

METHODS OF USING INTERLEUKIN-2 AGENTS

CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims the benefit of U.S. Provisional Application Nos. 63/284,978, filed
5 December 1, 2021; and 63/348,201, filed June 2, 2022. The contents of the aforementioned
applications are hereby incorporated by reference in their entirety.

BACKGROUND

Interleukin-2 (IL-2) is a cytokine that regulates the activities of the immune system. It is
10 produced by leukocytes, such as T cells, natural killer (NK) cells, dendritic cells, and macrophages, in
response to antigenic or mitogenic stimulation. IL-2 is important for T cell proliferation, B cell
stimulation, and other activities associated with immunity and tolerance. It is part of the body's
adaptive immune response and discriminates between foreign and host antigens. IL-2 mediates its
effects by binding to IL-2 receptors, which in turn activate downstream signaling events.

15 Human IL-2 is an FDA approved drug for the treatment of diseases such as metastatic renal
carcinoma and melanoma. The use of IL-2 in eligible patients is sometimes restricted due to the
severe toxicity associated with IL-2 therapy, and only a small subset of eligible patients will actually
receive therapy. The toxicities associated with IL-2 therapy can include severe fever, nausea,
vomiting, vascular leak and serious hypotension. Despite these toxicities, however, IL-2 is typically
20 effective for its approved indications.

For patients with various diseases and conditions that are amenable to treatment with IL-2,
there continues to be an unmet need for novel IL-2-based agents that exhibit characteristics sufficient
for the development of a safe and efficacious therapeutic.

25 SUMMARY

In an aspect, the disclosure provides a method of treating a transplant rejection or a symptom
thereof, comprising administering to a subject in need thereof an effective amount of an IL-2 agent
described herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein,
thereby treating the transplant rejection or the symptom thereof.

30 In an embodiment, the transplant is a heart transplant.

In an embodiment, the level of Tregs in the subject is increased by about 2, 3, 4, 5, 6, 7, 8, 9,
10-fold or more, compared to the level of Tregs in the subject prior to administration of the IL-2
fusion protein. In an embodiment, the level of Tregs is determined in a sample from the subject.

In an embodiment, the IL-2 fusion protein comprises an IL-2 variant described herein.

35 In an embodiment, the IL-2 variant comprising: (i) (a) the amino acid substitution H16L or
H16N, (b) the amino acid substitution I92S, or (c) both (a) and (b); and (ii) the amino acid
substitutions V69A, Q74P, and C125S, corresponding to human IL-2 (SEQ ID NO: 1031). In an

embodiment, the IL-2 variant further comprises the amino acid substitution T3A. In an embodiment, the IL-2 variant comprises the amino acid sequence of any of SEQ ID NOs: 4, 5, 11, 1000, 1001, or 1002, an amino acid sequence that is at least 95% identical thereto or differs by no more than 1, 2, 3, 4, or 5 amino acids therefrom, or a functional fragment thereof.

5 In an embodiment, the IL-2 fusion protein further comprises an Fc region. In an embodiment, the Fc region comprises an Fc region of IgG1 allotype m3 comprising an N297G substitution according to EU numbering. In an embodiment, the Fc region comprises the amino acid sequence of SEQ ID NO: 1003, or an amino acid sequence that is at least 95% identical thereto or differs by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 amino acids therefrom, or a functional fragment thereof. In an
10 embodiment, the Fc region is fused to the C-terminus of the IL-2 variant. In an embodiment, the IL-2 fusion protein further comprises a linker. In an embodiment, the linker comprises (G₄S)₄ (SEQ ID NO: 48). In an embodiment, the fusion protein forms a dimer.

In an embodiment, the fusion protein comprises an amino acid sequence of any of SEQ ID NOs: 1004, 1005, 1006, 1007, 1008, or 1009, an amino acid sequence that is at least 95% identical
15 thereto or differs by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 amino acids therefrom, or a functional fragment thereof.

In an embodiment, the method further comprises administering an immunosuppressive agent to the subject. In an embodiment, the immunosuppressive agent comprises rapamycin.

In an embodiment, the subject is a human or a non-human primate. In an embodiment, the
20 subject is a mouse.

In another aspect, the disclosure provides a method of preventing a transplant rejection or a symptom thereof, comprising administering to a subject in need thereof an effective amount of an IL-2 agent described herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described
25 herein, thereby preventing the transplant rejection or the symptom thereof.

In an embodiment, the transplant is a heart transplant.

In an embodiment, the level of Tregs in the subject is increased by about 2, 3, 4, 5, 6, 7, 8, 9, 10-fold or more, compared to the level of Tregs in the subject prior to administration of the IL-2 fusion protein. In an embodiment, the level of Tregs is determined in a sample from the subject.

30 In an embodiment, the IL-2 fusion protein comprises an IL-2 variant described herein.

In an embodiment, the IL-2 variant comprising: (i) (a) the amino acid substitution H16L or H16N, (b) the amino acid substitution I92S, or (c) both (a) and (b); and (ii) the amino acid substitutions V69A, Q74P, and C125S, corresponding to human IL-2 (SEQ ID NO: 1031). In an embodiment, the IL-2 variant further comprises the amino acid substitution T3A. In an embodiment,
35 the IL-2 variant comprises the amino acid sequence of any of SEQ ID NOs: 4, 5, 11, 1000, 1001, or 1002, an amino acid sequence that is at least 95% identical thereto or differs by no more than 1, 2, 3, 4, or 5 amino acids therefrom, or a functional fragment thereof.

In an embodiment, the IL-2 fusion protein further comprises an Fc region. In an embodiment, the Fc region comprises an Fc region of IgG1 allotype m3 comprising an N297G substitution according to EU numbering. In an embodiment, the Fc region comprises the amino acid sequence of SEQ ID NO: 1003, or an amino acid sequence that is at least 95% identical thereto or differs by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 amino acids therefrom, or a functional fragment thereof. In an embodiment, the Fc region is fused to the C-terminus of the IL-2 variant. In an embodiment, the IL-2 fusion protein further comprises a linker. In an embodiment, the linker comprises (G₄S)₄ (SEQ ID NO: 48). In an embodiment, the fusion protein forms a dimer.

In an embodiment, the fusion protein comprises an amino acid sequence of any of SEQ ID NOs: 1004, 1005, 1006, 1007, 1008, or 1009, an amino acid sequence that is at least 95% identical thereto or differs by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 amino acids therefrom, or a functional fragment thereof.

In an embodiment, the method further comprises administering an immunosuppressive agent to the subject. In an embodiment, the immunosuppressive agent comprises rapamycin.

In an embodiment, the subject is a human or a non-human primate. In an embodiment, the subject is a mouse.

In yet another aspect, the disclosure provides a method of modulating (e.g., increasing or inducing) immunosuppression for a transplant, comprising administering to a subject in need thereof an effective amount of an IL-2 agent described herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein, thereby modulating (e.g., increasing or inducing) immunosuppression for a transplant.

In an embodiment, the subject has received, is receiving, or will receive a transplant, when the IL-2 agent is administered to the subject. In an embodiment, the transplant is a heart transplant.

In an embodiment, the level of Tregs in the subject is increased by about 2, 3, 4, 5, 6, 7, 8, 9, 10-fold or more, compared to the level of Tregs in the subject prior to administration of the IL-2 fusion protein. In an embodiment, the level of Tregs is determined in a sample from the subject.

In an embodiment, the IL-2 fusion protein comprises an IL-2 variant described herein.

In an embodiment, the IL-2 variant comprising: (i) (a) the amino acid substitution H16L or H16N, (b) the amino acid substitution I92S, or (c) both (a) and (b); and (ii) the amino acid substitutions V69A, Q74P, and C125S, corresponding to human IL-2 (SEQ ID NO: 1031). In an embodiment, the IL-2 variant further comprises the amino acid substitution T3A. In an embodiment, the IL-2 variant comprises the amino acid sequence of any of SEQ ID NOs: 4, 5, 11, 1000, 1001, or 1002, an amino acid sequence that is at least 95% identical thereto or differs by no more than 1, 2, 3, 4, or 5 amino acids therefrom, or a functional fragment thereof.

In an embodiment, the IL-2 fusion protein further comprises an Fc region. In an embodiment, the Fc region comprises an Fc region of IgG1 allotype m3 comprising an N297G substitution

according to EU numbering. In an embodiment, the Fc region comprises the amino acid sequence of SEQ ID NO: 1003, or an amino acid sequence that is at least 95% identical thereto or differs by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 amino acids therefrom, or a functional fragment thereof. In an embodiment, the Fc region is fused to the C-terminus of the IL-2 variant. In an embodiment, the IL-2 fusion protein further comprises a linker. In an embodiment, the linker comprises (G₄S)₄ (SEQ ID NO: 48). In an embodiment, the fusion protein forms a dimer.

In an embodiment, the fusion protein comprises an amino acid sequence of any of SEQ ID NOs: 1004, 1005, 1006, 1007, 1008, or 1009, an amino acid sequence that is at least 95% identical thereto or differs by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 amino acids therefrom, or a functional fragment thereof.

In an embodiment, the method further comprises administering an immunosuppressive agent to the subject. In an embodiment, the immunosuppressive agent comprises rapamycin.

In an embodiment, the subject is a human or a non-human primate. In an embodiment, the subject is a mouse.

In still another aspect, the disclosure provides a method of conditioning a subject prior to a transplant, comprising administering to a subject in need thereof an effective amount of an IL-2 agent described herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein, thereby conditioning the subject prior to the transplant.

In an embodiment, the transplant is a heart transplant.

In an embodiment, the level of Tregs in the subject is increased by about 2, 3, 4, 5, 6, 7, 8, 9, 10-fold or more, compared to the level of Tregs in the subject prior to administration of the IL-2 fusion protein. In an embodiment, the level of Tregs is determined in a sample from the subject.

In an embodiment, the IL-2 fusion protein comprises an IL-2 variant described herein.

In an embodiment, the IL-2 variant comprising: (i) (a) the amino acid substitution H16L or H16N, (b) the amino acid substitution I92S, or (c) both (a) and (b); and (ii) the amino acid substitutions V69A, Q74P, and C125S, corresponding to human IL-2 (SEQ ID NO: 1031). In an embodiment, the IL-2 variant further comprises the amino acid substitution T3A. In an embodiment, the IL-2 variant comprises the amino acid sequence of any of SEQ ID NOs: 4, 5, 11, 1000, 1001, or 1002, an amino acid sequence that is at least 95% identical thereto or differs by no more than 1, 2, 3, 4, or 5 amino acids therefrom, or a functional fragment thereof.

In an embodiment, the IL-2 fusion protein further comprises an Fc region. In an embodiment, the Fc region comprises an Fc region of IgG1 allotype m3 comprising an N297G substitution according to EU numbering. In an embodiment, the Fc region comprises the amino acid sequence of SEQ ID NO: 1003, or an amino acid sequence that is at least 95% identical thereto or differs by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 amino acids therefrom, or a functional fragment thereof. In an embodiment, the Fc region is fused to the C-terminus of the IL-2 variant. In an embodiment, the IL-2

fusion protein further comprises a linker. In an embodiment, the linker comprises (G₄S)₄ (SEQ ID NO: 48). In an embodiment, the fusion protein forms a dimer.

In an embodiment, the fusion protein comprises an amino acid sequence of any of SEQ ID NOs: 1004, 1005, 1006, 1007, 1008, or 1009, an amino acid sequence that is at least 95% identical thereto or differs by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 amino acids therefrom, or a functional fragment thereof.

In an embodiment, the method further comprises administering an immunosuppressive agent to the subject. In an embodiment, the immunosuppressive agent comprises rapamycin.

In an embodiment, the subject is a human or a non-human primate. In an embodiment, the subject is a mouse.

In another aspect, the disclosure provides a method of selectively increasing Tregs, comprising administering to a subject in need thereof an effective amount of an IL-2 agent described herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein, wherein the subject has received, is receiving, or will receive a transplant, thereby selectively increasing Tregs.

In an embodiment, the transplant is a heart transplant.

In an embodiment, the level of Tregs in the subject is increased by about 2, 3, 4, 5, 6, 7, 8, 9, 10-fold or more, compared to the level of Tregs in the subject prior to administration of the IL-2 fusion protein. In an embodiment, the level of Tregs is determined in a sample from the subject.

In an embodiment, the IL-2 fusion protein comprises an IL-2 variant described herein.

In an embodiment, the IL-2 variant comprising: (i) (a) the amino acid substitution H16L or H16N, (b) the amino acid substitution I92S, or (c) both (a) and (b); and (ii) the amino acid substitutions V69A, Q74P, and C125S, corresponding to human IL-2 (SEQ ID NO: 1031). In an embodiment, the IL-2 variant further comprises the amino acid substitution T3A. In an embodiment, the IL-2 variant comprises the amino acid sequence of any of SEQ ID NOs: 4, 5, 11, 1000, 1001, or 1002, an amino acid sequence that is at least 95% identical thereto or differs by no more than 1, 2, 3, 4, or 5 amino acids therefrom, or a functional fragment thereof.

In an embodiment, the IL-2 fusion protein further comprises an Fc region. In an embodiment, the Fc region comprises an Fc region of IgG1 allotype m3 comprising an N297G substitution according to EU numbering. In an embodiment, the Fc region comprises the amino acid sequence of SEQ ID NO: 1003, or an amino acid sequence that is at least 95% identical thereto or differs by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 amino acids therefrom, or a functional fragment thereof. In an embodiment, the Fc region is fused to the C-terminus of the IL-2 variant. In an embodiment, the IL-2 fusion protein further comprises a linker. In an embodiment, the linker comprises (G₄S)₄ (SEQ ID NO: 48). In an embodiment, the fusion protein forms a dimer.

In an embodiment, the fusion protein comprises an amino acid sequence of any of SEQ ID NOs: 1004, 1005, 1006, 1007, 1008, or 1009, an amino acid sequence that is at least 95% identical

thereto or differs by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 amino acids therefrom, or a functional fragment thereof.

In an embodiment, the method further comprises administering an immunosuppressive agent to the subject. In an embodiment, the immunosuppressive agent comprises rapamycin.

5 In an embodiment, the subject is a human or a non-human primate. In an embodiment, the subject is a mouse.

In yet another aspect, the disclosure provides a method of treating a heart disease or a symptom thereof, comprising administering to a subject in need thereof an effective amount of an IL-2 agent described herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein; and providing a heart transplant to the subject, thereby treating the heart disease or the symptom thereof.

In an embodiment, the heart transplant is provided to the subject prior to, concurrent with, or after administration of the IL-2 fusion protein.

15 In an embodiment, the level of Tregs in the subject is increased by about 2, 3, 4, 5, 6, 7, 8, 9, 10-fold or more, compared to the level of Tregs in the subject prior to administration of the IL-2 fusion protein. In an embodiment, the level of Tregs is determined in a sample from the subject.

In an embodiment, the IL-2 fusion protein comprises an IL-2 variant described herein.

In an embodiment, the IL-2 variant comprising: (i) (a) the amino acid substitution H16L or H16N, (b) the amino acid substitution I92S, or (c) both (a) and (b); and (ii) the amino acid substitutions V69A, Q74P, and C125S, corresponding to human IL-2 (SEQ ID NO: 1031). In an embodiment, the IL-2 variant further comprises the amino acid substitution T3A. In an embodiment, the IL-2 variant comprises the amino acid sequence of any of SEQ ID NOs: 4, 5, 11, 1000, 1001, or 1002, an amino acid sequence that is at least 95% identical thereto or differs by no more than 1, 2, 3, 4, or 5 amino acids therefrom, or a functional fragment thereof.

25 In an embodiment, the IL-2 fusion protein further comprises an Fc region. In an embodiment, the Fc region comprises an Fc region of IgG1 allotype m3 comprising an N297G substitution according to EU numbering. In an embodiment, the Fc region comprises the amino acid sequence of SEQ ID NO: 1003, or an amino acid sequence that is at least 95% identical thereto or differs by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 amino acids therefrom, or a functional fragment thereof. In an embodiment, the Fc region is fused to the C-terminus of the IL-2 variant. In an embodiment, the IL-2 fusion protein further comprises a linker. In an embodiment, the linker comprises (G₄S)₄ (SEQ ID NO: 48). In an embodiment, the fusion protein forms a dimer.

35 In an embodiment, the fusion protein comprises an amino acid sequence of any of SEQ ID NOs: 1004, 1005, 1006, 1007, 1008, or 1009, an amino acid sequence that is at least 95% identical thereto or differs by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 amino acids therefrom, or a functional fragment thereof.

In an embodiment, the method further comprises administering an immunosuppressive agent to the subject. In an embodiment, the immunosuppressive agent comprises rapamycin.

In an embodiment, the subject is a human or a non-human primate. In an embodiment, the subject is a mouse.

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In another aspect, the disclosure provides a combination comprising an IL-2 agent described herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein, and a transplant. In an embodiment, the transplant is a heart transplant. In an embodiment, the transplant further comprises one or more additional immunosuppressive agents, e.g., rapamycin.

In an embodiment, the combination is for use in treating or preventing a transplant rejection in a subject. In an embodiment, the transplant rejection is a heart transplant rejection. In an embodiment, the IL-2 agent is administered to the subject prior to, during, and/or after the transplant.

In an embodiment, the combination is for use in modulating (e.g., increasing or inducing), immunosuppression in a subject. In an embodiment, the combination is for use in selectively increasing T regulatory cells in a subject. In an embodiment, the subject is a human or a non-human primate. In an embodiment, the subject is a mouse.

In an aspect, the disclosure provides an IL-2 agent described herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein, for use in a method of treating a transplant rejection or a symptom thereof in a subject, as described herein.

10 In another aspect, the disclosure provides an IL-2 agent described herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein, for use in a method of preventing a transplant rejection or a symptom thereof in a subject, as described herein.

In yet another aspect, the disclosure provides an IL-2 agent described herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein, for use in a method of modulating (e.g., increasing or inducing) immunosuppression for a transplant in a subject, as described herein.

15 In still another aspect, the disclosure provides an IL-2 agent described herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein, for use in a method of conditioning a subject prior to a transplant, as described herein.

20 In another aspect, the disclosure provides an IL-2 agent described herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein, for use in a method of selectively increasing Tregs in a subject, as described herein, e.g., wherein the subject has received, is receiving, or will receive a transplant.

25 In yet another aspect, the disclosure provides an IL-2 agent described herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein, in combination with a heart transplant, for use in a method of treating a heart disease or a symptom thereof in a subject, as described herein.

In an aspect, the disclosure provides use of an IL-2 agent described herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein, in the manufacture of a medicament for treating a transplant rejection or a symptom thereof in a subject, as described herein.

In another aspect, the disclosure provides use of an IL-2 agent described herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein, in the manufacture of a medicament for preventing a transplant rejection or a symptom thereof in a subject, as described herein.

In yet another aspect, the disclosure provides use of an IL-2 agent described herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein, in the manufacture of a medicament for modulating (e.g., increasing or inducing) immunosuppression for a transplant in a subject, as described herein.

In still another aspect, the disclosure provides use of an IL-2 agent described herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein, in the manufacture of a medicament for conditioning a subject prior to a transplant, as described herein.

In another aspect, the disclosure provides use of an IL-2 agent described herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein, in the manufacture of a medicament for selectively increasing Tregs in a subject, as described herein, e.g., wherein the subject has received, is receiving, or will receive a transplant.

In yet another aspect, the disclosure provides use of an IL-2 agent described herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein, in combination with a heart transplant, in the manufacture of a medicament for treating a heart disease or a symptom thereof in a subject, as described herein.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1A and **1B** are a series of flow cytometry plots showing that in the presence of TGF- β , an exemplary IL-2 mutein promoted murine inducible Treg (iTreg) development *in vitro*. Treatment in the absence (**FIG. 1A**) or presence (**FIG. 1B**) of 3 ng/ml TGF β 1 are indicated. Treatment with beads only, IL-2/0.5 ug/ml, IL-2/5 ug/ml, IL-2m 0.5 ug/ml, or IL-2m 5 ug/ml are also indicated. X-axis: FL9-A :: CD4 PB450-A, y-axis: FL1-A :: YFP FITC-A.

FIG. 2A and **2B** are immunoblots showing that an exemplary IL-2 mutein promoted Stat5 tyrosine phosphorylation (Y694) signaling from the IL-2R in Tregs. **FIG. 2A** depicts Tyr-694 with p-Stat5b indicated by the arrow, and **FIG. 2B** depicts total. Lanes 1-4: beads only; 5-8: beads + IL-2 10 ug/ml; 9-12: beads + IL-2m 10 ug/ml. Fresh, 10, 30, and 60 min.

FIG. 3 is a series of flow cytometry plots showing expansion of circulating Tregs *in vivo* by injected an exemplary IL-2 mutein. 10 ug of IL-2 mutein were administered subcutaneously twice in a week. Analysis of blood pre-Tx is shown. X-axis indicates CD4 expression and y-axis indicates Foxp3 expression.

FIG. 4. is a graph showing the survival of a murine allograft model (BALB/c → C57BL/6). Mice received RPM alone or two injections of IL-2 mutein pre-Tx, plus 0.5 mg/kg/d RPM for 14d (Alzet). Pre-transplant an exemplary IL-2 mutein (IL-2C) prolonged murine cardiac allograft survival for >100 days. IL-2A mutein ~50% Tregs, IL-2C mutein Tregs ~30%, IL-2D mutein ~20% Tregs, ~normal by d 10 post-Tx.

FIG. 5 is a graph showing the survival of a murine cardiac allograft model (BALB/c → C57BL/6, n=5) receiving post-Tx IL-2C mutein (10 ug/mouse/2x/w/3 weeks). This demonstrated the efficacy of post-Tx IL-2C mutein therapy alone in murine cardiac allograft recipients.

FIG. 6A is a graph showing the survival of a murine cardiac allograft model (BALB/c → C57BL/6, 4-5/group) receiving RPM alone or IL-2C mutein (10 ug i.p. x2/wk IL-2C from Tx) with RPM (0.5 mg/kg/d RPM 14d (Alzet)) post-transplant. IL-2C mutein dosing was stopped at day 21 or continued to day 80 post-Tx. C3H cardiac allografts were received at 100 days. The results demonstrate that limited post-transplant IL-2C mutein prolonged murine cardiac allograft survival through the end of the study period.

FIG. 6B is a series of flow cytometry plots depicting CD4 expression (x-axis) and Foxp3 expression (y-axis), related to the murine cardiac allograft model and treatment shown in FIG. 6A. The right-most flow cytometry plot corresponds to recipients with rejection.

FIG. 7 are histological images showing donor-specific tolerance induced by IL-2C mutein therapy. Shown are cardiac tissue from recipients after >110 d continued acceptance of BALB/c cardiac allografts (left) and acute rejection of C3H cardiac allografts within 8-9d (right). 3 weeks of IL-2C and 14 d low-dose RPM was administered, N=5/group, H&E, x200. Donor-specific tolerance was induced by IL-2C mutein therapy.

DETAILED DESCRIPTION

The disclosure is based, at least in part, the discovery that a brief course of therapy with a selected IL-2 mutein can expand recipient Foxp3⁺ Treg cells and induce donor-specific allograft survival. Without wishing to be bound by theory, it is believed that in some embodiments, IL-2 muteins promote iTreg development *in vitro* and *in vivo*, and their efficacy is superior to that of native IL-2 in terms of promoting murine allograft survival. As disclosed herein, pre-and post-treatment therapy prolonged allograft survival, especially when combined with a brief sub-therapeutic course of RPM. For example, three weeks of IL-2 mutein therapy post-treatment plus 2 weeks of rapamycin (RPM) induced long-term cardiac allograft survival. Hearts at >100 days showed essentially normal histology and recipients promptly rejected third party cardiac allografts.

Definitions

As used herein, the articles “a” and “an” refer to one or to more than one (*e.g.*, to at least one) of the grammatical object of the article.

The term “or” is used herein to mean, and is used interchangeably with, the term “and/or”, unless context clearly indicates otherwise.

“About” and “approximately” shall generally mean an acceptable degree of error for the quantity measured given the nature or precision of the measurements. Exemplary degrees of error are within 20 percent (%), typically, within 10%, and more typically, within 5% of a given value or range of values. When “about” or “approximately” is present before a series of numbers or a range, it is understood that “about” or “approximately” can modify each of the numbers in the series or range. Similarly, when “at least,” “more than,” “no more than,” “less than,” “no less than,” or “within” is present before a series of numbers or a range, it is understood that “at least,” “more than,” “no more than,” “less than,” “no less than,” or “within” can modify each of the numbers in the series or range. As used herein, ranges include both the upper and lower limit.

The compositions and methods disclosed herein encompass polypeptides and nucleic acids having the sequences specified, or sequences substantially identical or similar thereto, *e.g.*, sequences at least 85%, 90%, 95% identical or higher to the sequence specified.

In the context of an amino acid sequence, the term “substantially identical” is used herein to refer to a first amino acid that contains a sufficient or minimum number of amino acid residues that are i) identical to, or ii) conservative substitutions of aligned amino acid residues in a second amino acid sequence such that the first and second amino acid sequences can have a common structural domain and/or common functional activity. For example, amino acid sequences that contain a common structural domain having at least about 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98% or 99% identity to a reference sequence, *e.g.*, a sequence provided herein.

In the context of nucleotide sequence, the term “substantially identical” is used herein to refer to a first nucleic acid sequence that contains a sufficient or minimum number of nucleotides that are identical to aligned nucleotides in a second nucleic acid sequence such that the first and second nucleotide sequences encode a polypeptide having common functional activity, or encode a common structural polypeptide domain or a common functional polypeptide activity. For example, nucleotide sequences having at least about 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98% or 99% identity to a reference sequence, *e.g.*, a sequence provided herein.

The term “functional variant” refers polypeptides that have a substantially identical amino acid sequence to the naturally-occurring sequence, or are encoded by a substantially identical nucleotide sequence, and are capable of having one or more activities of the naturally-occurring sequence.

Calculations of homology or sequence identity between sequences (the terms are used interchangeably herein) are performed as follows.

To determine the percent identity of two amino acid sequences, or of two nucleic acid sequences, the sequences are aligned for optimal comparison purposes (*e.g.*, gaps can be introduced in one or both of a first and a second amino acid or nucleic acid sequence for optimal alignment and

non-homologous sequences can be disregarded for comparison purposes). In a typical embodiment, the length of a reference sequence aligned for comparison purposes is at least 30%, *e.g.*, at least 40%, 50%, 60%, *e.g.*, at least 70%, 80%, 90%, 100% of the length of the reference sequence. The amino acid residues or nucleotides at corresponding amino acid positions or nucleotide positions are then
5 compared. When a position in the first sequence is occupied by the same amino acid residue or nucleotide as the corresponding position in the second sequence, then the molecules are identical at that position.

The percent identity between the two sequences is a function of the number of identical positions shared by the sequences, taking into account the number of gaps, and the length of each gap,
10 which need to be introduced for optimal alignment of the two sequences.

The comparison of sequences and determination of percent identity between two sequences can be accomplished using a mathematical algorithm. In an embodiment, the percent identity between two amino acid sequences is determined using the Needleman and Wunsch ((1970) *J. Mol. Biol.* 48:444-453) algorithm which has been incorporated into the GAP program in the GCG software
15 package (available at www.gcg.com), using either a Blossum 62 matrix or a PAM250 matrix, and a gap weight of 16, 14, 12, 10, 8, 6, or 4 and a length weight of 1, 2, 3, 4, 5, or 6. In certain embodiments, the percent identity between two nucleotide sequences is determined using the GAP program in the GCG software package (available at www.gcg.com), using a NWSgapdna.CMP matrix and a gap weight of 40, 50, 60, 70, or 80 and a length weight of 1, 2, 3, 4, 5, or 6. One suitable set of
20 parameters (and the one that should be used unless otherwise specified) are a Blossum 62 scoring matrix with a gap penalty of 12, a gap extend penalty of 4, and a frameshift gap penalty of 5.

The percent identity between two amino acid or nucleotide sequences can be determined using the algorithm of E. Meyers and W. Miller ((1989) CABIOS, 4:11-17) which has been incorporated into the ALIGN program (version 2.0), using a PAM120 weight residue table, a gap
25 length penalty of 12 and a gap penalty of 4.

The nucleic acid and protein sequences described herein can be used as a "query sequence" to perform a search against public databases to, for example, identify other family members or related sequences. Such searches can be performed using the NBLAST and XBLAST programs (version 2.0) of Altschul, *et al.* (1990) *J. Mol. Biol.* 215:403-10. BLAST nucleotide searches can be performed
30 with the NBLAST program, score = 100, wordlength = 12 to obtain nucleotide sequences homologous to a nucleic acid as described herein. BLAST protein searches can be performed with the XBLAST program, score = 50, wordlength = 3 to obtain amino acid sequences homologous to protein molecules described herein. To obtain gapped alignments for comparison purposes, Gapped BLAST can be utilized as described in Altschul *et al.*, (1997) *Nucleic Acids Res.* 25:3389-3402. When
35 utilizing BLAST and gapped BLAST programs, the default parameters of the respective programs (*e.g.*, XBLAST and NBLAST) can be used. See www.ncbi.nlm.nih.gov.

As used herein, the term “hybridizes under low stringency, medium stringency, high stringency, or very high stringency conditions” describes conditions for hybridization and washing. Guidance for performing hybridization reactions can be found in *Current Protocols in Molecular Biology*, John Wiley & Sons, N.Y. (1989), 6.3.1-6.3.6, which is incorporated by reference. Aqueous and nonaqueous methods are described in that reference and either can be used. Specific hybridization conditions referred to herein are as follows: 1) low stringency hybridization conditions in 6X sodium chloride/sodium citrate (SSC) at about 45°C, followed by two washes in 0.2X SSC, 0.1% SDS at least at 50°C (the temperature of the washes can be increased to 55°C for low stringency conditions); 2) medium stringency hybridization conditions in 6X SSC at about 45°C, followed by one or more washes in 0.2X SSC, 0.1% SDS at 60°C; 3) high stringency hybridization conditions in 6X SSC at about 45°C, followed by one or more washes in 0.2X SSC, 0.1% SDS at 65°C; and preferably 4) very high stringency hybridization conditions are 0.5M sodium phosphate, 7% SDS at 65°C, followed by one or more washes at 0.2X SSC, 1% SDS at 65°C. Very high stringency conditions 4) are suitable conditions and the ones that should be used unless otherwise specified.

It is understood that the molecules described herein may have additional conservative or non-essential amino acid substitutions, which do not have a substantial effect on their functions.

The term “amino acid” is intended to embrace all molecules, whether natural or synthetic, which include both an amino functionality and an acid functionality and capable of being included in a polymer of naturally-occurring amino acids. Exemplary amino acids include naturally-occurring amino acids; analogs, derivatives and congeners thereof; amino acid analogs having variant side chains; and all stereoisomers of any of any of the foregoing. As used herein the term “amino acid” includes both the D- or L- optical isomers and peptidomimetics.

A “conservative amino acid substitution” is one in which the amino acid residue is replaced with an amino acid residue having a similar side chain. Families of amino acid residues having similar side chains have been defined in the art. These families include amino acids with basic side chains (*e.g.*, lysine, arginine, histidine), acidic side chains (*e.g.*, aspartic acid, glutamic acid), uncharged polar side chains (*e.g.*, glycine, asparagine, glutamine, serine, threonine, tyrosine, cysteine), nonpolar side chains (*e.g.*, alanine, valine, leucine, isoleucine, proline, phenylalanine, methionine, tryptophan), beta-branched side chains (*e.g.*, threonine, valine, isoleucine) and aromatic side chains (*e.g.*, tyrosine, phenylalanine, tryptophan, histidine).

The terms “polypeptide,” “peptide” and “protein” (if single chain) are used interchangeably herein to refer to polymers of amino acids of any length. The polymer may be linear or branched, it may comprise modified amino acids, and it may be interrupted by non-amino acids. The terms also encompass an amino acid polymer that has been modified; for example, disulfide bond formation, glycosylation, lipidation, acetylation, phosphorylation, or any other manipulation, such as conjugation with a labeling component. The polypeptide can be isolated from natural sources, can be a produced

by recombinant techniques from a eukaryotic or prokaryotic host, or can be a product of synthetic procedures.

As recognized by those skilled in the art, protein fragments, functional protein domains, and homologous proteins are also considered to be within the scope of this invention. For example, provided herein is any protein fragment of a reference protein (meaning a polypeptide sequence at least one amino acid residue shorter than a reference polypeptide sequence but otherwise identical) 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 70, 80, 90, 100, or greater than 100 amino acids in length. In another example, any protein that includes a stretch of about 20, about 30, about 40, about 50, or about 100 amino acids which are about 40%, about 50%, about 60%, about 70%, about 80%, about 90%, about 95%, about 98%, or about 100% identical to any of the sequences described herein can be utilized in accordance with the invention. In an embodiment, a protein sequence to be utilized in accordance with the disclosure includes 2, 3, 4, 5, 6, 7, 8, 9, 10, or more mutations as shown in any of the sequences provided or referenced herein.

The terms “nucleic acid,” “nucleic acid sequence,” “nucleotide sequence,” or “polynucleotide sequence,” and “polynucleotide” are used interchangeably. They refer to a polymeric form of nucleotides of any length, either deoxyribonucleotides or ribonucleotides, or analogs thereof. The polynucleotide may be either single-stranded or double-stranded, and if single-stranded may be the coding strand or non-coding (antisense) strand. A polynucleotide may comprise modified nucleotides, such as methylated nucleotides and nucleotide analogs. The sequence of nucleotides may be interrupted by non-nucleotide components. A polynucleotide may be further modified after polymerization, such as by conjugation with a labeling component. The nucleic acid may be a recombinant polynucleotide, or a polynucleotide of genomic, cDNA, semisynthetic, or synthetic origin which either does not occur in nature or is linked to another polynucleotide in a non-natural arrangement.

The term “isolated,” as used herein, refers to material that is removed from its original or native environment (*e.g.*, the natural environment if it is naturally occurring). For example, a naturally-occurring polynucleotide or polypeptide present in a living animal is not isolated, but the same polynucleotide or polypeptide, separated by human intervention from some or all of the co-existing materials in the natural system, is isolated. Such polynucleotides could be part of a vector and/or such polynucleotides or polypeptides could be part of a composition, and still be isolated in that such vector or composition is not part of the environment in which it is found in nature.

As used herein, the term “treat,” a disorder, *e.g.*, a myeloma, means that a subject (*e.g.*, a human) who has a disorder, *e.g.*, a myeloma, and/or experiences a symptom of a disorder, *e.g.*, a myeloma, will, in an embodiment, suffer less a severe symptom and/or recover faster when an antibody molecule is administered than if the antibody molecule were never administered. In an embodiment, when a myeloma is treated, a bone marrow biopsy will show fewer clonal plasma cells, after effective treatment for myeloma. For example, a diagnostic assay will detect fewer clonal

plasma cells in a biological sample of a subject after administration of an antibody molecule described herein for the effective treatment of a myeloma. Other assays, urine tests, or blood tests, can also be used to monitor treatment in a patient, or to detect the presence, *e.g.*, decreased presence (or absence), of a symptom of a myeloma, after treatment of a myeloma in the subject. In an embodiment, when a myeloma is treated, the level of $\beta 2$ microglobulin ($\beta 2M$) in serum or urine will be decreased, after effective treatment for myeloma. Treatment can, *e.g.*, partially or completely, alleviate, ameliorate, relieve, inhibit, or reduce the severity of, and/or reduce incidence, and optionally, delay onset of, one or more manifestations of the effects or symptoms, features, and/or causes of a disorder, *e.g.*, a myeloma. In an embodiment, treatment is of a subject who does not exhibit certain signs of a disorder, *e.g.*, a myeloma, and/or of a subject who exhibits only early signs of a disorder, *e.g.*, nephropathy. In an embodiment, treatment is of a subject who exhibits one or more established signs of a disorder, *e.g.*, a myeloma. In an embodiment, treatment is of a subject diagnosed as suffering from a disorder, *e.g.*, a myeloma.

As used herein, the term “prevent,” a disorder, *e.g.*, a myeloma, means that a subject (*e.g.*, a human) is less likely to have the disorder, *e.g.*, a myeloma, if the subject receives the antibody molecule.

Various aspects of the compositions and methods herein are described in further detail below. Additional definitions are set out throughout the specification.

IL-2 Agents

The present disclosure provides IL-2 agents, including, but not limited to, IL-2 variants, IL-2 fusion proteins, IL-2 complexes, and IL-2 conjugates. For example, the IL-2 agents described herein can have one or more structural and/or functional properties described herein. In an embodiment, the IL-2 agent comprises an IL-2 variant comprising one or more amino acid alterations (*e.g.*, substitutions) described herein. In an embodiment, the IL-2 agent comprises an IL-2 variant comprising one or more amino acid alterations (*e.g.*, substitutions) described in **Table 9**. In an embodiment, the IL-2 agent comprises an IL-2 variant comprising an amino acid sequence described in **Table 9**, or a portion thereof. In an embodiment, the IL-2 agent, or a portion thereof, is encoded by a nucleic acid comprising a nucleotide sequence described herein, *e.g.*, in **Table 10**. The one or more amino acid alterations (*e.g.*, substitutions), alone or in combination, may confer one or more desired biological properties described herein. In an embodiment, the IL-2 agent can modulate (*e.g.*, increase) Treg proliferation, survival, activation and/or function. In an embodiment, the modulation is selective or specific for the Tregs. For example, the IL-2 agent is capable of modulating the activity in Tregs but has limited or lacks the ability to promote the activity in non-regulatory T cells. In an embodiment, the IL-2 agent comprises a polypeptide (sometime referred to herein as “IL-2 polypeptide agent”).

IL-2 Variants

In an embodiment, the IL-2 agent comprises an IL-2 variant, *e.g.*, an IL-2 variant described herein.

In an embodiment, the IL-2 variant comprises an IL-2 polypeptide (*e.g.*, a human IL-2 polypeptide) described herein, or a functional fragment thereof. In an embodiment, the IL-2 variant comprises one or more amino acid alterations (*e.g.*, substitutions) described in **Table 9**. In an embodiment, the IL-2 variant comprises, or consists of, an amino acid sequence described in **Table 9**, or a functional fragment thereof. In an embodiment, the IL-2 variant is encoded by a nucleic acid comprising a nucleotide sequence described herein, *e.g.*, in **Table 10**.

Without wishing to be bound by theory, it is believed that in an embodiment, the IL-2 variants described herein, which have reduced human CD25 and/or reduced human CD122/CD132 binding affinity relative to a wild-type human IL-2 or a reference IL-2 variant, can have improved potency and/or selectivity for binding to and activating regulatory T cells (Tregs) than wild type IL-2 or other IL-2 variants. The IL-2 variants described herein can be identified, *e.g.*, by screening a library of mutated IL-2 polypeptides to identify IL-2 variants having a binding affinity for human CD25 and/or human CD122/CD132 in a desired range.

In an embodiment, the IL-2 variant has one or more (*e.g.*, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, or more) properties described herein, *e.g.*, different and/or improved properties, relative to a wild-type IL-2 or a reference IL-2 variant. In an embodiment, the IL-2 variant comprises one or more (*e.g.*, 2, 3, 4, 5, 6, 7, 8, 9, 10, or more) amino acid alterations (*e.g.*, substitutions) that provide different and/or improved properties, relative to a wild-type IL-2 or a reference IL-2 variant. In an embodiment, the IL-2 variant has one or more (*e.g.*, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, or all) of the following different and/or improved properties (*e.g.*, as determined by an assay described herein), relative to a wild-type IL-2 or a reference IL-2 variant:

- i) altered (*e.g.*, enhanced or increased) expression *in vitro* and/or *in vivo*;
- ii) altered (*e.g.*, reduced or decreased) aggregation *in vitro* and/or *in vivo*;
- iii) altered (*e.g.*, enhanced or increased) stability *in vitro* and/or *in vivo*;
- iv) altered (*e.g.*, enhanced or increased) half-life *in vitro* and/or *in vivo*;
- v) altered (*e.g.*, reduced or decreased) turnover and/or clearance *in vivo*;
- vi) altered (*e.g.*, reduced or decreased) susceptibility to proteolysis *in vitro* and/or *in vivo*;
- vii) altered (*e.g.*, enhanced or increased) resistance to proteolysis *in vitro* and/or *in vivo*;
- viii) altered (*e.g.*, reduced or decreased) binding capacity and/or binding affinity for human CD25 *in vitro* and/or *in vivo*;
- ix) altered (*e.g.*, reduced or decreased) binding capacity and/or binding affinity for human CD132 *in vitro* and/or *in vivo*;
- x) altered (*e.g.*, reduced or decreased) binding capacity and/or binding affinity for the dimeric IL-2 receptor comprising human CD122 and human CD132 *in vitro* and/or *in vivo*;

xi) altered (*e.g.*, enhanced, increased, reduced, decreased, and/or selective) binding to Tregs *in vitro* and/or *in vivo*;

xii) altered (*e.g.*, enhanced, increased, reduced, decreased, and/or selective) activation of the IL-2 signaling pathway in Tregs *in vitro* and/or *in vivo*;

5 xiii) altered (*e.g.*, enhanced, increased, reduced, decreased, and/or selective) ability to induce or promote Treg expansion, activity, survival, and/or proliferation *in vitro* and/or *in vivo*.

In an embodiment, the IL-2 variant has altered (*e.g.*, enhanced or increased) expression *in vitro* and/or *in vivo*, relative to a wild-type IL-2 or a reference IL-2 variant. In an embodiment, the IL-2 variant has enhanced or increased expression (*e.g.*, in a bacterial or mammalian cell) relative to a wild-type IL-2. In an embodiment, the IL-2 variant has enhanced or increased expression (*e.g.*, in bacterial or mammalian cell) relative to a reference IL-2 variant. In an embodiment, the expression of the IL-2 variant is increased by about 1%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, or about 100%, or more. In an embodiment, the expression of the IL-2 variant is increased by about 0.5-fold, 1-fold, 2-fold, 3-fold, 4-fold, 5-fold, 6-fold, 7-fold, 8-fold, 9-fold, or about 10-fold, or more. In an embodiment, the IL-2 variant expresses at a higher or increased level *in vitro* and/or *in vivo*, *e.g.*, increased by about 1%, about 2%, about 3%, about 4%, about 5%, about 10%, about 15%, about 20%, about 25%, about 30%, about 35%, about 40%, about 45%, about 50%, about 55%, about 60%, about 65%, about 70%, about 75%, about 80%, about 85%, about 90%, about 95%, about 100% or more *e.g.*, relative to an IL-2 agent comprising a wild-type IL-2 or an IL-2 agent comprising a reference IL-2 variant *e.g.*, as determined by an assay of protein concentration. In an embodiment, the IL-2 variant expresses at a higher or increased level, *e.g.*, increased by about 0.5-fold, about 1-fold, about 1.5-fold, about 2-fold, about 2.5-fold, about 3-fold, about 3.5-fold, about 4-fold, about 4.5-fold, about 5-fold, about 5.5-fold, about 6-fold, about 6.5-fold, about 7-fold, about 7.5-fold, about 8-fold, about 8.5-fold, about 9-fold, about 9.5-fold, about 10-fold or more *e.g.*, relative to an IL-2 agent comprising a wild-type IL-2 or an IL-2 agent comprising a reference IL-2 variant *e.g.*, as determined by an assay of protein concentration.

In an embodiment, the IL-2 variant has altered (*e.g.*, reduced or decreased) aggregation *in vitro* and/or *in vivo*, relative to a wild-type IL-2 or a reference IL-2 variant. In an embodiment, the IL-2 variant has reduced or decreased aggregation relative to a wild type IL-2. In an embodiment, the IL-2 variant has reduced or decreased aggregation relative to a reference IL-2 variant. In an embodiment, the aggregation of the IL-2 variant is decreased by about 1%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, or about 100%, or more. In an embodiment, the aggregation of the IL-2 variant is decreased by about 0.5-fold, 1-fold, 2-fold, 3-fold, 4-fold, 5-fold, 6-fold, 7-fold, 8-fold, 9-fold, or about 10-fold, or more. In an embodiment, an IL-2 agent comprising an IL-2 variant described herein aggregates at lower or decreased level *in vitro* and/or *in vivo*, *e.g.*, decreased by about 1%, about 2%, about 3%, about 4%, about 5%, about 10%, about 15%, about 20%, about 25%, about 30%, about 35%, about 40%, about 45%, about 50%, about 55%, about 60%, about 65%, about

70%, about 75%, about 80%, about 85%, about 90%, about 95%, about 100% or more *e.g.*, relative to an IL-2 agent comprising a wild-type IL-2 or an IL-2 agent comprising a reference IL-2 variant *e.g.*, as determined by melting temperature analysis (*e.g.*, using fluorimetry), dynamic light scattering, and/or size-exclusion chromatography. In an embodiment, an IL-2 agent comprising an IL-2 variant described herein aggregates at lower or decreased level, *e.g.*, decreased by about 0.5-fold, about 1-fold, about 1.5-fold, about 2-fold, about 2.5-fold, about 3-fold, about 3.5-fold, about 4-fold, about 4.5-fold, about 5-fold, about 5.5-fold, about 6-fold, about 6.5-fold, about 7-fold, about 7.5-fold, about 8-fold, about 8.5-fold, about 9-fold, about 9.5-fold, about 10-fold or more *e.g.*, relative to an IL-2 agent comprising a wild-type IL-2 or an IL-2 agent comprising a reference IL-2 variant, *e.g.*, as determined by melting temperature analysis (*e.g.*, using fluorimetry), dynamic light scattering, and/or size-exclusion chromatography.

In an embodiment, the IL-2 variant has altered (*e.g.*, enhanced or increased) stability *in vitro* and/or *in vivo*, relative to a wild-type IL-2 or a reference IL-2 variant. In an embodiment, the IL-2 variant has enhanced or increased stability relative to a wild-type IL-2. In an embodiment, the IL-2 variant has enhanced or increased stability relative to a reference IL-2 variant. In an embodiment, the stability of the IL-2 variant is increased by about 1%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, or about 100%, or more. In an embodiment, the stability of the IL-2 variant is increased by about 0.5-fold, 1-fold, 2-fold, 3-fold, 4-fold, 5-fold, 6-fold, 7-fold, 8-fold, 9-fold, or about 10-fold, or more. In an embodiment, an IL-2 agent comprising an IL-variant described herein has enhanced or increased stability *in vitro* and/or *in vivo*, *e.g.*, increased by about 1%, about 2%, about 3%, about 4%, about 5%, about 10%, about 15%, about 20%, about 25%, about 30%, about 35%, about 40%, about 45%, about 50%, about 55%, about 60%, about 65%, about 70%, about 75%, about 80%, about 85%, about 90%, about 95%, about 100% or more, or *e.g.*, increased by about 0.5-fold, about 1-fold, about 1.5-fold, about 2-fold, about 2.5-fold, about 3-fold, about 3.5-fold, about 4-fold, about 4.5-fold, about 5-fold, about 5.5-fold, about 6-fold, about 6.5-fold, about 7-fold, about 7.5-fold, about 8-fold, about 8.5-fold, about 9-fold, about 9.5-fold, about 10-fold or more *e.g.*, relative to an IL-2 agent comprising a wild-type IL-2 or an IL-2 agent comprising a reference IL-2 variant, *e.g.*, as determined by yeast surface display, circular dichroism or related spectroscopic techniques, and/or melting temperature analysis (*e.g.*, using fluorimetry).

In an embodiment, the IL-2 variant has altered (*e.g.*, enhanced or increased) half-life *in vitro* and/or *in vivo*, relative to a wild-type IL-2 or a reference IL-2 variant. In an embodiment, the IL-2 variant has enhanced or increased half-life relative to a wild-type IL-2. In an embodiment, the IL-2 variant has enhanced or increased half-life relative to a reference IL-2 variant. In an embodiment, the half-life of the IL-2 variant is increased by about 1%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, or about 100%, or more. In an embodiment, the half-life of the IL-2 variant is increased by about 0.5-fold, 1-fold, 2-fold, 3-fold, 4-fold, 5-fold, 6-fold, 7-fold, 8-fold, 9-fold, or about 10-fold, or more. In an embodiment, an IL-2 agent comprising an IL-2 variant described herein

has enhanced or increased half-life *in vitro* and/or *in vivo*, *e.g.*, increased by about 1%, about 2%, about 3%, about 4%, about 5%, about 10%, about 15%, about 20%, about 25%, about 30%, about 35%, about 40%, about 45%, about 50%, about 55%, about 60%, about 65%, about 70%, about 75%, about 80%, about 85%, about 90%, about 95%, about 100% or more, or *e.g.*, greater than about 0.5-fold, about 1-fold, about 1.5-fold, about 2-fold, about 2.5-fold, about 3-fold, about 3.5-fold, about 4-fold, about 4.5-fold, about 5-fold, about 5.5-fold, about 6-fold, about 6.5-fold, about 7-fold, about 7.5-fold, about 8-fold, about 8.5-fold, about 9-fold, about 9.5-fold, about 10-fold or more *e.g.*, relative to an IL-2 agent comprising a wild-type IL-2 or an IL-2 agent comprising a reference IL-2 variant, *e.g.*, as determined by ELISA, flow cytometry, and/or mass spectrometry.

- 10 In an embodiment, the IL-2 variant has altered (*e.g.*, reduced or decreased) turnover *in vitro* and/or *in vivo*, relative to a wild-type IL-2 or a reference IL-2 variant. In an embodiment, the IL-2 variant has reduced or decreased turnover relative to a wild-type IL-2. In an embodiment, the IL-2 variant has reduced or decreased turnover relative to a reference IL-2 variant. In an embodiment, the turnover of the IL-2 variant is decreased by about 1%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%,
- 15 80%, 90%, 95%, or about 100%, or more. In an embodiment, the turnover of the IL-2 variant is decreased by about 0.5-fold, 1-fold, 2-fold, 3-fold, 4-fold, 5-fold, 6-fold, 7-fold, 8-fold, 9-fold, about 10-fold, or more. In an embodiment, an IL-2 agent comprising an IL-2 variant described herein has a lower, reduced or decreased rate or level of turnover and/or clearance *in vivo*, *e.g.*, decreased by about 1%, about 2%, about 3%, about 4%, about 5%, about 10%, about 15%, about 20%, about 25%, about
- 20 30%, about 35%, about 40%, about 45%, about 50%, about 55%, about 60%, about 65%, about 70%, about 75%, about 80%, about 85%, about 90%, about 95%, about 100% or more, or *e.g.*, decreased by about 0.5-fold, about 1-fold, about 1.5-fold, about 2-fold, about 2.5-fold, about 3-fold, about 3.5-fold, about 4-fold, about 4.5-fold, about 5-fold, about 5.5-fold, about 6-fold, about 6.5-fold, about 7-fold, about 7.5-fold, about 8-fold, about 8.5-fold, about 9-fold, about 9.5-fold, about 10-fold or more *e.g.*,
- 25 relative to an IL-2 agent comprising a wild-type IL-2 or an IL-2 agent comprising a reference IL-2 variant, *e.g.*, as determined by ELISA, flow cytometry, and/or mass spectrometry.

- In an embodiment, the IL-2 has altered (*e.g.*, reduced or decreased) susceptibility to proteolysis *in vitro* and/or *in vivo*, relative to a wild-type IL-2 or a reference IL-2 variant. In an embodiment, the IL-2 variant has reduced or decreased susceptibility to proteolysis relative to IL-2
- 30 (*e.g.*, wild type human IL-2). In an embodiment, the IL-2 variant has reduced or decreased susceptibility to proteolysis relative to a reference IL-2 variant. In an embodiment, the susceptibility to proteolysis of the IL-2 variant is decreased by about 1%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, or about 100%, or more. In an embodiment, the susceptibility to proteolysis of the IL-2 variant is decreased by about 0.5-fold, 1-fold, 2-fold, 3-fold, 4-fold, 5-fold, 6-fold, 7-fold, 8-fold, 9-fold, or about 10-fold, or more.
- 35

In an embodiment, the IL-2 variant has altered (*e.g.*, enhanced or increased) resistance to proteolysis *in vitro* and/or *in vivo*, relative to a wild-type IL-2 or a reference IL-2 variant. In an

embodiment, the IL-2 variant has enhanced or increased resistance to proteolysis relative to a wild-type IL-2. In an embodiment, the IL-2 variant has enhanced or increased resistance to proteolysis relative to a reference IL-2 variant. In an embodiment, the resistance to proteolysis of the IL-2 variant is increased by about 1%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, or about 100%, or more. In an embodiment, the resistance to proteolysis of the IL-2 variant is increased by about 0.5-fold, 1-fold, 2-fold, 3-fold, 4-fold, 5-fold, 6-fold, 7-fold, 8-fold, 9-fold, or about 10-fold, or more.

In an embodiment, the IL-2 variant has altered (*e.g.*, reduced or decreased) binding capacity and/or binding affinity for human CD25 *in vitro* and/or *in vivo*, relative to a wild-type IL-2 or a reference IL-2 variant. In an embodiment, the IL-2 variant has reduced or decreased binding capacity and/or binding affinity for human CD25 relative to a wild-type human IL-2). In an embodiment, the IL-2 variant has reduced or decreased binding capacity and/or binding affinity for human CD25 relative to a reference IL-2 variant. In an embodiment, the binding capacity and/or binding affinity of the IL-2 variant for human CD25 is decreased by about 1%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, or about 100%, or more. In an embodiment, the binding capacity and/or binding affinity of the IL-2 variant for human CD25 is decreased by about 0.5-fold, 1-fold, 2-fold, 3-fold, 4-fold, 5-fold, 6-fold, 7-fold, 8-fold, 9-fold, or about 10-fold, or more. In an embodiment, an IL-2 agent comprising an IL-2 variant described herein has reduced or decreased binding affinity for CD25 (*e.g.*, human CD25), *e.g.*, decreased by about 1%, about 2%, about 3%, about 4%, about 5%, about 10%, about 15%, about 20%, about 25%, about 30%, about 35%, about 40%, about 45%, about 50%, about 55%, about 60%, about 65%, about 70%, about 75%, about 80%, about 85%, about 90%, about 95%, about 100% or more, or *e.g.*, decreased by about 0.5-fold, about 1-fold, about 1.5-fold, about 2-fold, about 2.5-fold, about 3-fold, about 3.5-fold, about 4-fold, about 4.5-fold, about 5-fold, about 5.5-fold, about 6-fold, about 6.5-fold, about 7-fold, about 7.5-fold, about 8-fold, about 8.5-fold, about 9-fold, about 9.5-fold, about 10-fold or more *e.g.*, relative to an IL-2 agent comprising a wild-type IL-2 or an IL-2 agent comprising a reference IL-2 variant *e.g.*, as determined by yeast surface display, surface plasmon resonance (*e.g.* Biacore) and/or bio-layer interferometry (*e.g.* Octet binding).

In an embodiment, the IL-2 variant binds to CD25 (*e.g.*, human CD25) with low affinity, *e.g.*, with a dissociation constant (K_D) of about 5-500 pM, *e.g.*, about 5, about 10, about 15, about 20, about 25, about 30, about 35, about 40, about 45, about 50, about 55, about 60, about 65, about 70, about 75, about 80, about 85, about 90, about 95, about 100, about 105, about 110, about 115, about 120, about 125, about 130, about 135, about 140, about 145, about 150, about 200, about 250, about 300, about 350, about 400, about 450, or about 500 pM, or *e.g.*, about 10 to about 400 pM, about 20 to about 300 pM, about 50 to about 200 pM, about 100 to about 150 pM, about 5 to about 10 pM, *e.g.*, about 10 to about 20 pM, about 20 to about 30 pM, or about 30 to about 40 pM, *e.g.*, about 40 to about 50 pM, about 50 to about 60 pM, about 60 to about 70 pM, about 70 to about 80 pM, about 80 to about 90 pM, about 90 to about 100 pM, about 100 to about 110 pM, about 110 to about 120 pM, about 120 to

about 130 pM, about 130 to about 140 pM, about 140 to about 150 pM, about 150 to about 200 pM, about 200 to about 250 pM, about 250 to about 300 pM, about 300 to about 350 pM, about 350 to about 400 pM, about 400 to about 500 pM, or *e.g.*, greater than about 5, about 10, about 15, about 20, about 25, about 30, about 35, about 40, about 45, about 50, about 55, about 60, about 65, about 70, about 75, about 80, about 85, about 90, about 95, about 100, about 105, about 110, about 115, about 120, about 125, about 130, about 135, about 140, about 145, about 150, about 200, about 250, about 300, about 350, about 400, about 450, or about 500 pM, *e.g.* as determined by yeast surface display, surface plasmon resonance (*e.g.* Biacore) and/or biolayer interferometry (*e.g.* Octet binding).

In an embodiment, the IL-2 variant binds to CD25 (*e.g.*, human CD25) with low affinity, *e.g.*, with a dissociation constant (K_D) of about 0.1-10 nM, *e.g.*, about 0.1, about 0.2, about 0.3, about 0.4, about 0.5, about 0.6, about 0.7, about 0.8, about 0.9, about 1, about 1.5, about 2, about 2.5, about 3, about 3.5, about 4, about 4.5, about 5, about 6, about 7, about 8, about 9, or about 10 nM, or *e.g.*, about 0.2 to about 5 nM, about 0.5 to about 2 nM, about 1 to 1.5 nM, about 0.1 to about 0.2 nM, *e.g.*, about 0.2 to about 0.3 nM, about 0.3 to about 0.4 nM, or about 0.4 to about 0.5 nM, *e.g.*, about 0.5 to about 0.6 nM, about 0.6 to about 0.7 nM, about 0.7 to about 0.8 nM, about 0.8 to about 0.9 nM, about 0.9 to about 1 nM, about 1 to about 1.5 nM, about 1.5 to about 2 nM, about 2.5 to about 3 nM, about 3.5 to about 4 nM, about 4 to about 4.5 nM, about 4.5 to about 5 nM, about 5 to about 6 nM, about 6 to about 7 nM, about 7 to about 8 nM, about 8 to about 9 nM, or about 9 to about 10 nM, or *e.g.*, greater than about 0.1, about 0.2, about 0.3, about 0.4, about 0.5, about 0.6, about 0.7, about 0.8, about 0.9, about 1, about 2, about 3, about 4, about 5, about 6, about 7, about 8, about 9, or about 10 nM, *e.g.*, as determined by surface plasmon resonance (*e.g.* Biacore) and/or bio-layer interferometry (*e.g.*, Octet binding).

In an embodiment, the IL-2 variant has altered (*e.g.*, reduced or decreased) binding capacity and/or binding affinity for human CD132 *in vitro* and/or *in vivo*, relative to a wild-type IL-2 or a reference IL-2 variant. In an embodiment, the IL-2 variant has reduced or decreased binding capacity and/or binding affinity for human CD132 relative to a wild-type IL-2. In an embodiment, the IL-2 variant has reduced or decreased binding capacity and/or binding affinity for human CD132 relative to a reference IL-2 variant. In an embodiment, the binding capacity and/or binding affinity of the IL-2 variant for human CD132 is decreased by about 1%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, or about 100%, or more. In an embodiment, the binding capacity and/or binding affinity of the IL-2 variant for human CD132 is decreased by about 0.5-fold, 1-fold, 2-fold, 3-fold, 4-fold, 5-fold, 6-fold, 7-fold, 8-fold, 9-fold, or about 10-fold, or more.

In an embodiment, the IL-2 variant has altered (*e.g.*, reduced or decreased) binding capacity and/or binding affinity for the human dimeric IL-2 receptor comprising human CD122 and human CD132 *in vitro* and/or *in vivo*, relative to a wild-type IL-2 or a reference IL-2 variant. In an embodiment, the IL-2 variant has reduced or decreased binding capacity and/or binding affinity for the human dimeric IL-2 receptor comprising human CD122 and human CD132 relative to a wild-type

IL-2. In an embodiment, the IL-2 variant has reduced or decreased binding capacity and/or binding affinity for the human dimeric IL-2 receptor comprising human CD122 and human CD132 relative to a reference IL-2 variant. In an embodiment, the binding capacity and/or binding affinity of the IL-2 variant for the human dimeric IL-2 receptor comprising human CD122 and human CD132 is decreased by about 1%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, or about 100%, or more. In an embodiment, the binding capacity and/or binding affinity of the IL-2 variant for the human dimeric IL-2 receptor comprising human CD122 and human CD132 is decreased by about 0.5-fold, 1-fold, 2-fold, 3-fold, 4-fold, 5-fold, 6-fold, 7-fold, 8-fold, 9-fold, or about 10-fold, or more.

In an embodiment, the IL-2 variant has reduced or decreased binding affinity for CD122/CD132 heterodimer (*e.g.*, human CD122/CD132 heterodimer), *e.g.*, decreased by about 1%, about 2%, about 3%, about 4%, about 5%, about 10%, about 15%, about 20%, about 25%, about 30%, about 35%, about 40%, about 45%, about 50%, about 55%, about 60%, about 65%, about 70%, about 75%, about 80%, about 85%, about 90%, about 95%, about 100% or more, or *e.g.*, decreased by about 0.5-fold, about 1-fold, about 1.5-fold, about 2-fold, about 2.5-fold, about 3-fold, about 3.5-fold, about 4-fold, about 4.5-fold, about 5-fold, about 5.5-fold, about 6-fold, about 6.5-fold, about 7-fold, about 7.5-fold, about 8-fold, about 8.5-fold, about 9-fold, about 9.5-fold, about 10-fold or more *e.g.*, relative to an IL-2 agent comprising a wild-type IL-2 or an IL-2 agent comprising a reference IL-2 variant *e.g.*, as determined by yeast surface display, surface plasmon resonance (*e.g.* Biacore) and/or bio-layer interferometry (*e.g.* Octet binding).

In an embodiment, the IL-2 variant binds to CD122/CD132 heterodimer (*e.g.*, human CD122/CD132 heterodimer) with low affinity, *e.g.*, with a dissociation constant (KD) of about 0.2-20 nM, *e.g.*, about 0.2, about 0.3, about 0.4, about 0.5, about 0.6, about 0.7, about 0.8, about 0.9, about 1, about 1.1, about 1.2, about 1.3, about 1.4, about 1.5, about 2, about 3, about 4, about 5, about 6, about 7, about 8, about 9, about 10, about 11, about 12, about 13, about 14, about 15, about 16, about 17, about 18, or about 20 nM, or *e.g.*, about 0.5 to about 15 nM, about 1 to about 10 nM, about 2 to about 5 nM, about 0.2 to about 0.3 nM, about 0.3 to about 0.4 nM, about 0.4 to about 0.5 nM, about 0.5 to about 0.6 nM, about 0.6 to about 0.7 nM, about 0.7 to about 0.8 nM, about 0.8 to about 0.9 nM, about 0.9 to about 1 nM, about 1 to about 1.1 nM, about 1.1 to about 1.2 nM, about 1.2 to about 1.3 nM, about 1.3 to about 1.4 nM, about 1.4 to about 1.5 nM, about 1.5 to about 2 nM, about 2 to about 3 nM, about 3 to about 4 nM, about 4 to about 5 nM, about 5 to about 6 nM, about 6 to about 7 nM, about 7 to about 8 nM, about 8 to about 9 nM, about 9 to about 10 nM, about 10 to about 11 nM, about 11 to about 12 nM, about 12 to about 13 nM, about 13 to about 14 nM, about 14 to about 15 nM, about 15 to about 16 nM, about 16 to about 17 nM, about 17 to about 18 nM, about 18 to about 19 nM, or about 19 to about 20 nM, or *e.g.*, greater than about 0.2, about 0.3, about 0.4, about 0.5, about 0.6, about 0.7, about 0.8, about 0.9, about 1, about 1.1, about 1.2, about 1.3, about 1.4, about 1.5, about 2, about 3, about 4, about 5, about 6, about 7, about 8, about 9, about 10, about 11, about 12, about 13, about 14, about 15, about 16, about 17, about 18, or about 20 nM, *e.g.*, as determined by yeast surface display.

In an embodiment, the IL-2 variant binds to CD122/CD132 heterodimer (*e.g.*, human CD122/CD132 heterodimer) with low affinity, *e.g.*, with a dissociation constant (KD) of about 0.2-300 nM, *e.g.*, about 0.2 nM, about 0.5 nM, about 1 nM, about 2 nM, about 5 nM, about 10 nM, about 15 nM, about 20 nM, about 25 nM, about 30 nM, about 40 nM, about 50 nM, about 60 nM, about 70 nM, about 80 nM, about 90 nM, about 100 nM, about 110 nM, about 120 nM, about 130 nM, about 140 nM, about 150 nM, about 160 nM, about 170 nM, about 180 nM, about 190 nM, about 200 nM, about 210 nM, about 220 nM, about 230 nM, about 240 nM, about 250 nM, about 260 nM, about 270 nM, about 280 nM, about 290 nM, or about 300 nM, or *e.g.*, about 0.5 to about 15 nM, about 1 to about 10 nM, about 2 to about 5 nM, about 0.2 nM to about 0.5 nM, about 0.5 nM to about 1 nM, about 1 to about 2 nM, about 2 nM to about 5 nM, about 5 nM to about 10 nM, about 10 nM to about 15 nM, about 15 nM to about 20 nM, about 20 nM to about 25 nM, about 25 to about 30 nM, about 30 nM to about 40 nM, about 40 nM to about 50 nM, about 50 to about 60 nM, about 60 to about 70 nM, about 70 nM to about 80 nM, about 80 nM to about 90 nM, about 90 nM to about 100 nM, about 100 nM to about 110 nM, about 110 nM to about 120 nM, about 120 nM to about 130 nM, about 130 nM to about 140 nM, about 140 nM to about 150 nM, about 150 nM to about 160 nM, about 160 nM to about 170 nM, about 170 nM to about 180 nM, about 180 nM to about 190 nM, about 190 nM to about 200 nM, about 200 nM to about 210 nM, about 210 nM to about 220 nM, about 220 nM to about 230 nM, about 230 nM to about 240 nM, about 240 nM to about 250 nM, about 250 nM to about 260 nM, about 260 nM to about 270 nM, about 270 nM to about 280 nM, about 280 nM to about 290 nM, or about 290 nM to about 300 nM, or *e.g.*, greater than about 0.2, about 0.5, about 1, about 2, about 5, about 10, about 15, about 20 nM, about 25 nM, about 30 nM, about 40 nM, about 50 nM, about 60 nM, about 70 nM, about 80 nM, about 90 nM, about 100 nM, about 110 nM, about 120 nM, about 130 nM, about 140 nM, about 150 nM, about 160 nM, about 170 nM, about 180 nM, about 190 nM, about 200 nM, about 210 nM, about 220 nM, about 230 nM, about 240 nM, about 250 nM, about 260 nM, about 270 nM, about 280 nM, about 290 nM, or greater than about 300 nM, *e.g.*, as determined by surface plasmon resonance (*e.g.* Biacore) and/or biolayer interferometry (*e.g.* Octet binding).

In an embodiment, the IL-2 variant has altered (*e.g.*, enhanced, increased, and/or selective) binding to Tregs *in vitro* and/or *in vivo*, relative to a wild-type IL-2 or a reference IL-2 variant. In an embodiment, the IL-2 variant has enhanced or increased binding to Tregs relative to a wild-type IL-2. In an embodiment, the IL-2 variant has selective binding to Tregs relative to IL-2 (*e.g.*, wild type human IL-2). In an embodiment, the IL-2 variant has enhanced or increased binding to Tregs relative to a reference IL-2 variant. In an embodiment, the IL-2 variant has selective binding to Tregs relative to a reference IL-2 variant. In an embodiment, the binding to Tregs is increased by about 1%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, or about 100%, or more. In an embodiment, the binding to Tregs is increased by about 0.5-fold, 1-fold, 2-fold, 3-fold, 4-fold, 5-fold, 6-fold, 7-fold, 8-fold, 9-fold, or about 10-fold, or more.

In an embodiment, the IL-2 variant has altered (*e.g.*, enhanced, increased, and/or selective) activation of the IL-2 signaling pathway in Tregs *in vitro* and/or *in vivo*, relative to a wild-type IL-2 or a reference IL-2 variant. In an embodiment, the IL-2 variant has enhanced or increased activation of the IL-2 signaling pathway in Tregs relative to a wild-type IL-2. In an embodiment, the IL-2 variant has selective activation of the IL-2 signaling pathway in Tregs relative to a wild-type IL-2. In an embodiment, the IL-2 variant has enhanced or increased activation of the IL-2 signaling pathway in Tregs relative to a reference IL-2 variant. In an embodiment, the IL-2 variant has selective activation of the IL-2 signaling pathway in Tregs relative to a reference IL-2 variant. In an embodiment, the activation of the IL-2 signaling pathway in Tregs is increased by about 1%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, or about 100%, or more. In an embodiment, the activation of the IL-2 signaling pathway in Tregs is increased by about 0.5-fold, 1-fold, 2-fold, 3-fold, 4-fold, 5-fold, 6-fold, 7-fold, 8-fold, 9-fold, or about 10-fold, or more.

In an embodiment, the IL-2 variant selectively activates IL-2 signaling in T regulatory cells *in vitro* and/or *in vivo*, *e.g.*, having an T helper EC50/Treg EC50 ratio greater than about 1, about 2, about 3, about 4, about 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800, 900, 1000, 1500, 2000, 2500, or about 3000 or more relative to an IL-2 agent comprising a wild-type IL-2 or an IL-2 agent comprising a reference IL-2 variant *e.g.*, as determined flow cytometry.

In an embodiment, the IL-2 variant selectively activates IL-2 signaling in T regulatory cells *in vitro* and/or *in vivo*, *e.g.*, having an NK cell EC50/Treg EC50 ratio greater than *e.g.*, about 1, about 2, about 3, about 4, about 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800, 900, 1000, 1500, 2000, 2500, or about 3000 or more, or *e.g.*, greater than 1 and about 1 to 2, about 2 to 3, about 3 to 4, about 4 to 5, greater than 1 and about 1 to 10, greater than 1 and about 1 to 20, greater than 1 and about 1 to 30, greater than 1 and about 1 to 40, greater than 1 and about 1 to 50, about 2 to 10, about 2 to 20, about 2 to 30, about 2 to 40, 2 to 50, about 5 to 10, about 5 to 20, about 5 to 30, about 5 to 40, about 5 to 50, about 10 to 20, about 10 to 30, about 10 to 40 about 10 to 50, about 20 to 40, about 20 to 50, about 50 to 100, about 100 to 200, about 200 to 500, about 500 to 1000, about 1000 to 2000, or about 1000 to 3000, relative to an IL-2 agent comprising a wild-type IL-2 or an IL-2 agent comprising a reference IL-2 variant *e.g.*, as determined flow cytometry.

In an embodiment, the IL-2 variant has altered (*e.g.*, enhanced, increased, and/or selective) ability to induce or promote Treg expansion, activity, survival, and/or proliferation *in vitro* and/or *in vivo*, relative to a wild-type IL-2 or a reference IL-2 variant. In an embodiment, the IL-2 variant has enhanced or increased ability to induce or promote Treg expansion, activity, survival, and/or proliferation relative to a wild-type IL-2. In an embodiment, the IL-2 variant has selective ability to

induce or promote Treg expansion, activity, survival, and/or proliferation relative to a wild-type IL-2.

In an embodiment, the IL-2 variant has enhanced or increased ability to induce or promote Treg expansion, activity, survival, and/or proliferation relative to a reference IL-2 variant. In an

embodiment, the IL-2 variant has selective ability to induce or promote Treg expansion, activity,

- 5 survival, and/or proliferation relative to a reference IL-2 variant. In an embodiment, the ability to induce or promote Treg expansion, activity, survival, and/or proliferation is increased by about 1%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, or about 100%, or more. In an embodiment, the ability to induce or promote Treg expansion, activity, survival, and/or proliferation is increased by about 0.5-fold, 1-fold, 2-fold, 3-fold, 4-fold, 5-fold, 6-fold, 7-fold, 8-fold, 9-fold, or
- 10 about 10-fold, or more.

In an embodiment, the IL-2 variant has enhanced or increased potency and/or ability to induce or promote T regulatory cell activity, *e.g.*, having an EC50 for Tregs that is lower by about 1%, about 2%, about 3%, about 4%, about 5%, about 10%, about 15%, about 20%, about 25%, about 30%, about 35%, about 40%, about 45%, about 50%, about 55%, about 60%, about 65%, about 70%, about 75%,

15 about 80%, about 85%, about 90%, about 95%, about 100% or more, or *e.g.*, decreased by about 0.5-fold, about 1-fold, about 1.5-fold, about 2-fold, about 2.5-fold, about 3-fold, about 3.5-fold, about 4-fold, about 4.5-fold, about 5-fold, about 5.5-fold, about 6-fold, about 6.5-fold, about 7-fold, about 7.5-fold, about 8-fold, about 8.5-fold, about 9-fold, about 9.5-fold, about 10-fold or more *e.g.*, relative to an IL-2 agent comprising a wild-type IL-2 or an IL-2 agent comprising a reference IL-2 variant *e.g.*,

- 20 as determined flow cytometry.

In an embodiment, the IL-2 variant has reduced or decreased potency and/or ability to induce or promote T regulatory cell activity, *e.g.*, having an EC50 for Tregs that is higher by about 1%, about 2%, about 3%, about 4%, about 5%, about 10%, about 15%, about 20%, about 25%, about 30%, about 35%, about 40%, about 45%, about 50%, about 55%, about 60%, about 65%, about 70%, about 75%,

25 about 80%, about 85%, about 90%, about 95%, or about 100% or more, or *e.g.*, decreased by about 0.5-fold, about 1-fold, about 1.5-fold, about 2-fold, about 2.5-fold, about 3-fold, about 3.5-fold, about 4-fold, about 4.5-fold, about 5-fold, about 5.5-fold, about 6-fold, about 6.5-fold, about 7-fold, about 7.5-fold, about 8-fold, about 8.5-fold, about 9-fold, about 9.5-fold, about 10-fold, about 50-fold, about 100-fold, about 200-fold, about 500-fold, about 1000-fold, about 2000-fold, about 5000-fold, about

30 10,000, about 15,000-fold, or about 20,000-fold or more *e.g.*, relative to an IL-2 agent comprising a wild-type IL-2 or an IL-2 agent comprising a reference IL-2 variant *e.g.*, as determined flow cytometry.

In an embodiment, the T helper cell described herein is a CD45+CD3+CD4+Foxp3- cell, *e.g.*, determined by flow cytometry. In an embodiment, the Treg described herein is

- 35 CD45+CD3+CD4+Foxp3+ cell, *e.g.*, determined by flow cytometry. In an embodiment, the NK cell described herein is a CD45+CD3- cell that is CD56+ and/or CD16+, *e.g.*, determined by flow

cytometry. In an embodiment, the NK cell described herein is a CD45⁺CD3⁺CD56⁺ cell, *e.g.*, determined by flow cytometry.

In an embodiment, the IL-2 variant has one or more of the same, or substantially the same, structural and/or functional properties, as a wild-type IL-2 or a reference IL-2 variant.

5 In an embodiment, the reference IL-2 variant comprises an amino acid sequence that has about 75%, 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity to an IL-2 variant described herein. In an embodiment, the reference IL-2 variant comprises the amino acid sequence of SEQ ID NO: 1 (IL-2 C125S). In an embodiment, the IL-2 variant comprises an amino acid sequence that is at least 80%, 85%, 90%, 95%, or 98% identical to the amino
10 acid sequence of SEQ ID NO: 1 and comprises one or more (2, 3, 4, 5, 6, 7, 8, 9, 10, or more) amino acid alterations (*e.g.*, substitutions) described herein.

For purposes of this disclosure, IL-2 variant position numbering begins at the first amino acid following the signal peptide of the exemplary wild type (WT) human IL-2 polypeptide:

MYRMQLLSICIALSLALVTNS/A1/P2/T3/S4/S5/S6/T7/K8/K9/T10/Q11/L12/Q13/L14/E15/H16/L1
15 7/L18/L19/D20/L21/Q22/M23/I24/L25/N26/G27/I28/N29/N30/Y31/K32/N33/P34/K35/L36/T37/R38
/M39/L40/T41/F42/K43/F44/Y45/M46/P47/K48/K49/A50/T51/E52/L53/K54/H55/L56/Q57/C58/L59
/E60/E61/E62/L63/K64/P65/L66/E67/E68/V69/L70/N71/L72/A73/Q74/S75/K76/N77/F78/H79/L80/
R81/P82/R83/D84/L85/I86/S87/N88/I89/N90/V91/I92/V93/L94/E95/L96/K97/G98/S99/E100/T101/
T102/F103/M104/C105/E106/Y107/A108/D109/E110/T111/A112/T113/I114/V115/E116/F117/L118
20 /N119/R120/W121/I122/T123/F124/C125/Q126/S127/I128/I129/S130/T131/L132/T133 (SEQ ID
NO: 360; Uniprot P60568; signal peptide underlined). The corresponding amino acid sequence
without the signal peptide is shown as SEQ ID NO: 1031.

In an embodiment, the IL-2 agent comprises amino acid alteration(s) (*e.g.*, substitution(s)) at
25 position(s) corresponding to human IL-2 (*e.g.*, comprising the amino acid sequence of SEQ ID NO:
1031).

In an embodiment, the IL-2 variant comprises the amino acid sequence of
A1/P2/X3/S4/S5/S6/T7/K8/K9/T10/Q11/L12/Q13/L14/E15/X16/L17/L18/L19/D20/L21/Q22/M23/I2
4/L25/N26/G27/X28/N29/N30/Y31/K32/N33/P34/X35/L36/T37/X38/M39/L40/T41/X42/K43/F44/Y
45/M46/P47/K48/K49/A50/T51/E52/L53/K54/H55/L56/Q57/C58/L59/E60/E61/E62/L63/K64/P65/L
30 66/E67/X68/X69/L70/N71/L72/A73/X74/S75/K76/N77/F78/H79/L80/R81/P82/R83/X84/L85/I86/X8
7/X88/I89/N90/V91/X92/V93/L94/E95/L96/K97/G98/S99/E100/T101/T102/F103/M104/C105/E106/
Y107/A108/D109/E110/T111/A112/T113/I114/V115/E116/F117/L118/N119/R120/W121/I122/T123
/F124/X125/X126/S127/I128/I129/S130/T131/L132/T133 (SEQ ID NO: 1032),

wherein: X3 is T or A; X16 is H, L or N; X28 is I, T or F; X35 is K or E; X38 is R, E, N or Q;
35 X42 is F, A, K or Q; X68 is E, Q or N; X69 is V or A; X74 is Q or P; X84 is D or V; X87 is S or R;
X88 is N, D, L or S; X92 is I or S; X125 is C or S; and X126 is Q, K, R or T, provided that the IL-2

variant does not comprise the amino acid sequence of SEQ ID NO: 1 or 1031. In an embodiment, the IL-2 variant comprises, or consists of, an IL-2 variant amino acid sequence described herein.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at one or more (*e.g.*, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, or all) of positions, as described herein. In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at one or more (*e.g.*, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, or all) of positions chosen from T3, H16, I28, K35, R38, F42, E68, V69, Q74, D84, S87, N88, I92, C125, or Q126.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position T3. In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position H16. In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position I28. In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position K35. In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position R38. In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position F42. In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position E68. In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position V69. In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position Q74. In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position D84. In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position S87. In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position N88. In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position I92. In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position C125. In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position Q126.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position V69, Q74, or a combination thereof. In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at positions V69 and Q74. In an embodiment, the IL-2 variant comprises the amino acid substitution V69A. In an embodiment, the IL-2 variant comprises the amino acid substitution Q74P.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position H16, I92, D84, or a combination thereof. In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position H16, optionally wherein the amino acid substitution is H16N, H16L, or H16D. In an embodiment, the IL-2 variant comprises the amino acid substitution H16N. In an embodiment, the IL-2 variant comprises the amino acid substitution H16L. In an embodiment, the IL-2 variant comprises the amino acid substitution H16D.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position at I92, optionally wherein the amino acid substitution is I92S. In an embodiment, the IL-2 variant comprises the amino acid substitution I92S.

5 In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position D84, optionally wherein the amino acid substitution is D84V. In an embodiment, the IL-2 variant comprises the amino acid substitution is D84V.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position K35, R38, F42, E68, or a combination thereof. In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position K35, optionally wherein the amino acid substitution is K35E. In an embodiment, IL-2 variant comprises the amino acid substitution K35E.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position R38, optionally wherein the amino acid substitution is R38E, R38N or R38Q. In an embodiment, the IL-2 variant comprises the amino acid substitution R38N. In an embodiment, the IL-2 variant comprises the amino acid substitution R38Q.

15 In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position F42, optionally wherein the amino acid substitution is F42K or F42Q. In an embodiment, the IL-2 variant comprises the amino acid substitution F42K. In an embodiment, the IL-2 variant comprises the amino acid substitution F42Q.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution): (i) at (a) positions V69 and Q74, (b) position K35, or (c) positions V69, Q74, and K35; and (ii) at one, two, or all of positions H16, I92, or D84. In an embodiment, the IL-2 variant further comprises an amino acid alteration (*e.g.*, substitution) at one, two, or all of positions R38, F42, or E68.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution): (i) at (a) positions V69 and Q74, (b) position K35, or (c) positions V69, Q74, and K35; and (ii) at (a) one, two, or all of positions H16, I92, or D84; or (b) one, two, or all of positions R38, F42, or E68.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution): (i) at (a) positions V69 and Q74, (b) position K35, or (c) positions V69, Q74, and K35; and (ii) at (a) one, two, or all of positions H16, I92, or D84; and (b) one, two, or all of positions R38, F42, or E68.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position V69, Q74, and H16, optionally wherein the amino acid substitution is V69A, Q74P, and H16N or H16L, respectively. In an embodiment, the IL-2 variant comprises the amino acid substitutions V69A, Q74P, and H16N or H16L. In an embodiment, the IL-2 variant comprises the amino acid substitutions V69A, Q74P, and H16N. In an embodiment, the IL-2 variant comprises the amino acid substitutions V69A, Q74P, and H16L.

35 In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position V69, Q74, and I92, optionally wherein the amino acid substitution is V69A, Q74P, and I92S,

respectively. In an embodiment, the IL-2 variant comprises the amino acid substitutions V69A, Q74P, and I92S.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position V69, Q74, and D84, optionally wherein the amino acid substitution is V69A, Q74P, and D84V, respectively. In an embodiment, the IL-2 variant comprises the amino acid substitutions V69A, Q74P, and D84V.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position V69, Q74, and R38, optionally wherein the amino acid substitution is V69A, Q74P, and R38Q, respectively. In an embodiment, the IL-2 variant comprises the amino acid substitutions V69A, Q74P, and R38Q.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position V69, Q74, and F42, optionally wherein the amino acid substitution is V69A, Q74P, and F42Q, respectively. In an embodiment, the IL-2 variant comprises the amino acid substitutions V69A, Q74P, and F42Q.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position V69, Q74, and R38, optionally wherein the amino acid substitution is V69A, Q74P, and R38N, respectively. In an embodiment, the IL-2 variant comprises the amino acid substitutions V69A, Q74P, and R38N.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position V69, Q74, and R38, optionally wherein the amino acid substitution is V69A, Q74P, and R38E, respectively. In an embodiment, the IL-2 variant comprises the amino acid substitution V69A, Q74P, and R38E.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position V69, Q74, K35, and H16, optionally wherein the amino acid substitution is V69A, Q74P, K35E, and H16N, respectively. In an embodiment, the IL-2 variant comprises the amino acid substitutions V69A, Q74P, K35E, and H16N.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position V69, Q74, K35, H16, and R38, optionally wherein the amino acid substitution is V69A, Q74P, K35E, H16N, and R38N, respectively. In an embodiment, the IL-2 variant comprises the amino acid substitutions V69A, Q74P, K35E, H16N, and R38N.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position V69, Q74, H16, and R38, optionally wherein the amino acid substitution is V69A, Q74P, H16N, and R38N or R38Q, respectively. In an embodiment, the IL-2 variant comprises the amino acid substitutions V69A, Q74P, H16N, and R38N or R38Q. In an embodiment, the IL-2 variant comprises the amino acid substitutions V69A, Q74P, H16N, and R38N. In an embodiment, the IL-2 variant comprises the amino acid substitutions V69A, Q74P, H16N, and R38Q.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position I28, E68, S87, N88, Q126, or a combination thereof.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position I28, optionally wherein the amino acid substitution is I28T or I28F. In an embodiment, the IL-2 variant comprises the amino acid substitution I28T. In an embodiment, the IL-2 variant comprises the amino acid substitution I28F.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position E68, optionally wherein the amino acid substitution is E68Q or E68N. In an embodiment, the IL-2 variant comprises the amino acid substitution E68Q. In an embodiment, the IL-2 variant comprises the amino acid substitution E68N.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position S87, optionally wherein the amino acid substitution is S87R. In an embodiment, the IL-2 variant comprises the amino acid substitution S87R.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position N88, optionally wherein the amino acid substitution is N88S, N88L, or N88D. In an embodiment, the IL-2 variant comprises the amino acid substitution N88S, N88L, or N88D. In an embodiment, the IL-2 variant comprises the amino acid substitution N88S. In an embodiment, the IL-2 variant comprises the amino acid substitution N88L. In an embodiment, the IL-2 variant comprises the amino acid substitution N88D.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position Q126, optionally wherein the amino acid substitution is Q126T, Q126K, or Q126R. In an embodiment, the IL-2 variant comprises the amino acid substitution Q126T, Q126K, or Q126R. In an embodiment, the IL-2 variant comprises the amino acid substitution Q126T, Q126K, or Q126R. In an embodiment, the IL-2 variant comprises the amino acid substitution Q126T. In an embodiment, the IL-2 variant comprises the amino acid substitution Q126K. In an embodiment, the IL-2 variant comprises the amino acid substitution Q126R.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position C125, optionally wherein the amino acid substitution is C125S. In an embodiment, the IL-2 variant comprises the amino acid substitution C125S.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position T3, optionally wherein the amino acid substitution is T3A. In an embodiment, the IL-2 variant comprises the amino acid substitution T3A.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position V69, Q74, and C125, optionally wherein the amino acid substitution is V69A, Q74P, and C125S, respectively. In an embodiment, the IL-2 variant comprises the amino acid substitutions V69A, Q74P, and C125S.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position T3, H16, I92, or a combination thereof, optionally wherein the amino acid substitution is T3A, H16N, and I92S, respectively.

5 In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position H16, V69, Q74, and C125, optionally wherein the amino acid substitution is H16N, V69A, Q74P, and C125S, respectively. In an embodiment, the IL-2 variant comprises the amino acid substitutions H16N, V69A, Q74P, and C125S.

10 In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position H16, V69, Q74, and C125, optionally wherein the amino acid substitution is H16L, V69A, Q74P, and C125S, respectively. In an embodiment, the IL-2 variant comprises the amino acid substitutions H16L, V69A, Q74P, and C125S.

15 In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position H16, V69, Q74, I92, and C125, optionally wherein the amino acid substitution is H16L, V69A, Q74P, I92S, and C125S, respectively. In an embodiment, the IL-2 variant comprises the amino acid substitutions H16L, V69A, Q74P, I92S, and C125S.

20 In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position T3, V69, Q74, and C125, optionally wherein the amino acid substitution is T3A, V69A, Q74P, and C125S, respectively. In an embodiment, the IL-2 variant comprises the amino acid substitutions T3A, V69A, Q74P, and C125S.

25 In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position T3, H16, V69, Q74, and C125, optionally wherein the amino acid substitution is T3A, H16N or H16L, V69A, Q74P, and C125S, respectively. In an embodiment, the IL-2 variant comprises the amino acid substitutions T3A, H16N, V69A, Q74P, and C125S. In an embodiment, the IL-2 variant comprises the amino acid substitutions T3A, H16L, V69A, Q74P, and C125S.

30 In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position T3, V69, Q74, I92, and C125, optionally wherein the amino acid substitution is T3A, V69A, Q74P, I92S, and C125S, respectively. In an embodiment, the IL-2 variant comprises the amino acid substitutions T3A, V69A, Q74P, I92S, and C125S. In an embodiment, the IL-2 variant comprises the amino acid substitutions T3A, V69A, Q74P, I92S, and C125S.

35 In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position H16, K35, V69 and Q74, optionally wherein the amino acid substitution is H16L, K35E, V69A, and Q74P, respectively. In an embodiment, the IL-2 variant comprises the amino acid substitutions H16L, K35E, V69A, and Q74P.

In an embodiment, the IL-2 variant comprises an amino acid alteration (*e.g.*, substitution) at position H16, R38, V69A, and Q74P, optionally wherein the amino acid substitution is H16L, R38Q, V69A, and Q74P, respectively. In an embodiment, the IL-2 variant comprises the amino acid substitutions H16L, R38Q, V69A, and Q74P.

In an embodiment, the IL-2 variant comprises amino acid substitutions H16L, V69A, Q74P, and C125S. In an embodiment, the IL-2 variant comprises amino acid substitutions H16N, V69A, Q74P, and C125S.

There are various technical effects associated with the presence of the particular sets of mutations described herein, for example, a set of mutations comprising an amino acid substitution at position H16, in combination with amino acid substitutions at positions V69, Q74, and C125 (*e.g.*, H16L, V69A, Q74P, and C125S). Without wishing to be bound by theory, it is believed that in an embodiment, an IL-2 variant comprising the aforesaid mutations also has reduced binding affinity for CD122 and/or CD132, which increases the potency and selectivity of the IL-2 variant for regulatory T cells (Treg) compared to other T cell types. Without wishing to be bound by theory, it is also believed that in an embodiment, an IL-2 variant comprising the aforesaid mutations is significantly stable, *e.g.*, due to the presence of stabilizing V69A and Q74P mutations. For example, it was unexpectedly discovered that the V69A and Q74P substitutions do not substantially increase the binding affinity of the IL-2 variant for CD25, but rather stabilize the IL-2 variant in an active conformation sufficient for binding to CD25. Therefore, an IL-2 variant comprising these mutations selectively activates regulatory T cells (Treg) and is significantly stable. Without wishing to be bound by theory, it is further believed that in an embodiment, an IL-2 variant comprising the aforesaid mutations has reduced or decreased binding capacity and/or binding affinity for CD25, which improves the lifetime of the IL-2 variant. Without wishing to be bound by theory, it is also believed that in an embodiment, an IL-2 variant comprising these mutations does not substantially promote expansion, activation, survival, and/or proliferation of T effector cells and/or natural killer (NK) cells *in vitro* and/or *in vivo*. Without wishing to be bound by theory, it is further believed that in an embodiment, an IL-2 variant comprising the aforesaid mutations has reduced incorrect disulfide pairing and improved stability, *e.g.*, due to the presence of the C125S mutation. In an embodiment, an IL-2 agent comprising the H16L mutation has reduced binding affinity for CD122 and/or CD132 and/or increased potency and selectivity for Treg over other T cell types, compared to an IL-2 agent comprising other H16 mutations. These properties make an IL-2 variant comprising these mutations particularly suitable for treating disorders and conditions arising from abnormal immune responses.

Thus, in an embodiment, an IL-2 variant (*e.g.*, IL-2 variant or IL-2 fusion protein) comprising an amino acid substitution at position H16 in combination with amino acid substitutions at positions V69, Q74, and C125 (*e.g.*, H16L, V69A, Q74P, and C125S), has *inter alia* one or more (*e.g.*, 2, 3, 4, 5, 6, 7, or all) of the following properties relative to a wild-type IL-2 or a reference IL-2 variant that does not comprise the amino acid substitutions: (i) enhanced or increased stability *in vitro* or *in vivo*; (ii) reduced or decreased binding capacity and/or binding affinity for human CD122 *in vitro* and/or *in vivo*; (iii) reduced or decreased binding capacity and/or binding affinity for human CD132 *in vitro* and/or *in vivo*; (iv) reduced or decreased affinity of the IL-2 variant for the heterodimeric IL-2 receptor composed of human CD122 and human CD132 (*i.e.* human CD122/CD132 heterodimer) *in*

vitro and/or *in vivo*; (v) reduced or decreased binding capacity and/or binding affinity for human CD25 *in vitro* and/or *in vivo*; (vi) selective binding to regulatory T cells (e.g. Foxp3⁺ T cells); (vii) selective activation of the IL-2 signaling pathway in T regulatory cells (Tregs) *in vitro* or *in vivo*; or (viii) enhanced or increased ability to induce or promote Treg expansion, activity, survival and/or proliferation.

In an embodiment, the IL-2 variant comprises, or consists of, an amino acid sequence chosen from: SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 12, SEQ ID NO: 13, SEQ ID NO: 14, SEQ ID NO: 15, SEQ ID NO: 16, SEQ ID NO: 17, SEQ ID NO: 18, SEQ ID NO: 19, SEQ ID NO: 20, SEQ ID NO: 21, SEQ ID NO: 22, SEQ ID NO: 23, SEQ ID NO: 24, SEQ ID NO: 25, SEQ ID NO: 26, SEQ ID NO: 27, SEQ ID NO: 28, SEQ ID NO: 29, SEQ ID NO: 30, SEQ ID NO: 31, SEQ ID NO: 32, SEQ ID NO: 33, SEQ ID NO: 34, SEQ ID NO: 35, SEQ ID NO: 36, SEQ ID NO: 37, SEQ ID NO: 38, SEQ ID NO: 1000, SEQ ID NO: 1001, SEQ ID NO: 1002, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto.

In an embodiment, the IL-2 variant comprises, or consists of, the amino acid sequence of SEQ ID NO: 4, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto. In an embodiment, the IL-2 variant comprises, or consists of, the amino acid sequence of SEQ ID NO: 5, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto. In an embodiment, the IL-2 variant comprises, or consists of, the amino acid sequence of SEQ ID NO: 11, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto. In an embodiment, the IL-2 variant comprises, or consists of, the amino acid sequence of SEQ ID NO: 1000, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto. In an embodiment, the IL-2 variant comprises, or consists of, the amino acid sequence of SEQ ID NO: 1001, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto. In an embodiment, the IL-2 variant comprises, or consists of, the amino acid sequence of SEQ ID NO: 1002, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%,

93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto.

In an embodiment, the IL-2 variant comprises, or consists of, the amino acid sequence of any of SEQ ID NOs: 4, 5, 11, 1000, 1001, or 1002, or a functional fragment thereof. In an embodiment, the IL-2 variant comprises, or consists of, the amino acid sequence of SEQ ID NO: 4 or 5, or a functional fragment thereof. In an embodiment, the IL-2 variant comprises, or consists of, the amino acid sequence of SEQ ID NO: 4, or a functional fragment thereof. In an embodiment, the IL-2 variant comprises, or consists of, the amino acid sequence of SEQ ID NO: 5, or a functional fragment thereof. In an embodiment, the IL-2 variant comprises, or consists of, the amino acid sequence of SEQ ID NO: 11, or a functional fragment thereof. In an embodiment, the IL-2 variant comprises, or consists of, the amino acid sequence of SEQ ID NO: 1000, or a functional fragment thereof. In an embodiment, the IL-2 variant comprises, or consists of, the amino acid sequence of SEQ ID NO: 1001, or a functional fragment thereof. In an embodiment, the IL-2 variant comprises, or consists of, the amino acid sequence of SEQ ID NO: 1002, or a functional fragment thereof.

Without wishing to be bound by theory, it is believed that in an embodiment, an IL-2 variant comprising, or consisting of, the amino acid sequence of SEQ ID NO: 5, or a functional fragment thereof, can have at least one or more of the following advantageous properties: (i) has reduced binding affinity for CD122 and/or CD132, which increases the potency and selectivity of the IL-2 agent for regulatory T cells (Treg) compared to other T cell types; (ii) is significantly stable, *e.g.*, due to the presence of stabilizing V69A and Q74P mutations; (iii) has reduced or decreased binding capacity and/or binding affinity for CD25, which improves the lifetime of the IL-2 agent; (iv) does not substantially promote expansion, activation, survival, and/or proliferation of T effector cells and/or natural killer (NK) cells *in vitro* and/or *in vivo*; and/or (v) has reduced incorrect disulfide pairing and improved stability, *e.g.*, due to the presence of the C125S mutation. In an embodiment, an IL-2 agent comprising the H16L mutation has reduced binding affinity for CD122 and/or CD132 and/or increased potency and selectivity for Treg over other T cell types, compared to an IL-2 agent comprising other H16 mutations. These properties make an IL-2 variant comprising, or consisting of, the amino acid sequence of SEQ ID NO: 5 particularly suitable for treating disorders and conditions arising from abnormal immune responses.

Thus, in an embodiment, an IL-2 variant comprising, or consisting of, the amino acid sequence SEQ ID NO: 5, or a functional fragment thereof, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto, has *inter alia* one or more (*e.g.*, 2, 3, 4, 5, 6, 7, or all) of the following properties relative to a wild-type IL-2 or a reference IL-2 variant that does not comprise the amino acid substitutions: (i) enhanced or increased stability *in vitro* or *in vivo*; (ii) reduced or decreased binding capacity and/or binding affinity for human CD122 *in vitro* and/or *in vivo*; (iii) reduced or decreased

binding capacity and/or binding affinity for human CD132 *in vitro* and/or *in vivo*; (iv) reduced or decreased affinity of the IL-2 variant for the heterodimeric IL-2 receptor composed of human CD122 and human CD132 (*i.e.* human CD122/CD132 heterodimer) *in vitro* and/or *in vivo*; (v) reduced or decreased or substantially unchanged binding capacity and/or binding affinity for human CD25 *in vitro* and/or *in vivo*; (vi) selective binding to regulatory T cells (*e.g.* Foxp3⁺ T cells); (vii) selective activation of the IL-2 signaling pathway in T regulatory cells (Tregs) *in vitro* or *in vivo*; or (viii) enhanced or increased ability to induce or promote Treg expansion, activity, survival and/or proliferation.

As described further herein, the disclosure provides IL-2 fusion proteins, IL-2 complexes, and IL-2 conjugates comprising an IL-2 variant described herein. In an embodiment, one or more different and/or improved properties ascribed to an IL-2 variant described herein is maintained, transferred, or imparted to the IL-2 fusion protein, IL-2 complex, or IL-2. For the purposes of the present disclosure, the terms “IL-2 variant” and “IL-2 mutein” may be used interchangeably herein.

In an embodiment, the IL-2 variant comprises a polypeptide (sometime referred to herein as “IL-2 variant polypeptide”). This disclosure provides an isolated nucleic acid molecule encoding an IL-2 variant described herein, and vectors and host cells thereof. The nucleic acid molecule includes, but is not limited to, RNA, genomic DNA and cDNA.

IL-2 Fusion Proteins

In an embodiment, the IL-2 agent comprises an IL-2 fusion protein, *e.g.*, an IL-2 fusion protein described herein.

In an embodiment, the IL-2 fusion protein comprises an IL-2 variant, *e.g.*, an IL-2 variant described herein. In an embodiment, the IL-2 fusion protein comprises one or more amino acid alterations (*e.g.*, substitutions) described in **Table 9**. In an embodiment, the IL-2 fusion protein comprises an amino acid sequence described in **Table 9**, or a functional fragment thereof. In an embodiment, the IL-2 variant is encoded by a nucleic acid comprising a nucleotide sequence described herein, *e.g.*, in **Table 10**.

Without wishing to be bound by theory, it is believed that in an embodiment, the IL-2 fusion proteins described herein, which have reduced human CD25 and/or reduced human CD122/CD132 binding affinity relative to a IL-2 fusion protein comprising a wild-type human IL-2 or a reference IL-2 fusion protein, can have improved potency and/or selectivity for binding to and activating regulatory T cells (Tregs) than IL-2 fusion proteins comprising a wild-type human IL-2 or other IL-2 fusion protein.

In an embodiment, the IL-2 fusion protein has one or more (*e.g.*, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, or more) properties described herein, *e.g.*, different and/or improved properties, relative to an IL-2 fusion protein comprising a wild-type IL-2 or a reference IL-2 fusion protein. In an embodiment, the IL-2 fusion protein comprises one or more (*e.g.*, 2, 3, 4, 5, 6, 7, 8, 9, 10, or more) amino acid

alterations (e.g., substitutions) that provide different and/or improved properties, relative to an IL-2 fusion protein comprising a wild-type IL-2 or a reference IL-2 fusion protein. In an embodiment, the IL-2 fusion protein has one or more (e.g., 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, or all) of the following different and/or improved properties (e.g., as determined by an assay described herein), relative to an

- 5 IL-2 fusion protein comprising a wild-type IL-2 or a reference IL-2 fusion protein:
 - i) altered (e.g., enhanced or increased) expression *in vitro* and/or *in vivo*;
 - ii) altered (e.g., reduced or decreased) aggregation *in vitro* and/or *in vivo*;
 - iii) altered (e.g., enhanced or increased) stability *in vitro* and/or *in vivo*;
 - iv) altered (e.g., enhanced or increased) half-life *in vitro* and/or *in vivo*;
 - 10 v) altered (e.g., reduced or decreased) turnover and/or clearance *in vivo*;
 - vi) altered (e.g., reduced or decreased) susceptibility to proteolysis *in vitro* and/or *in vivo*;
 - vii) altered (e.g., enhanced or increased) resistance to proteolysis *in vitro* and/or *in vivo*;
 - viii) altered (e.g., reduced or decreased) binding capacity and/or binding affinity for human CD25 *in vitro* and/or *in vivo*;
 - 15 ix) altered (e.g., reduced or decreased) binding capacity and/or binding affinity for human CD132 *in vitro* and/or *in vivo*;
 - x) altered (e.g., reduced or decreased) binding capacity and/or binding affinity for the dimeric IL-2 receptor comprising human CD122 and human CD132 *in vitro* and/or *in vivo*;
 - xi) altered (e.g., enhanced, increased, reduced, decreased, and/or selective) binding to
 - 20 Tregs *in vitro* and/or *in vivo*;
 - xii) altered (e.g., enhanced, increased, reduced, decreased, and/or selective) activation of the IL-2 signaling pathway in Tregs *in vitro* and/or *in vivo*; or
 - xiii) altered (e.g., enhanced, increased, reduced, decreased, and/or selective) ability to induce or promote Treg expansion, activity, survival, and/or proliferation *in vitro* and/or *in vivo*.
- 25 In an embodiment, the IL-2 fusion protein has altered (e.g., enhanced or increased) expression *in vitro* and/or *in vivo*, relative to an IL-2 fusion protein comprising a wild-type IL-2 or a reference IL-2 fusion protein. In an embodiment, the IL-2 fusion protein has enhanced or increased expression (e.g., in a bacterial or mammalian cell) relative to an IL-2 fusion protein comprising a wild-type IL-2. In an embodiment, the IL-2 fusion protein has enhanced or increased expression (e.g.,
- 30 in bacterial or mammalian cell) relative to a reference IL-2 fusion protein. In an embodiment, the expression of the IL-2 fusion protein is increased by about 1%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, or about 100%, or more. In an embodiment, the expression of the IL-2 fusion protein is increased by about 0.5-fold, 1-fold, 2-fold, 3-fold, 4-fold, 5-fold, 6-fold, 7-fold, 8-fold, 9-fold, or about 10-fold, or more. In an embodiment, the IL-2 fusion protein expresses at a higher or
- 35 increased level *in vitro* and/or *in vivo*, e.g., increased by about 1%, about 2%, about 3%, about 4%, about 5%, about 10%, about 15%, about 20%, about 25%, about 30%, about 35%, about 40%, about 45%, about 50%, about 55%, about 60%, about 65%, about 70%, about 75%, about 80%, about 85%,

about 90%, about 95%, about 100% or more *e.g.*, relative to an IL-2 fusion protein comprising a wild-type IL-2 or a reference IL-2 fusion protein *e.g.*, as determined by an assay of protein concentration. In an embodiment, the IL-2 fusion protein expresses at a higher or increased level, *e.g.*, increased by about 0.5-fold, about 1-fold, about 1.5-fold, about 2-fold, about 2.5-fold, about 3-fold, about 3.5-fold, about 4-fold, about 4.5-fold, about 5-fold, about 5.5-fold, about 6-fold, about 6.5-fold, about 7-fold, about 7.5-fold, about 8-fold, about 8.5-fold, about 9-fold, about 9.5-fold, about 10-fold or more *e.g.*, relative to an IL-2 fusion protein comprising a wild-type IL-2 or a reference IL-2 fusion protein *e.g.*, as determined by an assay of protein concentration.

In an embodiment, the IL-2 fusion protein has altered (*e.g.*, reduced or decreased) aggregation *in vitro* and/or *in vivo*, relative to an IL-2 fusion protein comprising a wild-type IL-2 or a reference IL-2 fusion protein. In an embodiment, the IL-2 fusion protein has reduced or decreased aggregation relative to a wild type IL-2. In an embodiment, the IL-2 fusion protein has reduced or decreased aggregation relative to a reference IL-2 fusion protein. In an embodiment, the aggregation of the IL-2 fusion protein is decreased by about 1%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, or about 100%, or more. In an embodiment, the aggregation of the IL-2 fusion protein is decreased by about 0.5-fold, 1-fold, 2-fold, 3-fold, 4-fold, 5-fold, 6-fold, 7-fold, 8-fold, 9-fold, or about 10-fold, or more. In an embodiment, the IL-2 fusion protein aggregates at lower or decreased level *in vitro* and/or *in vivo*, *e.g.*, decreased by about 1%, about 2%, about 3%, about 4%, about 5%, about 10%, about 15%, about 20%, about 25%, about 30%, about 35%, about 40%, about 45%, about 50%, about 55%, about 60%, about 65%, about 70%, about 75%, about 80%, about 85%, about 90%, about 95%, about 100% or more *e.g.*, relative to an IL-2 fusion protein comprising a wild-type IL-2 or a reference IL-2 fusion protein *e.g.*, as determined by melting temperature analysis (*e.g.*, using fluorimetry), dynamic light scattering, and/or size-exclusion chromatography. In an embodiment, the IL-2 fusion protein aggregates at lower or decreased level, *e.g.*, decreased by about 0.5-fold, about 1-fold, about 1.5-fold, about 2-fold, about 2.5-fold, about 3-fold, about 3.5-fold, about 4-fold, about 4.5-fold, about 5-fold, about 5.5-fold, about 6-fold, about 6.5-fold, about 7-fold, about 7.5-fold, about 8-fold, about 8.5-fold, about 9-fold, about 9.5-fold, about 10-fold or more *e.g.*, relative to an IL-2 fusion protein comprising a wild-type IL-2 or a reference IL-2 fusion protein *e.g.*, as determined by melting temperature analysis (*e.g.*, using fluorimetry), dynamic light scattering, and/or size-exclusion chromatography.

In an embodiment, the IL-2 fusion protein has altered (*e.g.*, enhanced or increased) stability *in vitro* and/or *in vivo*, relative to an IL-2 fusion protein comprising a wild-type IL-2 or a reference IL-2 fusion protein. In an embodiment, the IL-2 fusion protein has enhanced or increased stability relative to an IL-2 fusion protein comprising a wild-type IL-2. In an embodiment, the IL-2 fusion protein has enhanced or increased stability relative to a reference IL-2 fusion protein. In an embodiment, the stability of the IL-2 fusion protein is increased by about 1%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, or about 100%, or more. In an embodiment, the stability of the IL-2 fusion

protein is increased by about 0.5-fold, 1-fold, 2-fold, 3-fold, 4-fold, 5-fold, 6-fold, 7-fold, 8-fold, 9-fold, or about 10-fold, or more. In an embodiment, the IL-2 fusion protein has enhanced or increased stability *in vitro* and/or *in vivo*, *e.g.*, increased by about 1%, about 2%, about 3%, about 4%, about 5%, about 10%, about 15%, about 20%, about 25%, about 30%, about 35%, about 40%, about 45%,
5 about 50%, about 55%, about 60%, about 65%, about 70%, about 75%, about 80%, about 85%, about 90%, about 95%, about 100% or more, or *e.g.*, increased by about 0.5-fold, about 1-fold, about 1.5-fold, about 2-fold, about 2.5-fold, about 3-fold, about 3.5-fold, about 4-fold, about 4.5-fold, about 5-fold, about 5.5-fold, about 6-fold, about 6.5-fold, about 7-fold, about 7.5-fold, about 8-fold, about 8.5-fold, about 9-fold, about 9.5-fold, about 10-fold or more *e.g.*, relative to an IL-2 fusion protein
10 comprising a wild-type IL-2 or a reference IL-2 fusion protein, *e.g.*, as determined by yeast surface display, circular dichroism or related spectroscopic techniques, and/or melting temperature analysis (*e.g.*, using fluorimetry).

In an embodiment, the IL-2 fusion protein has altered (*e.g.*, enhanced or increased) half-life *in vitro* and/or *in vivo*, relative to an IL-2 fusion protein comprising a wild-type IL-2 or a reference IL-2
15 fusion protein. In an embodiment, the IL-2 fusion protein has enhanced or increased half-life relative to an IL-2 fusion protein comprising a wild-type IL-2. In an embodiment, the IL-2 fusion protein has enhanced or increased half-life relative to a reference IL-2 fusion protein. In an embodiment, the half-life of the IL-2 fusion protein is increased by about 1%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, or about 100%, or more. In an embodiment, the half-life of the IL-2 fusion protein is
20 increased by about 0.5-fold, 1-fold, 2-fold, 3-fold, 4-fold, 5-fold, 6-fold, 7-fold, 8-fold, 9-fold, or about 10-fold, or more. In an embodiment, the IL-2 fusion protein has enhanced or increased half-life *in vitro* and/or *in vivo*, *e.g.*, increased by about 1%, about 2%, about 3%, about 4%, about 5%, about 10%, about 15%, about 20%, about 25%, about 30%, about 35%, about 40%, about 45%, about 50%, about 55%, about 60%, about 65%, about 70%, about 75%, about 80%, about 85%, about 90%, about
25 95%, about 100% or more, or *e.g.*, greater than about 0.5-fold, about 1-fold, about 1.5-fold, about 2-fold, about 2.5-fold, about 3-fold, about 3.5-fold, about 4-fold, about 4.5-fold, about 5-fold, about 5.5-fold, about 6-fold, about 6.5-fold, about 7-fold, about 7.5-fold, about 8-fold, about 8.5-fold, about 9-fold, about 9.5-fold, about 10-fold or more *e.g.*, relative to an IL-2 fusion protein comprising a wild-type IL-2 or a reference IL-2 fusion protein, *e.g.*, as determined by ELISA, flow cytometry, and/or
30 mass spectrometry.

In an embodiment, the IL-2 fusion protein has altered (*e.g.*, reduced or decreased) turnover *in vitro* and/or *in vivo*, relative to an IL-2 fusion protein comprising a wild-type IL-2 or a reference IL-2 fusion protein. In an embodiment, the IL-2 fusion protein has reduced or decreased turnover relative to an IL-2 fusion protein comprising a wild-type IL-2. In an embodiment, the IL-2 fusion protein has
35 reduced or decreased turnover relative to a reference IL-2 fusion protein. In an embodiment, the turnover of the IL-2 fusion protein is decreased by about 1%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, or about 100%, or more. In an embodiment, the turnover of the IL-2 fusion

protein is decreased by about 0.5-fold, 1-fold, 2-fold, 3-fold, 4-fold, 5-fold, 6-fold, 7-fold, 8-fold, 9-fold, about 10-fold, or more. In an embodiment, the IL-2 fusion protein has a lower, reduced or decreased rate or level of turnover and/or clearance *in vivo*, *e.g.*, decreased by about 1%, about 2%, about 3%, about 4%, about 5%, about 10%, about 15%, about 20%, about 25%, about 30%, about 35%, about 40%, about 45%, about 50%, about 55%, about 60%, about 65%, about 70%, about 75%, about 80%, about 85%, about 90%, about 95%, about 100% or more, or *e.g.*, decreased by about 0.5-fold, about 1-fold, about 1.5-fold, about 2-fold, about 2.5-fold, about 3-fold, about 3.5-fold, about 4-fold, about 4.5-fold, about 5-fold, about 5.5-fold, about 6-fold, about 6.5-fold, about 7-fold, about 7.5-fold, about 8-fold, about 8.5-fold, about 9-fold, about 9.5-fold, about 10-fold or more *e.g.*, relative to an IL-2 fusion protein comprising a wild-type IL-2 or a reference IL-2 fusion protein, *e.g.*, as determined by ELISA, flow cytometry, and/or mass spectrometry.

In an embodiment, the IL-2 fusion protein provided by the disclosure comprise the property of having altered (*e.g.*, reduced or decreased) susceptibility to proteolysis *in vitro* and/or *in vivo*, relative to an IL-2 fusion protein comprising a wild-type IL-2 or a reference IL-2 fusion protein. In an embodiment, the IL-2 fusion protein has reduced or decreased susceptibility to proteolysis relative to IL-2 (*e.g.*, wild type human IL-2). In an embodiment, the IL-2 fusion protein has reduced or decreased susceptibility to proteolysis relative to a reference IL-2 fusion protein. In an embodiment, the susceptibility to proteolysis of the IL-2 fusion protein is decreased by about 1%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, or about 100%, or more. In an embodiment, the susceptibility to proteolysis of the IL-2 fusion protein is decreased by about 0.5-fold, 1-fold, 2-fold, 3-fold, 4-fold, 5-fold, 6-fold, 7-fold, 8-fold, 9-fold, or about 10-fold, or more.

In an embodiment, the IL-2 fusion protein has altered (*e.g.*, enhanced or increased) resistance to proteolysis *in vitro* and/or *in vivo*, relative to an IL-2 fusion protein comprising a wild-type IL-2 or a reference IL-2 fusion protein. In an embodiment, the IL-2 fusion protein has enhanced or increased resistance to proteolysis relative to an IL-2 fusion protein comprising a wild-type IL-2. In an embodiment, the IL-2 fusion protein has enhanced or increased resistance to proteolysis relative to a reference IL-2 fusion protein. In an embodiment, the resistance to proteolysis of the IL-2 fusion protein is increased by about 1%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, or about 100%, or more. In an embodiment, the resistance to proteolysis of the IL-2 fusion protein is increased by about 0.5-fold, 1-fold, 2-fold, 3-fold, 4-fold, 5-fold, 6-fold, 7-fold, 8-fold, 9-fold, or about 10-fold, or more.

In an embodiment, the IL-2 fusion protein has altered (*e.g.*, reduced or decreased) binding capacity and/or binding affinity for human CD25 *in vitro* and/or *in vivo*, relative to an IL-2 fusion protein comprising a wild-type IL-2 or a reference IL-2 fusion protein. In an embodiment, the IL-2 fusion protein has reduced or decreased binding capacity and/or binding affinity for human CD25 relative to a wild-type human IL-2). In an embodiment, the IL-2 fusion protein has reduced or decreased binding capacity and/or binding affinity for human CD25 relative to a reference IL-2 fusion

protein. In an embodiment, the binding capacity and/or binding affinity of the IL-2 fusion protein for human CD25 is decreased by about 1%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, or about 100%, or more. In an embodiment, the binding capacity and/or binding affinity of the IL-2 fusion protein for human CD25 is decreased by about 0.5-fold, 1-fold, 2-fold, 3-fold, 4-fold, 5-fold, 6-fold, 7-fold, 8-fold, 9-fold, or about 10-fold, or more. In an embodiment, the IL-2 fusion protein has reduced or decreased binding affinity for CD25 (*e.g.*, human CD25), *e.g.*, decreased by about 1%, about 2%, about 3%, about 4%, about 5%, about 10%, about 15%, about 20%, about 25%, about 30%, about 35%, about 40%, about 45%, about 50%, about 55%, about 60%, about 65%, about 70%, about 75%, about 80%, about 85%, about 90%, about 95%, about 100% or more, or *e.g.*, decreased by about 0.5-fold, about 1-fold, about 1.5-fold, about 2-fold, about 2.5-fold, about 3-fold, about 3.5-fold, about 4-fold, about 4.5-fold, about 5-fold, about 5.5-fold, about 6-fold, about 6.5-fold, about 7-fold, about 7.5-fold, about 8-fold, about 8.5-fold, about 9-fold, about 9.5-fold, about 10-fold or more *e.g.*, relative to an IL-2 fusion protein comprising a wild-type IL-2 or a reference IL-2 fusion protein *e.g.*, as determined by yeast surface display, surface plasmon resonance (*e.g.* Biacore) and/or bio-layer interferometry (*e.g.* Octet binding).

In an embodiment, the IL-2 fusion protein binds to CD25 (*e.g.*, human CD25) with low affinity, *e.g.*, with a dissociation constant (K_D) of about 5-500 pM, *e.g.*, about 5, about 10, about 15, about 20, about 25, about 30, about 35, about 40, about 45, about 50, about 55, about 60, about 65, about 70, about 75, about 80, about 85, about 90, about 95, about 100, about 105, about 110, about 115, about 120, about 125, about 130, about 135, about 140, about 145, about 150, about 200, about 250, about 300, about 350, about 400, about 450, or about 500 pM, or *e.g.*, about 10 to about 400 pM, about 20 to about 300 pM, about 50 to about 200 pM, about 100 to about 150 pM, about 5 to about 10 pM, about 10 to about 20 pM, about 20 to about 30 pM, or about 30 to about 40 pM, *e.g.*, about 40 to about 50 pM, about 50 to about 60 pM, about 60 to about 70 pM, about 70 to about 80 pM, about 80 to about 90 pM, about 90 to about 100 pM, about 100 to about 110 pM, about 110 to about 120 pM, about 120 to about 130 pM, about 130 to about 140 pM about 140 to about 150 pM, about 150 to about 200 pM, about 200 to about 250 pM, about 250 to about 300 pM, about 300 to about 350 pM, about 350 to about 400 pM, about 400 to about 500 pM, or *e.g.*, greater than about 5, about 10, about 15, about 20, about 25, about 30, about 35, about 40, about 45, about 50, about 55, about 60, about 65, about 70, about 75, about 80, about 85, about 90, about 95, about 100, about 105, about 110, about 115, about 120, about 125, about 130, about 135, about 140, about 145, about 150, about 200, about 250, about 300, about 350, about 400, about 450, or about 500 pM, *e.g.* as determined by yeast surface display, surface plasmon resonance (*e.g.* Biacore) and/or biolayer interferometry (*e.g.* Octet binding).

In an embodiment, the IL-2 fusion protein binds to CD25 (*e.g.*, human CD25) with low affinity, *e.g.*, with a dissociation constant (K_D) of about 0.1-10 nM, *e.g.*, about 0.1, about 0.2, about 0.3, about 0.4, about 0.5, about 0.6, about 0.7, about 0.8, about 0.9, about 1, about 1.5, about 2, about

2.5, about 3, about 3.5, about 4, about 4.5, about 5, about 6, about 7, about 8, about 9, or about 10 nM, or *e.g.*, about 0.2 to about 5 nM, about 0.5 to about 2 nM, about 1 to 1.5 nM, about 0.1 to about 0.2 nM, about 0.2 to about 0.3 nM, about 0.3 to about 0.4 nM, or about 0.4 to about 0.5 nM, *e.g.*, about 0.5 to about 0.6 nM, about 0.6 to about 0.7 nM, about 0.7 to about 0.8 nM, about 0.8 to about 0.9 nM, 5 about 0.9 to about 1 nM, about 1 to about 1.5 nM, about 1.5 to about 2 nM, about 2.5 to about 3 nM, about 3.5 to about 4 nM, about 4 to about 4.5 nM, about 4.5 to about 5 nM, about 5 to about 6 nM, about 6 to about 7 nM, about 7 to about 8 nM, about 8 to about 9 nM, or about 9 to about 10 nM, or *e.g.*, greater than about 0.1, about 0.2, about 0.3, about 0.4, about 0.5, about 0.6, about 0.7, about 0.8, about 0.9, about 1, about 2, about 3, about 4, about 5, about 6, about 7, about 8, about 9, or about 10 10 nM, *e.g.*, as determined by surface plasmon resonance (*e.g.* Biacore) and/or bio-layer interferometry (*e.g.*, Octet binding).

In an embodiment, the IL-2 fusion protein has altered (*e.g.*, reduced or decreased) binding capacity and/or binding affinity for human CD132 *in vitro* and/or *in vivo*, relative to an IL-2 fusion protein comprising a wild-type IL-2 or a reference IL-2 fusion protein. In an embodiment, the IL-2 15 fusion protein has reduced or decreased binding capacity and/or binding affinity for human CD132 relative to an IL-2 fusion protein comprising a wild-type IL-2. In an embodiment, the IL-2 fusion protein has reduced or decreased binding capacity and/or binding affinity for human CD132 relative to a reference IL-2 fusion protein. In an embodiment, the binding capacity and/or binding affinity of the IL-2 fusion protein for human CD132 is decreased by about 1%, 5%, 10%, 20%, 30%, 40%, 50%, 20 60%, 70%, 80%, 90%, 95%, or about 100%, or more. In an embodiment, the binding capacity and/or binding affinity of the IL-2 fusion protein for human CD132 is decreased by about 0.5-fold, 1-fold, 2-fold, 3-fold, 4-fold, 5-fold, 6-fold, 7-fold, 8-fold, 9-fold, or about 10-fold, or more.

In an embodiment, the IL-2 fusion protein has altered (*e.g.*, reduced or decreased) binding capacity and/or binding affinity for the human dimeric IL-2 receptor comprising human CD122 and 25 human CD132 *in vitro* and/or *in vivo*, relative to an IL-2 fusion protein comprising a wild-type IL-2 or a reference IL-2 fusion protein. In an embodiment, the IL-2 fusion protein has reduced or decreased binding capacity and/or binding affinity for the human dimeric IL-2 receptor comprising human CD122 and human CD132 relative to an IL-2 fusion protein comprising a wild-type IL-2. In an embodiment, the IL-2 fusion protein has reduced or decreased binding capacity and/or binding 30 affinity for the human dimeric IL-2 receptor comprising human CD122 and human CD132 relative to a reference IL-2 fusion protein. In an embodiment, the binding capacity and/or binding affinity of the IL-2 fusion protein for the human dimeric IL-2 receptor comprising human CD122 and human CD132 is decreased by about 1%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, or about 100%, or more. In an embodiment, the binding capacity and/or binding affinity of the IL-2 fusion 35 protein for the human dimeric IL-2 receptor comprising human CD122 and human CD132 is decreased by about 0.5-fold, 1-fold, 2-fold, 3-fold, 4-fold, 5-fold, 6-fold, 7-fold, 8-fold, 9-fold, or about 10-fold, or more.

In an embodiment, the IL-2 fusion protein has altered (*e.g.*, enhanced, increased, and/or selective) binding to Tregs *in vitro* and/or *in vivo*, relative to an IL-2 fusion protein comprising a wild-type IL-2 or a reference IL-2 fusion protein. In an embodiment, the IL-2 fusion protein has enhanced or increased binding to Tregs relative to an IL-2 fusion protein comprising a wild-type IL-2. In an embodiment, the IL-2 fusion protein has selective binding to Tregs relative to IL-2 (*e.g.*, wild type human IL-2). In an embodiment, the IL-2 fusion protein has enhanced or increased binding to Tregs relative to a reference IL-2 fusion protein. In an embodiment, the IL-2 fusion protein has selective binding to Tregs relative to a reference IL-2 fusion protein. In an embodiment, the binding to Tregs is increased by about 1%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, or about 100%, or more. In an embodiment, the binding to Tregs is increased by about 0.5-fold, 1-fold, 2-fold, 3-fold, 4-fold, 5-fold, 6-fold, 7-fold, 8-fold, 9-fold, or about 10-fold, or more.

In an embodiment, the IL-2 fusion protein has reduced or decreased binding affinity for CD122/CD132 heterodimer (*e.g.*, human CD122/CD132 heterodimer), *e.g.*, decreased by about 1%, about 2%, about 3%, about 4%, about 5%, about 10%, about 15%, about 20%, about 25%, about 30%, about 35%, about 40%, about 45%, about 50%, about 55%, about 60%, about 65%, about 70%, about 75%, about 80%, about 85%, about 90%, about 95%, about 100% or more, or *e.g.*, decreased by about 0.5-fold, about 1-fold, about 1.5-fold, about 2-fold, about 2.5-fold, about 3-fold, about 3.5-fold, about 4-fold, about 4.5-fold, about 5-fold, about 5.5-fold, about 6-fold, about 6.5-fold, about 7-fold, about 7.5-fold, about 8-fold, about 8.5-fold, about 9-fold, about 9.5-fold, about 10-fold or more *e.g.*, relative to an IL-2 fusion protein comprising a wild-type IL-2 or a reference IL-2 fusion protein *e.g.*, as determined by yeast surface display, surface plasmon resonance (*e.g.* Biacore) and/or bio-layer interferometry (*e.g.* Octet binding).

In an embodiment, the IL-2 fusion protein binds to CD122/CD132 heterodimer (*e.g.*, human CD122/CD132 heterodimer) with low affinity, *e.g.*, with a dissociation constant (K_D) of about 0.2-20 nM, *e.g.*, about 0.2, about 0.3, about 0.4, about 0.5, about 0.6, about 0.7, about 0.8, about 0.9, about 1, about 1.1, about 1.2, about 1.3, about 1.4, about 1.5, about 2, about 3, about 4, about 5, about 6, about 7, about 8, about 9, about 10, about 11, about 12, about 13, about 14, about 15, about 16, about 17, about 18, or about 20 nM, or *e.g.*, about 0.5 to about 15 nM, about 1 to about 10 nM, about 2 to about 5 nM, about 0.2 to about 0.3 nM, about 0.3 to about 0.4 nM, about 0.4 to about 0.5 nM, about 0.5 to about 0.6 nM, about 0.6 to about 0.7 nM, about 0.7 to about 0.8 nM, about 0.8 to about 0.9 nM, about 0.9 to about 1 nM, about 1 to about 1.1 nM, about 1.1 to about 1.2 nM, about 1.2 to about 1.3 nM, about 1.3 to about 1.4 nM, about 1.4 to about 1.5 nM, about 1.5 to about 2 nM, about 2 to about 3 nM, about 3 to about 4 nM, about 4 to about 5 nM, about 5 to about 6 nM, about 6 to about 7 nM, about 7 to about 8 nM, about 8 to about 9 nM, about 9 to about 10 nM, about 10 to about 11 nM, about 11 to about 12 nM, about 12 to about 13 nM, about 13 to about 14 nM, about 14 to about 15 nM, about 15 to about 16 nM, about 16 to about 17 nM, about 17 to about 18 nM, about 18 to about 19 nM, or about 19 to about 20 nM, or *e.g.*, greater than about 0.2, about 0.3, about 0.4, about 0.5, about 0.6, about 0.7,

about 0.8, about 0.9, about 1, about 1.1, about 1.2, about 1.3, about 1.4, about 1.5, about 2, about 3, about 4, about 5, about 6, about 7, about 8, about 9, about 10, about 11, about 12, about 13, about 14, about 15, about 16, about 17, about 18, or about 20 nM, *e.g.*, as determined by yeast surface display.

In an embodiment, the IL-2 fusion protein binds to CD122/CD132 heterodimer (*e.g.*, human
 5 CD122/CD132 heterodimer) with low affinity, *e.g.*, with a dissociation constant (K_D) of about 0.2-300 nM, *e.g.*, about 0.2 nM, about 0.5 nM, about 1 nM, about 2 nM, about 5 nM, about 10 nM, about 15 nM, about 20 nM, about 25 nM, about 30 nM, about 40 nM, about 50 nM, about 60 nM, about 70 nM, about 80 nM, about 90 nM, about 100 nM, about 110 nM, about 120 nM, about 130 nM, about 140 nM, about 150 nM, about 160 nM, about 170 nM, about 180 nM, about 190 nM, about 200 nM, about
 10 210 nM, about 220 nM, about 230 nM, about 240 nM, about 250 nM, about 260 nM, about 270 nM, about 280 nM, about 290 nM, or about 300 nM, or *e.g.*, about 0.5 to about 15 nM, about 1 to about 10 nM, about 2 to about 5 nM, about 0.2 nM to about 0.5 nM, about 0.5 nM to about 1 nM, about 1 to about 2 nM, about 2 nM to about 5 nM, about 5 nM to about 10 nM, about 10 nM to about 15 nM, about 15 nM to about 20 nM, about 20 nM to about 25 nM, about 25 to about 30 nM, about 30 nM to
 15 about 40 nM, about 40 nM to about 50 nM, about 50 to about 60 nM, about 60 to about 70 nM, about 70 nM to about 80 nM, about 80 nM to about 90 nM, about 90 nM to about 100 nM, about 100 nM to about 110 nM, about 110 nM to about 120 nM, about 120 nM to about 130 nM, about 130 nM to about 140 nM, about 140 nM to about 150 nM, about 150 nM to about 160 nM, about 160 nM to about 170 nM, about 170 nM to about 180 nM, about 180 nM to about 190 nM, about 190 nM to
 20 about 200 nM, about 200 nM to about 210 nM, about 210 nM to about 220 nM, about 220 nM to about 230 nM, about 230 nM to about 240 nM, about 240 nM to about 250 nM, about 250 nM to about 260 nM, about 260 nM to about 270 nM, about 270 nM to about 280 nM, about 280 nM to about 290 nM, or about 290 nM to about 300 nM, or *e.g.*, greater than about 0.2, about 0.5, about 1, about 2, about 5, about 10, about 15, about 20 nM, about 25 nM, about 30 nM, about 40 nM, about 50
 25 nM, about 60 nM, about 70 nM, about 80 nM, about 90 nM, about 100 nM, about 110 nM, about 120 nM, about 130 nM, about 140 nM, about 150 nM, about 160 nM, about 170 nM, about 180 nM, about 190 nM, about 200 nM, about 210 nM, about 220 nM, about 230 nM, about 240 nM, about 250 nM, about 260 nM, about 270 nM, about 280 nM, about 290 nM, or greater than about 300 nM, *e.g.*, as determined by surface plasmon resonance (*e.g.* Biacore) and/or biolayer interferometry (*e.g.* Octet
 30 binding).

In an embodiment, the IL-2 fusion protein has altered (*e.g.*, enhanced, increased, and/or selective) binding to Tregs *in vitro* and/or *in vivo*, relative to an IL-2 fusion protein comprising wild-type IL-2 or a reference IL-2 fusion protein. In an embodiment, the IL-2 fusion protein has enhanced or increased binding to Tregs relative to an IL-2 fusion protein comprising wild-type IL-2. In an
 35 embodiment, the IL-2 fusion protein has selective binding to Tregs relative to IL-2 (*e.g.*, wild type human IL-2). In an embodiment, the IL-2 fusion protein has enhanced or increased binding to Tregs relative to a reference IL-2 fusion protein. In an embodiment, the IL-2 fusion protein has selective

binding to Tregs relative to a reference IL-2 fusion protein. In an embodiment, the binding to Tregs is increased by about 1%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, or about 100%, or more. In an embodiment, the binding to Tregs is increased by about 0.5-fold, 1-fold, 2-fold, 3-fold, 4-fold, 5-fold, 6-fold, 7-fold, 8-fold, 9-fold, or about 10-fold, or more.

5 In an embodiment, the IL-2 fusion protein has altered (*e.g.*, enhanced, increased, and/or selective) activation of the IL-2 signaling pathway in Tregs *in vitro* and/or *in vivo*, relative to an IL-2 fusion protein comprising a wild-type IL-2 or a reference IL-2 fusion protein. In an embodiment, the IL-2 fusion protein has enhanced or increased activation of the IL-2 signaling pathway in Tregs relative to an IL-2 fusion protein comprising a wild-type IL-2. In an embodiment, the IL-2 fusion protein has selective activation of the IL-2 signaling pathway in Tregs relative to an IL-2 fusion protein comprising a wild-type IL-2. In an embodiment, the IL-2 fusion protein has enhanced or increased activation of the IL-2 signaling pathway in Tregs relative to a reference IL-2 fusion protein. In an embodiment, the IL-2 fusion protein has selective activation of the IL-2 signaling pathway in Tregs relative to a reference IL-2 fusion protein. In an embodiment, the activation of the IL-2 signaling pathway in Tregs is increased by about 1%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, or about 100%, or more. In an embodiment, the activation of the IL-2 signaling pathway in Tregs is increased by about 0.5-fold, 1-fold, 2-fold, 3-fold, 4-fold, 5-fold, 6-fold, 7-fold, 8-fold, 9-fold, or about 10-fold, or more.

In an embodiment, the IL-2 fusion protein selectively activates IL-2 signaling in T regulatory cells *in vitro* and/or *in vivo*, *e.g.*, having an T helper EC50/Treg EC50 ratio greater than about 1, about 2, about 3, about 4, about 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800, 900, 1000, 1500, 2000, 2500, or about 3000 or more relative to an IL-2 fusion protein comprising a wild-type IL-2 or a reference IL-2 fusion protein *e.g.*, as determined flow cytometry.

In an embodiment, the IL-2 fusion protein selectively activates IL-2 signaling in T regulatory cells *in vitro* and/or *in vivo*, *e.g.*, having an NK cell EC50/Treg EC50 ratio greater than *e.g.*, about 1, about 2, about 3, about 4, about 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800, 900, 1000, 1500, 2000, 2500, or about 3000 or more, or *e.g.*, greater than 1 and about 1 to 2, about 2 to 3, about 3 to 4, about 4 to 5, greater than 1 and about 1 to 10, greater than 1 and about 1 to 20, greater than 1 and about 1 to 30, greater than 1 and about 1 to 40, greater than 1 and about 1 to 50, about 2 to 10, about 2 to 20, about 2 to 30, about 2 to 40, 2 to 50, about 5 to 10, about 5 to 20, about 5 to 30, about 5 to 40, about 5 to 50, about 10 to 20, about 10 to 30, about 10 to 40, about 10 to 50, about 20 to 40, about 20 to 50, about 50 to 100, about 100 to 200, about 200 to 500, about 500 to 1000, about 1000 to 2000, or about 1000 to 3000, relative to an IL-2 fusion

protein comprising a wild-type IL-2 or a reference IL-2 fusion protein *e.g.*, as determined flow cytometry.

In an embodiment, the IL-2 fusion protein has altered (*e.g.*, enhanced, increased, and/or selective) ability to induce or promote Treg expansion, activity, survival, and/or proliferation *in vitro* and/or *in vivo*, relative to an IL-2 fusion protein comprising a wild-type IL-2 or a reference IL-2 fusion protein. In an embodiment, the IL-2 fusion protein has enhanced or increased ability to induce or promote Treg expansion, activity, survival, and/or proliferation relative to an IL-2 fusion protein comprising a wild-type IL-2. In an embodiment, the IL-2 fusion protein has selective ability to induce or promote Treg expansion, activity, survival, and/or proliferation relative to an IL-2 fusion protein comprising a wild-type IL-2. In an embodiment, the IL-2 fusion protein has enhanced or increased ability to induce or promote Treg expansion, activity, survival, and/or proliferation relative to a reference IL-2 fusion protein. In an embodiment, the IL-2 fusion protein has selective ability to induce or promote Treg expansion, activity, survival, and/or proliferation relative to a reference IL-2 fusion protein. In an embodiment, the ability to induce or promote Treg expansion, activity, survival, and/or proliferation is increased by about 1%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, or about 100%, or more. In an embodiment, the ability to induce or promote Treg expansion, activity, survival, and/or proliferation is increased by about 0.5-fold, 1-fold, 2-fold, 3-fold, 4-fold, 5-fold, 6-fold, 7-fold, 8-fold, 9-fold, or about 10-fold, or more.

In an embodiment, the IL-2 fusion protein has enhanced or increased potency and/or ability to induce or promote T regulatory cell activity, *e.g.*, having an EC50 for Tregs that is lower by about 1%, about 2%, about 3%, about 4%, about 5%, about 10%, about 15%, about 20%, about 25%, about 30%, about 35%, about 40%, about 45%, about 50%, about 55%, about 60%, about 65%, about 70%, about 75%, about 80%, about 85%, about 90%, about 95%, about 100% or more, or *e.g.*, decreased by about 0.5-fold, about 1-fold, about 1.5-fold, about 2-fold, about 2.5-fold, about 3-fold, about 3.5-fold, about 4-fold, about 4.5-fold, about 5-fold, about 5.5-fold, about 6-fold, about 6.5-fold, about 7-fold, about 7.5-fold, about 8-fold, about 8.5-fold, about 9-fold, about 9.5-fold, about 10-fold or more *e.g.*, relative to an IL-2 fusion protein comprising a wild-type IL-2 or a reference IL-2 fusion protein *e.g.*, as determined flow cytometry.

In an embodiment, the IL-2 fusion protein has reduced or decreased potency and/or ability to induce or promote T regulatory cell activity, *e.g.*, having an EC50 for Tregs that is higher by about 1%, about 2%, about 3%, about 4%, about 5%, about 10%, about 15%, about 20%, about 25%, about 30%, about 35%, about 40%, about 45%, about 50%, about 55%, about 60%, about 65%, about 70%, about 75%, about 80%, about 85%, about 90%, about 95%, or about 100% or more, or *e.g.*, decreased by about 0.5-fold, about 1-fold, about 1.5-fold, about 2-fold, about 2.5-fold, about 3-fold, about 3.5-fold, about 4-fold, about 4.5-fold, about 5-fold, about 5.5-fold, about 6-fold, about 6.5-fold, about 7-fold, about 7.5-fold, about 8-fold, about 8.5-fold, about 9-fold, about 9.5-fold, about 10-fold, about 50-fold, about 100-fold, about 200-fold, about 500-fold, about 1000-fold, about 2000-fold, about

5000-fold, about 10,000, about 15,000-fold, or about 20,000-fold or more *e.g.*, relative to an IL-2 fusion protein comprising a wild-type IL-2 or a reference IL-2 fusion protein *e.g.*, as determined flow cytometry.

In an embodiment, the T helper cell described herein is a CD45+CD3+CD4+Foxp3- cell, *e.g.*,
 5 determined by flow cytometry. In an embodiment, the Treg described herein is
 CD45+CD3+CD4+Foxp3+ cell, *e.g.*, determined by flow cytometry. In an embodiment, the NK cell
 described herein is a CD45+CD3- cell that is CD56+ and/or CD16+, *e.g.*, determined by flow
 cytometry. In an embodiment, the NK cell described herein is a CD45+CD3-CD56+ cell, *e.g.*,
 determined by flow cytometry.

10 In an embodiment, the IL-2 fusion protein has one or more of the same, or substantially the
 same, structural and/or functional properties, as an IL-2 fusion protein comprising a wild-type IL-2 or
 a reference IL-2 fusion protein.

In an embodiment, the reference IL-2 fusion protein comprises an amino acid sequence that
 has about 75%, 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more
 15 sequence identity to an IL-2 fusion protein described herein. In an embodiment, the reference IL-2
 fusion protein comprises an IL-2 variant comprising the amino acid sequence of SEQ ID NO: 57. In
 an embodiment, the IL-2 fusion protein comprises an amino acid sequence that is at least 80%, 85%,
 90%, 95%, or 98% identical to the amino acid sequence of SEQ ID NO: 57 and comprises one or
 more (2, 3, 4, 5, 6, 7, 8, 9, 10, or more) amino acid alterations (*e.g.*, substitutions) described herein.

20 In an embodiment, the IL-2 fusion protein comprises an IL-2 polypeptide (*e.g.*, a human IL-2
 polypeptide) described herein. In an embodiment, the IL-2 fusion protein is encoded by a nucleic acid
 comprising a nucleotide sequence described herein.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*,
 substitution) at one or more (*e.g.*, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, or all) of positions in IL-2, as
 25 described herein. In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*,
 substitution) at one or more (*e.g.*, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, or all) of positions chosen
 from T3, H16, I28, K35, R38, F42, E68, V69, Q74, D84, S87, N88, I92, C125, or Q126 in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*,
 substitution) at position T3 in IL-2. In an embodiment, the IL-2 fusion protein comprises an amino
 30 acid alteration (*e.g.*, substitution) at position H16 in IL-2. In an embodiment, the IL-2 fusion protein
 comprises an amino acid alteration (*e.g.*, substitution) at position I28 in IL-2. In an embodiment, the
 IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position K35 in IL-2. In
 an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at
 position R38 in IL-2. In an embodiment, the IL-2 fusion protein comprises an amino acid alteration
 35 (*e.g.*, substitution) at position F42 in IL-2. In an embodiment, the IL-2 fusion protein comprises an
 amino acid alteration (*e.g.*, substitution) at position E68 in IL-2. In an embodiment, the IL-2 fusion
 protein comprises an amino acid alteration (*e.g.*, substitution) at position V69 in IL-2. In an

embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position Q74 in IL-2. In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position D84 in IL-2. In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position S87 in IL-2. In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position N88 in IL-2. In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position I92 in IL-2. In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position C125 in IL-2. In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position Q126 in IL-2.

10 In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position V69, Q74, or both, in IL-2. In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at positions V69 and Q74 in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitution V69A in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitution Q74P in IL-2.

15 In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position H16, I92, D84, or a combination thereof, in IL-2. In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position H16, optionally wherein the amino acid substitution is H16N, H16L, or H16D, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitution H16N in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitution H16L in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitution H16D in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position at I92, optionally wherein the amino acid substitution is I92S, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitution I92S in IL-2.

25 In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position D84, optionally wherein the amino acid substitution is D84V, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitution is D84V in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position K35, R38, F42, E68, or a combination thereof, in IL-2. In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position K35, optionally wherein the amino acid substitution is K35E, in IL-2. In an embodiment, IL-2 fusion protein comprises the amino acid substitution K35E in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position R38, optionally wherein the amino acid substitution is R38E, R38N or R38Q, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitution R38N in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitution R38Q in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*,

substitution) at position F42, optionally wherein the amino acid substitution is F42K or F42Q, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitution F42K in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitution F42Q in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution): (i) at (a) positions V69 and Q74, (b) position K35, or (c) positions V69, Q74, and K35; and (ii) at one, two, or all of positions H16, I92, or D84, in IL-2. In an embodiment, the IL-2 fusion protein further comprises an amino acid alteration (*e.g.*, substitution) at one, two, or all of positions R38, F42, or E68, in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution): (i) at (a) positions V69 and Q74, (b) position K35, or (c) positions V69, Q74, and K35; and (ii) at (a) one, two, or all of positions H16, I92, or D84; or (b) one, two, or all of positions R38, F42, or E68, in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution): (i) at (a) positions V69 and Q74, (b) position K35, or (c) positions V69, Q74, and K35; and (ii) at (a) one, two, or all of positions H16, I92, or D84; and (b) one, two, or all of positions R38, F42, or E68, in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position V69, Q74, and H16, optionally wherein the amino acid substitution is V69A, Q74P, and H16N or H16L, respectively, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitutions V69A, Q74P, and H16N or H16L, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitutions V69A, Q74P, and H16N, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitutions V69A, Q74P, and H16L, in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position V69, Q74, and I92, optionally wherein the amino acid substitution is V69A, Q74P, and I92S, respectively, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitutions V69A, Q74P, and I92S, in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position V69, Q74, and D84, optionally wherein the amino acid substitution is V69A, Q74P, and D84V, respectively, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitutions V69A, Q74P, and D84V, in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position V69, Q74, and R38, optionally wherein the amino acid substitution is V69A, Q74P, and R38Q, respectively, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitutions V69A, Q74P, and R38Q, in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position V69, Q74, and F42, optionally wherein the amino acid substitution is V69A,

Q74P, and F42Q, respectively, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitutions V69A, Q74P, and F42Q, in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position V69, Q74, and R38, optionally wherein the amino acid substitution is V69A, Q74P, and R38N, respectively, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitutions V69A, Q74P, and R38N, in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position V69, Q74, and R38, optionally wherein the amino acid substitution is V69A, Q74P, and R38E, respectively, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitution V69A, Q74P, and R38E, in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position V69, Q74, K35, and H16, optionally wherein the amino acid substitution is V69A, Q74P, K35E, and H16N, respectively, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitutions V69A, Q74P, K35E, and H16N, in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position V69, Q74, K35, H16, and R38, optionally wherein the amino acid substitution is V69A, Q74P, K35E, H16N, and R38N, respectively, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitutions V69A, Q74P, K35E, H16N, and R38N, in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position V69, Q74, H16, and R38, optionally wherein the amino acid substitution is V69A, Q74P, H16N, and R38N or R38Q, respectively, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitutions V69A, Q74P, H16N, and R38N or R38Q, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitutions V69A, Q74P, H16N, and R38N, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitutions V69A, Q74P, H16N, and R38Q, in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position I28, E68, S87, N88, Q126, or a combination thereof, in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position I28, optionally wherein the amino acid substitution is I28T or I28F, in IL-2.

In an embodiment, the IL-2 fusion protein comprises the amino acid substitution I28T in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitution I28F in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position E68, optionally wherein the amino acid substitution is E68Q or E68N, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitution E68Q in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitution E68N in IL-2.

In an embodiment, the IL-2 fusion protein comprises the amino acid substitution E68N in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position S87, optionally wherein the amino acid substitution is S87R, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitution S87R in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position N88, optionally wherein the amino acid substitution is N88S, N88L, or N88D, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitution N88S, N88L, or N88D, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitution N88S in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitution N88L in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitution N88D in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position Q126, optionally wherein the amino acid substitution is Q126T, Q126K, or Q126R, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitution Q126T, Q126K, or Q126R, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitution Q126T, Q126K, or Q126R, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitution Q126T in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitution Q126K in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitution Q126R in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position C125 in IL-2, optionally wherein the amino acid substitution is C125S. In an embodiment, the IL-2 fusion protein comprises the amino acid substitution C125S in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position T3 in IL-2, optionally wherein the amino acid substitution is T3A. In an embodiment, the IL-2 fusion protein comprises the amino acid substitution T3A in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position V69, Q74, and C125, in IL-2, optionally wherein the amino acid substitution is V69A, Q74P, and C125S, respectively. In an embodiment, the IL-2 fusion protein comprises the amino acid substitutions V69A, Q74P, and C125S, in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position T3, H16, I92, in IL-2, or a combination thereof, optionally wherein the amino acid substitution is T3A, H16N, and I92S, in IL-2, respectively.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position H16, V69, Q74, and C125, in IL-2, optionally wherein the amino acid substitution is H16N, V69A, Q74P, and C125S, in IL-2, respectively. In an embodiment, the IL-2 fusion protein comprises the amino acid substitutions H16N, V69A, Q74P, and C125S in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position H16, V69, Q74, and C125, in IL-2, optionally wherein the amino acid

substitution is H16L, V69A, Q74P, and C125S, in IL-2, respectively. In an embodiment, the IL-2 fusion protein comprises the amino acid substitutions H16L, V69A, Q74P, and C125S, in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position H16, V69, Q74, I92, and C125, in IL-2, optionally wherein the amino acid substitution is H16L, V69A, Q74P, I92S, and C125S, in IL-2, respectively. In an embodiment, the IL-2 fusion protein comprises the amino acid substitutions H16L, V69A, Q74P, I92S, and C125S, in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position T3, V69, Q74, and C125, in IL-2, optionally wherein the amino acid substitution is T3A, V69A, Q74P, and C125S, in IL-2, respectively. In an embodiment, the IL-2 fusion protein comprises the amino acid substitutions T3A, V69A, Q74P, and C125S, in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position T3, H16, V69, Q74, and C125, in IL-2, optionally wherein the amino acid substitution is T3A, H16N or H16L, V69A, Q74P, and C125S, in IL-2, respectively. In an embodiment, the IL-2 fusion protein comprises the amino acid substitutions T3A, H16N, V69A, Q74P, and C125S. In an embodiment, the IL-2 fusion protein comprises the amino acid substitutions T3A, H16L, V69A, Q74P, and C125S, in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position T3, V69, Q74, I92, and C125, in IL-2, optionally wherein the amino acid substitution is T3A, V69A, Q74P, I92S, and C125S, in IL-2, respectively. In an embodiment, the IL-2 fusion protein comprises the amino acid substitutions T3A, V69A, Q74P, I92S, and C125S, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitutions T3A, V69A, Q74P, I92S, and C125S, in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position H16, K35, V69 and Q74, optionally wherein the amino acid substitution is H16L, K35E, V69A, and Q74P, respectively, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitutions H16L, K35E, V69A, and Q74P, in IL-2.

In an embodiment, the IL-2 fusion protein comprises an amino acid alteration (*e.g.*, substitution) at position H16, R38, V69A, and Q74P, optionally wherein the amino acid substitution is H16L, R38Q, V69A, and Q74P, respectively, in IL-2. In an embodiment, the IL-2 fusion protein comprises the amino acid substitutions H16L, R38Q, V69A, and Q74P, in IL-2.

In an embodiment, the IL-2 fusion protein comprises the amino acid substitutions H16L, V69A, Q74P, and C125S, in IL-2.

Without wishing to be bound by theory, it is believed that in an embodiment, an IL-2 fusion protein comprising the amino acid substitutions H16L, V69A, Q74P, and C125S, can have at least one or more of the following advantageous properties: (i) has reduced binding affinity for CD122 and/or CD132, which increases the potency and selectivity of the IL-2 agent for regulatory T cells (Treg)

compared to other T cell types; (ii) is significantly stable, *e.g.*, due to the presence of stabilizing V69A and Q74P mutations; (iii) has reduced or decreased binding capacity and/or binding affinity for CD25, which improves the lifetime of the IL-2 agent; (iv) does not substantially promote expansion, activation, survival, and/or proliferation of T effector cells and/or natural killer (NK) cells *in vitro* and/or *in vivo*; and/or (v) has reduced incorrect disulfide pairing and improved stability, *e.g.*, due to the presence of the C125S mutation. In an embodiment, an IL-2 agent comprising the H16L mutation has reduced binding affinity for CD122 and/or CD132 and/or increased potency and selectivity for Treg over other T cell types, compared to an IL-2 agent comprising other H16 mutations. These properties make an IL-2 variant comprising the amino acid substitutions H16L, V69A, Q74P, and C125S particularly suitable for treating disorders and conditions arising from abnormal immune responses.

Thus, in an embodiment, an IL-2 fusion protein comprising amino acid substitutions H16L, V69A, Q74P, and C125S, has *inter alia* one or more (*e.g.*, 2, 3, 4, 5, 6, 7, or all) of the following properties relative to a wild-type IL-2 or a reference IL-2 variant that does not comprise the amino acid substitutions: (i) enhanced or increased stability *in vitro* or *in vivo*; (ii) reduced or decreased binding capacity and/or binding affinity for human CD122 *in vitro* and/or *in vivo*; (iii) reduced or decreased binding capacity and/or binding affinity for human CD132 *in vitro* and/or *in vivo*; (iv) reduced or decreased affinity of the IL-2 variant for the heterodimeric IL-2 receptor composed of human CD122 and human CD132 (*i.e.* human CD122/CD132 heterodimer) *in vitro* and/or *in vivo*; (v) reduced or decreased or substantially unchanged binding capacity and/or binding affinity for human CD25 *in vitro* and/or *in vivo*; (vi) selective binding to regulatory T cells (*e.g.* Foxp3⁺ T cells); (vii) selective activation of the IL-2 signaling pathway in T regulatory cells (Tregs) *in vitro* or *in vivo*; or (viii) enhanced or increased ability to induce or promote Treg expansion, activity, survival and/or proliferation.

In an embodiment, the IL-2 fusion protein comprises an IL-2 variant comprising an amino acid sequence chosen from: SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 12, SEQ ID NO: 13, SEQ ID NO: 14, SEQ ID NO: 15, SEQ ID NO: 16, SEQ ID NO: 17, SEQ ID NO: 18, SEQ ID NO: 19, SEQ ID NO: 20, SEQ ID NO: 21, SEQ ID NO: 22, SEQ ID NO: 23, SEQ ID NO: 24, SEQ ID NO: 25, SEQ ID NO: 26, SEQ ID NO: 27, SEQ ID NO: 28, SEQ ID NO: 29, SEQ ID NO: 30, SEQ ID NO: 31, SEQ ID NO: 32, SEQ ID NO: 33, SEQ ID NO: 34, SEQ ID NO: 35, SEQ ID NO: 36, SEQ ID NO: 37, SEQ ID NO: 38, SEQ ID NO: 1000, SEQ ID NO: 1001, SEQ ID NO: 1002, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto.

In an embodiment, the IL-2 fusion protein comprises an IL-2 variant comprising the amino acid sequence of SEQ ID NO: 4, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%,

93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto. In an embodiment, the IL-2 fusion protein comprises an IL-2 variant comprising the amino acid sequence of SEQ ID NO: 5, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto. In an embodiment, the IL-2 fusion protein comprises the amino acid sequence of SEQ ID NO: 11, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto. In an embodiment, the IL-2 fusion protein comprises the amino acid sequence of SEQ ID NO: 1000, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto. In an embodiment, the IL-2 fusion protein comprises the amino acid sequence of SEQ ID NO: 1001, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto. In an embodiment, the IL-2 fusion protein comprises the amino acid sequence of SEQ ID NO: 1002, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto.

In an embodiment, the IL-2 fusion protein comprises the amino acid sequence of any of SEQ ID NOs: 4, 5, 11, 1000, 1001, or 1002, or a functional fragment thereof. In an embodiment, the IL-2 fusion protein comprises the amino acid sequence of SEQ ID NO: 4 or 5, or a functional fragment thereof. In an embodiment, the IL-2 fusion protein comprises the amino acid sequence of SEQ ID NO: 4, or a functional fragment thereof. In an embodiment, the IL-2 fusion protein comprises the amino acid sequence of SEQ ID NO: 5, or a functional fragment thereof. In an embodiment, the IL-2 fusion protein comprises the amino acid sequence of SEQ ID NO: 11, or a functional fragment thereof. In an embodiment, the IL-2 fusion protein comprises the amino acid sequence of SEQ ID NO: 1000, or a functional fragment thereof. In an embodiment, the IL-2 fusion protein comprises the amino acid sequence of SEQ ID NO: 1001, or a functional fragment thereof. In an embodiment, the IL-2 fusion protein comprises the amino acid sequence of SEQ ID NO: 1002, or a functional fragment thereof.

Without wishing to be bound by theory, it is believed that in an embodiment, an IL-2 fusion protein comprising the amino acid sequence of SEQ ID NO: 5, or a functional fragment thereof, can have at least one or more of the following advantageous properties: (i) has reduced binding affinity for CD122 and/or CD132, which increases the potency and selectivity of the IL-2 agent for regulatory T cells (Treg) compared to other T cell types; (ii) is significantly stable, *e.g.*, due to the presence of

stabilizing V69A and Q74P mutations; (iii) has reduced or decreased binding capacity and/or binding affinity for CD25, which improves the lifetime of the IL-2 agent; (iv) does not substantially promote expansion, activation, survival, and/or proliferation of T effector cells and/or natural killer (NK) cells *in vitro* and/or *in vivo*; and/or (v) has reduced incorrect disulfide pairing and improved stability, *e.g.*, due to the presence of the C125S mutation. In an embodiment, an IL-2 agent comprising the H16L mutation has reduced binding affinity for CD122 and/or CD132 and/or increased potency and selectivity for Treg over other T cell types, compared to an IL-2 agent comprising other H16 mutations. These properties make an IL-2 fusion protein comprising the amino acid sequence of SEQ ID NO: 5 particularly suitable for treating disorders and conditions arising from abnormal immune responses.

Thus, in an embodiment, an IL-2 fusion protein comprising the amino acid sequence SEQ ID NO: 5, or a functional fragment thereof, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto, has *inter alia* one or more (*e.g.*, 2, 3, 4, 5, 6, 7, or all) of the following properties relative to a wild-type IL-2 or a reference IL-2 fusion protein that does not comprise the amino acid substitutions: (i) enhanced or increased stability *in vitro* or *in vivo*; (ii) reduced or decreased binding capacity and/or binding affinity for human CD122 *in vitro* and/or *in vivo*; (iii) reduced or decreased binding capacity and/or binding affinity for human CD132 *in vitro* and/or *in vivo*; (iv) reduced or decreased affinity of the IL-2 fusion protein for the heterodimeric IL-2 receptor composed of human CD122 and human CD132 (*i.e.* human CD122/CD132 heterodimer) *in vitro* and/or *in vivo*; (v) reduced or decreased or substantially unchanged binding capacity and/or binding affinity for human CD25 *in vitro* and/or *in vivo*; (vi) selective binding to regulatory T cells (*e.g.* Foxp3⁺ T cells); (vii) selective activation of the IL-2 signaling pathway in T regulatory cells (Tregs) *in vitro* or *in vivo*; or (viii) enhanced or increased ability to induce or promote Treg expansion, activity, survival and/or proliferation.

In an embodiment, the IL-2 fusion proteins described herein comprise an Fc region, *e.g.* an Fc region having one or more mutations described herein, and/or having one or more structural or functional properties described herein. Without wishing to be bound by theory, it is believed that in an embodiment, the Fc regions described herein can reduce (*e.g.*, prevent) renal clearance and/or extend half-life of the IL-2 agents (*e.g.*, via FcRn).

As used herein, the term “fusion protein” refers to a protein, comprising two or more protein or peptide components. The two or more protein or peptide components can be obtained from different sources or encoded by different genes. A fusion protein is sometimes also referred to as a chimeric protein. An Fc fusion protein (also known as Fc chimeric fusion protein, Fc-Ig, Ig-based chimeric fusion protein, or Fc-tag protein) can include an Fc region of an immunoglobulin (*e.g.*, an Fc region described herein) linked (*e.g.*, fused) to a protein or peptide. The Fc region can be linked (*e.g.*, fused genetically) to the protein or peptide directly, or indirectly, *e.g.*, through a linker. In an

embodiment, the Fc region is derived from the Fc region of IgG, *e.g.*, human IgG, *e.g.*, IgG1, IgG2, IgG3, or IgG4. In an embodiment, the Fc region is derived from the Fc region of IgG1, *e.g.*, human IgG1.

An IL-2 fusion protein can include an IL-2 variant (*e.g.*, an IL-2 variant described herein), or
5 a functional fragment thereof, linked (*e.g.*, fused) to a protein or peptide. In an embodiment, the IL-2 fusion protein is an IL-2-Fc fusion protein, *e.g.*, further comprising an Fc region of an immunoglobulin (*e.g.*, an Fc region described herein) linked (*e.g.*, fused) to the IL-2 polypeptide (*e.g.*, an IL-2 variant described herein) or a functional fragment thereof. In an embodiment, the IL-2 fusion
10 protein is not an IL-2-Fc fusion protein, *e.g.*, an IL-2 fusion variant described herein, or a functional fragment thereof, is linked (*e.g.*, fused) to a protein or peptide other than an Fc region of IgG, *e.g.*, human IgG, *e.g.*, IgG1, IgG2, IgG3, or IgG4.

In an embodiment, the IL-2 fusion protein comprises an amino acid sequence chosen from:
SEQ ID NO: 56, SEQ ID NO: 57, SEQ ID NO: 58, SEQ ID NO: 59, SEQ ID NO: 60, SEQ ID NO:
61, SEQ ID NO: 62, SEQ ID NO: 63, SEQ ID NO: 64, SEQ ID NO: 65, SEQ ID NO: 66, SEQ ID
15 NO: 67, SEQ ID NO: 68, SEQ ID NO: 69, SEQ ID NO: 70, SEQ ID NO: 71, SEQ ID NO: 72, SEQ ID NO: 73, SEQ ID NO: 74, SEQ ID NO: 75, SEQ ID NO: 76, SEQ ID NO: 77, SEQ ID NO: 78, SEQ ID NO: 79, SEQ ID NO: 80, SEQ ID NO: 81, SEQ ID NO: 82, SEQ ID NO: 83, SEQ ID NO: 84, SEQ ID NO: 85, SEQ ID NO: 86, SEQ ID NO: 87, SEQ ID NO: 88, SEQ ID NO: 89, SEQ ID NO: 90, SEQ ID NO: 91, SEQ ID NO: 92, SEQ ID NO: 93, or an amino acid sequence with at least
20 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto.

In an embodiment, the IL-2 fusion protein comprises an amino acid sequence chosen from:
SEQ ID NO: 94, SEQ ID NO: 95, SEQ ID NO: 96, SEQ ID NO: 97, SEQ ID NO: 98, SEQ ID NO:
25 99, SEQ ID NO: 100, SEQ ID NO: 101, SEQ ID NO: 102, SEQ ID NO: 103, SEQ ID NO: 104, SEQ ID NO: 105, SEQ ID NO: 106, SEQ ID NO: 107, SEQ ID NO: 108, SEQ ID NO: 109, SEQ ID NO: 110, SEQ ID NO: 111, SEQ ID NO: 112, SEQ ID NO: 113, SEQ ID NO: 114, SEQ ID NO: 115, SEQ ID NO: 116, SEQ ID NO: 117, SEQ ID NO: 118, SEQ ID NO: 119, SEQ ID NO: 120, SEQ ID NO: 121, SEQ ID NO: 122, SEQ ID NO: 123, SEQ ID NO: 124, SEQ ID NO: 125, SEQ ID NO: 126, SEQ
30 ID NO: 127, SEQ ID NO: 128, SEQ ID NO: 129, SEQ ID NO: 130, or SEQ ID NO: 131, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto.

In an embodiment, the IL-2 fusion protein comprises an amino acid sequence chosen from:
35 SEQ ID NO: 132, SEQ ID NO: 133, SEQ ID NO: 134, SEQ ID NO: 135, SEQ ID NO: 136, SEQ ID NO: 137, SEQ ID NO: 138, SEQ ID NO: 139, SEQ ID NO: 140, SEQ ID NO: 141, SEQ ID NO: 142, SEQ ID NO: 143, SEQ ID NO: 144, SEQ ID NO: 145, SEQ ID NO: 146, SEQ ID NO: 147, SEQ ID

NO: 148, SEQ ID NO: 149, SEQ ID NO: 150, SEQ ID NO: 151, SEQ ID NO: 152, SEQ ID NO: 153, SEQ ID NO: 154, SEQ ID NO: 155, SEQ ID NO: 156, SEQ ID NO: 157, SEQ ID NO: 158, SEQ ID NO: 159, SEQ ID NO: 160, SEQ ID NO: 161, SEQ ID NO: 162, SEQ ID NO: 163, SEQ ID NO: 164, SEQ ID NO: 165, SEQ ID NO: 166, SEQ ID NO: 167, SEQ ID NO: 168, or SEQ ID NO: 169, or an
 5 amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto.

In an embodiment, the IL-2 fusion protein comprises an amino acid sequence chosen from:
 SEQ ID NO: 170, SEQ ID NO: 171, SEQ ID NO: 172, SEQ ID NO: 173, SEQ ID NO: 174, SEQ ID
 10 NO: 175, SEQ ID NO: 176, SEQ ID NO: 177, SEQ ID NO: 178, SEQ ID NO: 179, SEQ ID NO: 180, SEQ ID NO: 181, SEQ ID NO: 182, SEQ ID NO: 183, SEQ ID NO: 184, SEQ ID NO: 185, SEQ ID NO: 186, SEQ ID NO: 187, SEQ ID NO: 188, SEQ ID NO: 189, SEQ ID NO: 190, SEQ ID NO: 191, SEQ ID NO: 192, SEQ ID NO: 193, SEQ ID NO: 194, SEQ ID NO: 195, SEQ ID NO: 196, SEQ ID NO: 197, SEQ ID NO: 198, SEQ ID NO: 199, SEQ ID NO: 200, SEQ ID NO: 201, SEQ ID NO: 202,
 15 SEQ ID NO: 203, SEQ ID NO: 204, SEQ ID NO: 205, SEQ ID NO: 206, or SEQ ID NO: 207, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto.

In an embodiment, the IL-2 fusion protein comprises an amino acid sequence chosen from:
 20 SEQ ID NO: 208, SEQ ID NO: 209, SEQ ID NO: 210, SEQ ID NO: 211, SEQ ID NO: 212, SEQ ID NO: 213, SEQ ID NO: 214, SEQ ID NO: 215, SEQ ID NO: 216, SEQ ID NO: 217, SEQ ID NO: 218, SEQ ID NO: 219, SEQ ID NO: 220, SEQ ID NO: 221, SEQ ID NO: 222, SEQ ID NO: 223, SEQ ID NO: 224, SEQ ID NO: 225, SEQ ID NO: 226, SEQ ID NO: 227, SEQ ID NO: 228, SEQ ID NO: 229, SEQ ID NO: 230, SEQ ID NO: 231, SEQ ID NO: 232, SEQ ID NO: 233, SEQ ID NO: 234, SEQ ID
 25 NO: 235, SEQ ID NO: 236, SEQ ID NO: 237, SEQ ID NO: 238, SEQ ID NO: 239, SEQ ID NO: 240, SEQ ID NO: 241, SEQ ID NO: 242, SEQ ID NO: 243, SEQ ID NO: 244, or SEQ ID NO: 245, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto.

In an embodiment, the IL-2 fusion protein comprises an amino acid sequence chosen from:
 30 SEQ ID NO: 246, SEQ ID NO: 247, SEQ ID NO: 248, SEQ ID NO: 249, SEQ ID NO: 250, SEQ ID NO: 251, SEQ ID NO: 252, SEQ ID NO: 253, SEQ ID NO: 254, SEQ ID NO: 255, SEQ ID NO: 256, SEQ ID NO: 257, SEQ ID NO: 258, SEQ ID NO: 259, SEQ ID NO: 260, SEQ ID NO: 261, SEQ ID NO: 262, SEQ ID NO: 263, SEQ ID NO: 264, SEQ ID NO: 265, SEQ ID NO: 266, SEQ ID NO: 267,
 35 SEQ ID NO: 268, SEQ ID NO: 269, SEQ ID NO: 270, SEQ ID NO: 271, SEQ ID NO: 272, SEQ ID NO: 273, SEQ ID NO: 274, SEQ ID NO: 275, SEQ ID NO: 276, SEQ ID NO: 277, SEQ ID NO: 278, SEQ ID NO: 279, SEQ ID NO: 280, SEQ ID NO: 281, SEQ ID NO: 282, or SEQ ID NO: 283, or an

amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto.

In an embodiment, the IL-2 fusion protein comprises an amino acid sequence chosen from:

5 SEQ ID NO: 284, SEQ ID NO: 285, SEQ ID NO: 286, SEQ ID NO: 287, SEQ ID NO: 288, SEQ ID NO: 289, SEQ ID NO: 290, SEQ ID NO: 291, SEQ ID NO: 292, SEQ ID NO: 293, SEQ ID NO: 294, SEQ ID NO: 295, SEQ ID NO: 296, SEQ ID NO: 297, SEQ ID NO: 298, SEQ ID NO: 299, SEQ ID NO: 300, SEQ ID NO: 301, SEQ ID NO: 302, SEQ ID NO: 303, SEQ ID NO: 304, SEQ ID NO: 305, SEQ ID NO: 306, SEQ ID NO: 307, SEQ ID NO: 308, SEQ ID NO: 309, SEQ ID NO: 310, SEQ ID
10 NO: 311, SEQ ID NO: 312, SEQ ID NO: 313, SEQ ID NO: 314, SEQ ID NO: 315, SEQ ID NO: 316, SEQ ID NO: 317, SEQ ID NO: 318, SEQ ID NO: 319, SEQ ID NO: 320, or SEQ ID NO: 321, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto.

15 In an embodiment, the IL-2 fusion protein comprises an amino acid sequence chosen from:

SEQ ID NO: 322, SEQ ID NO: 323, SEQ ID NO: 324, SEQ ID NO: 325, SEQ ID NO: 326, SEQ ID NO: 327, SEQ ID NO: 328, SEQ ID NO: 329, SEQ ID NO: 330, SEQ ID NO: 331, SEQ ID NO: 332, SEQ ID NO: 333, SEQ ID NO: 334, SEQ ID NO: 335, SEQ ID NO: 336, SEQ ID NO: 337, SEQ ID NO: 338, SEQ ID NO: 339, SEQ ID NO: 340, SEQ ID NO: 341, SEQ ID NO: 342, SEQ ID NO: 343,
20 SEQ ID NO: 344, SEQ ID NO: 345, SEQ ID NO: 346, SEQ ID NO: 347, SEQ ID NO: 348, SEQ ID NO: 349, SEQ ID NO: 350, SEQ ID NO: 351, SEQ ID NO: 352, SEQ ID NO: 353, SEQ ID NO: 354, SEQ ID NO: 355, SEQ ID NO: 356, SEQ ID NO: 357, SEQ ID NO: 358, or SEQ ID NO: 359, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11,
25 12, 13, 14, 15, 20, 25, or 30 amino acids thereto.

In an embodiment, the IL-2 fusion protein comprises an amino acid sequence chosen from:

1004, SEQ ID NO: 1005, SEQ ID NO: 1006, SEQ ID NO: 1007, SEQ ID NO: 1008, SEQ ID NO: 1009 or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8,
30 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto. In an embodiment, the IL-2 fusion protein comprises the amino acid sequence of SEQ ID NO: 1004, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto. In an embodiment, the IL-2 fusion protein comprises the amino acid sequence of SEQ
35 ID NO: 1005, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto. In an embodiment, the IL-2 fusion

protein comprises the amino acid sequence of SEQ ID NO: 1006, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto. In an embodiment, the IL-2 fusion protein comprises the amino acid sequence of SEQ ID NO: 1007, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto. In an embodiment, the IL-2 fusion protein comprises the amino acid sequence of SEQ ID NO: 1008, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto.

In an embodiment, the IL-2 agent comprises the amino acid sequence of any of SEQ ID NOs: 1004-1009, or a functional fragment thereof. In an embodiment, the IL-2 agent comprises the amino acid sequence of SEQ ID NO: 1007 or 1008, or a functional fragment thereof. In an embodiment, the IL-2 agent comprises the amino acid sequence of SEQ ID NO: 1004, or a functional fragment thereof. In an embodiment, the IL-2 agent comprises the amino acid sequence of SEQ ID NO: 1005, or a functional fragment thereof. In an embodiment, the IL-2 agent comprises the amino acid sequence of SEQ ID NO: 1006, or a functional fragment thereof. In an embodiment, the IL-2 agent comprises the amino acid sequence of SEQ ID NO: 1007, or a functional fragment thereof. In an embodiment, the IL-2 agent comprises the amino acid sequence of SEQ ID NO: 1008, or a functional fragment thereof. In an embodiment, the IL-2 agent comprises the amino acid sequence of SEQ ID NO: 1009, or a functional fragment thereof.

Without wishing to be bound by theory, it is also believed that in an embodiment, an IL-2 fusion protein comprising the amino acid sequence of SEQ ID NO: 1008, or a functional fragment thereof, can have at least one or more of the following advantageous properties: (i) has reduced binding affinity for CD122 and/or CD132, which increases the potency and selectivity of the IL-2 agent for regulatory T cells (Treg) compared to other T cell types; (ii) is significantly stable, *e.g.*, due to the presence of stabilizing V69A and Q74P mutations; (iii) has reduced or decreased binding capacity and/or binding affinity for CD25, which improves the lifetime of the IL-2 agent; (iv) does not substantially promote expansion, activation, survival, and/or proliferation of T effector cells and/or natural killer (NK) cells *in vitro* and/or *in vivo*; (v) has reduced incorrect disulfide pairing and improved stability, *e.g.*, due to the presence of the C125S mutation; and/or (vi) has reduced effector function, *e.g.*, by reduced Fc glycosylation due to the N297G mutation in the Fc region. In an embodiment, an IL-2 agent comprising the H16L mutation has reduced binding affinity for CD122 and/or CD132 and/or increased potency and selectivity for Treg over other T cell types, compared to an IL-2 agent comprising other H16 mutations. These properties make an IL-2 fusion protein

comprising the amino acid sequence of SEQ ID NO: 1008 particularly suitable for treating disorders and conditions arising from abnormal immune responses.

Thus, in an embodiment, an IL-2 fusion protein comprising the amino acid sequence SEQ ID NO: 1008, or a functional fragment thereof, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, 30, 35, 40, 45, or 50 amino acids thereto, has *inter alia* one or more (*e.g.*, 2, 3, 4, 5, 6, 7, 8, or all) of the following properties relative to a wild-type IL-2 or a reference IL-2 fusion protein that does not comprise the amino acid substitutions: (i) enhanced or increased stability *in vitro* or *in vivo*; (ii) reduced or decreased binding capacity and/or binding affinity for human CD122 *in vitro* and/or *in vivo*; (iii) reduced or decreased binding capacity and/or binding affinity for human CD132 *in vitro* and/or *in vivo*; (iv) reduced or decreased affinity of the IL-2 fusion protein for the heterodimeric IL-2 receptor composed of human CD122 and human CD132 (*i.e.* human CD122/CD132 heterodimer) *in vitro* and/or *in vivo*; (v) reduced or decreased or substantially unchanged binding capacity and/or binding affinity for human CD25 *in vitro* and/or *in vivo*; (vi) selective binding to regulatory T cells (*e.g.* Foxp3⁺ T cells); (vii) selective activation of the IL-2 signaling pathway in T regulatory cells (Tregs) *in vitro* or *in vivo*; (viii) enhanced or increased ability to induce or promote Treg expansion, activity, survival and/or proliferation; or (ix) reduced or decreased effector function.

In an embodiment, the IL-2 fusion protein comprises from N-terminus to C-terminus an IL-2 variant described herein and an Fc region (*e.g.*, Fc region described herein). In an embodiment, the fusion protein further comprises a linker (*e.g.*, a linker described herein) between the IL-2 variant and the Fc region. In an embodiment the IL-2 fusion forms a dimer, *e.g.*, a homodimer.

In an embodiment, the fusion protein comprises one or more glycosylation sites, or is glycosylated. In another embodiment, the fusion protein does not have a glycosylation site, or is not glycosylated.

In an embodiment, the only amino acids in the fusion protein are canonical amino acids. In an embodiment, the fusion protein comprises naturally-occurring amino acids; analogs, derivatives and congeners thereof; amino acid analogs having variant side chains; and/or all stereoisomers of any of any of the foregoing. The fusion protein may comprise the D- or L- optical isomers of amino acids and peptidomimetics.

In an aspect, this disclosure provides a method of making an IL-2 fusion protein disclosed herein. The IL-2 fusion proteins described herein can be produced by any suitable recombinant DNA technique. In an embodiment, the method includes culturing a cell containing a nucleic acid encoding the IL-2 fusion protein under conditions that allow production of the fusion protein. In another embodiment, the method further includes isolating or purifying the IL-2 fusion protein. In yet another embodiment, the method further includes evaluating efficacy of the IL-2 fusion protein in a cell-based

assay or in an animal model. In still another embodiment, the method further includes administering the IL-2 fusion protein to a subject, *e.g.*, a human.

This disclosure provides an isolated nucleic acid molecule encoding an IL-2 fusion protein described herein, and vectors and host cells thereof. The nucleic acid molecule includes, but is not
5 limited to, RNA, genomic DNA and cDNA.

IL-2 Complexes

In an embodiment, the IL-2 agent comprises an IL-2 complex, *e.g.*, an IL-2 complex described herein. In an embodiment, the IL-2 complex is an IL-2/anti-IL-2 antibody immune
10 complex (IL-2 ic).

Without wishing to be bound by theory, it is believed that in an embodiment, IL-2 complexes, such as IL-2/anti-IL-2 antibody immune complexes, can potentiate biologic activity of IL-2 *in vivo*. For example, the effect of IL-2 on cells (*e.g.*, Tregs) can be modulated by complexing IL-2 with distinct mAbs that specifically bind IL-2. The mechanisms can include, *e.g.*, the prolongation of the
15 cytokine half-life in circulation. Depending on the clone of IL-2 antibody, IL-2 ic can selectively stimulate, for example, CD25^{high} cells (*e.g.*, IL-2/JES6-1 immune complexes), or CD122^{high} cells (*e.g.*, IL-2/S4B6 immune complexes). For example, IL-2/JES6-1 immune complexes highly selectively stimulate regulatory T cells and they can be useful for transplantations and in treatment of autoimmune diseases. As another example, IL-2/S4B6 immune complexes can have high stimulatory
20 activity for NK cells and memory CD8⁺ T cells and they can replace the conventional IL-2 in cancer immunotherapy.

In an embodiment, the IL-2 complex comprises an IL-2 variant described herein. In an embodiment, the IL-2 complex comprises one or more amino acid alterations (*e.g.*, substitutions) described in **Table 9**. In an embodiment, the IL-2 complex comprises an amino acid sequence
25 described in **Table 9**, or a functional fragment thereof. In an embodiment, the IL-2 complex comprises an anti-IL-2 antibody molecule. In an embodiment, the IL-2 complex comprises an IL-2 variant described herein and an anti-IL-2 antibody molecule. In an embodiment, the anti-IL-2 antibody molecule binds to the IL-2 variant. In an embodiment, the anti-IL-2 antibody molecule is capable of binding to the IL-2 variant and the wild-type IL-2. In an embodiment, the IL-2 variant
30 comprises one or more mutations described herein. In an embodiment, the one or more mutations does not reduce, or does not substantially reduce, binding of the IL-2 variant to an anti-IL-2 antibody molecule.

In an embodiment, the IL-2 complex comprises an amino acid sequence chosen from: SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 12, SEQ ID NO: 13, SEQ ID NO: 14, SEQ ID NO: 15, SEQ ID NO: 16, SEQ ID NO: 17, SEQ ID NO: 18, SEQ ID NO: 19, SEQ ID NO: 20, SEQ ID NO: 21, SEQ ID NO: 22, SEQ ID NO: 23, SEQ ID NO: 24, SEQ ID NO: 25, SEQ

ID NO: 26, SEQ ID NO: 27, SEQ ID NO: 28, SEQ ID NO: 29, SEQ ID NO: 30, SEQ ID NO: 31, SEQ ID NO: 32, SEQ ID NO: 33, SEQ ID NO: 34, SEQ ID NO: 35, SEQ ID NO: 36, SEQ ID NO: 37, SEQ ID NO: 38, SEQ ID NO: 1000, SEQ ID NO: 1001, SEQ ID NO: 1002, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more
 5 sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto.

In an embodiment, the IL-2 complex modulates (*e.g.*, stimulates) one or more activities of T cells. In an embodiment, the IL-2 complex stimulates CD25^{high} cells. In an embodiment, the IL-2 complex stimulates Tregs. In an embodiment, the IL-2 complex stimulates CD122^{high} cells. In an
 10 embodiment, the IL-2 complex stimulates NK cells and/or memory CD8⁺ T cells. In an embodiment, the IL-2 complex selectively stimulates CD25^{high} cells over CD122^{high} cells. In an embodiment, the IL-2 complex selectively stimulates CD122^{high} cells over CD25^{high} cells. In an embodiment, the IL-2 complex selectively stimulates Tregs over NK cells and/or memory CD8⁺ T cells. In an
 15 embodiment, the IL-2 complex selectively stimulates NK cells and/or memory CD8⁺ T cells over Tregs.

Exemplary anti-IL-2 antibody molecules suitable for use are described, *e.g.*, in International Application Publication No. WO 2016/164937, which is incorporated herein by reference in its entirety.

As used herein, the term “antibody molecule” refers to a protein, *e.g.*, an immunoglobulin
 20 chain or a fragment thereof, comprising at least one immunoglobulin variable domain sequence. The term “antibody molecule” includes, for example, full-length, mature antibodies and antigen-binding fragments of an antibody. For example, an antibody molecule can include a heavy (H) chain variable domain sequence (abbreviated herein as VH), and a light (L) chain variable domain sequence (abbreviated herein as VL). In another example, an antibody molecule includes two heavy (H) chain
 25 variable domain sequences and two light (L) chain variable domain sequence, thereby forming two antigen binding sites, such as Fab, Fab', F(ab')₂, Fc, Fd, Fd', Fv, single chain antibodies (scFv for example), single variable domain antibodies, diabodies (Dab) (bivalent and bispecific), and chimeric (*e.g.*, humanized) antibodies, which may be produced by the modification of whole antibodies or those synthesized *de novo* using recombinant DNA technologies. These functional antibody
 30 fragments retain the ability to selectively bind with their respective antigen or receptor. Antibodies and antibody fragments can be from any class of antibodies including, but not limited to, IgG, IgA, IgM, IgD, and IgE, and from any subclass (*e.g.*, IgG1, IgG2, IgG3, and IgG4) of antibodies. The antibody molecules can be monoclonal or polyclonal. The antibody molecule can also be a human, humanized, CDR-grafted, or *in vitro* generated antibody. The antibody molecule can have a heavy
 35 chain constant region chosen from, *e.g.*, IgG1, IgG2, IgG3, or IgG4. The antibody molecule can also have a light chain chosen from, *e.g.*, kappa or lambda. The term “immunoglobulin” (Ig) is used interchangeably with the term “antibody” herein.

Examples of antigen-binding fragments include: (i) a Fab fragment, a monovalent fragment consisting of the VL, VH, CL and CH1 domains; (ii) a F(ab')₂ fragment, a bivalent fragment comprising two Fab fragments linked by a disulfide bridge at the hinge region; (iii) a Fd fragment consisting of the VH and CH1 domains; (iv) a Fv fragment consisting of the VL and VH domains of a single arm of an antibody, (v) a diabody (dAb) fragment, which consists of a VH domain; (vi) a camelid or camelized variable domain; (vii) a single chain Fv (scFv), see *e.g.*, Bird *et al.* (1988) *Science* 242:423-426; and Huston *et al.* (1988) *Proc. Natl. Acad. Sci. USA* 85:5879-5883; (viii) a single domain antibody. These antibody fragments may be obtained using any suitable method, including several conventional techniques known to those with skill in the art, and the fragments can be screened for utility in the same manner as are intact antibodies.

The term “antibody” includes intact molecules as well as functional fragments thereof. Constant regions of the antibodies can be altered, *e.g.*, mutated, to modify the properties of the antibody (*e.g.*, to increase or decrease one or more of: Fc receptor binding, antibody glycosylation, the number of cysteine residues, effector cell function, or complement function).

The antibody molecule can be a single chain antibody. A single-chain antibody (scFV) may be engineered (*see*, for example, Colcher, D. *et al.* (1999) *Ann N Y Acad Sci* 880:263-80; and Reiter, Y. (1996) *Clin Cancer Res* 2:245-52). The single chain antibody can be dimerized or multimerized to generate multivalent antibodies having specificities for different epitopes of the same target protein.

The antibody molecules disclosed herein can also be single domain antibodies. Single domain antibodies can include antibodies whose complementary determining regions are part of a single domain polypeptide. Examples include, but are not limited to, heavy chain antibodies, antibodies naturally devoid of light chains, single domain antibodies derived from conventional 4-chain antibodies, engineered antibodies and single domain scaffolds other than those derived from antibodies. Single domain antibodies may be any of the art, or any future single domain antibodies. Single domain antibodies may be derived from any species including, but not limited to mouse, human, camel, llama, fish, shark, goat, rabbit, and bovine. According to some aspects, a single domain antibody is a naturally occurring single domain antibody known as heavy chain antibody devoid of light chains. Such single domain antibodies are disclosed in WO 94/04678, for example. For clarity reasons, this variable domain derived from a heavy chain antibody naturally devoid of light chain is known herein as a VHH or nanobody to distinguish it from the conventional VH of four chain immunoglobulins. Such a VHH molecule can be derived from antibodies raised in *Camelidae* species, for example in camel, llama, dromedary, alpaca and guanaco. Other species besides *Camelidae* may produce heavy chain antibodies naturally devoid of light chain; such VHHs are also contemplated.

The VH and VL regions can be subdivided into regions of hypervariability, termed “complementarity determining regions” (CDR), interspersed with regions that are more conserved, termed “framework regions” (FR or FW). The terms “complementarity determining region,” and

“CDR,” as used herein refer to the sequences of amino acids within antibody variable regions which confer antigen specificity and binding affinity. As used herein, the terms “framework,” “FW” and “FR” are used interchangeably.

The extent of the framework region and CDRs has been precisely defined by a number of methods (*see*, Kabat, E. A., et al. (1991) Sequences of Proteins of Immunological Interest, Fifth Edition, U.S. Department of Health and Human Services, NIH Publication No. 91-3242; Chothia, C. et al. (1987) *J. Mol. Biol.* 196:901-917; and the AbM definition used by Oxford Molecular’s AbM antibody modeling software. *See*, generally, *e.g.*, Protein Sequence and Structure Analysis of Antibody Variable Domains. In: Antibody Engineering Lab Manual (Ed.: Duebel, S. and Kontermann, R., Springer-Verlag, Heidelberg). In an embodiment, the following definitions are used: AbM definition of CDR1 of the heavy chain variable domain and Kabat definitions for the other CDRs. In an embodiment, Kabat definitions are used for all CDRs. In addition, embodiments described with respect to Kabat or AbM CDRs may also be implemented using Chothia hypervariable loops. Each VH and VL typically includes three CDRs and four FRs, arranged from amino-terminus to carboxy-terminus in the following order: FR1, CDR1, FR2, CDR2, FR3, CDR3, and FR4.

As used herein, an “immunoglobulin variable domain sequence” refers to an amino acid sequence which can form the structure of an immunoglobulin variable domain. For example, the sequence may include all or part of the amino acid sequence of a naturally-occurring variable domain. For example, the sequence may or may not include one, two, or more N- or C-terminal amino acids or may include other alterations that are compatible with formation of the protein structure.

The term “antigen-binding region” refers to the part of an antibody molecule that comprises determinants that form an interface that binds to an antigen, or an epitope thereof. With respect to proteins (or protein mimetics), the antigen-binding region typically includes one or more loops (of at least, *e.g.*, four amino acids or amino acid mimics) that form an interface that binds to the antigen. Typically, the antigen-binding region of an antibody molecule includes at least one or two CDRs and/or hypervariable loops, or more typically at least three, four, five or six CDRs and/or hypervariable loops.

The terms “compete” or “cross-compete” are used interchangeably herein to refer to the ability of an antibody molecule to interfere with binding of another antibody molecule to a target. The interference with binding can be direct or indirect (*e.g.*, through an allosteric modulation of the antibody molecule or the target). The extent to which an antibody molecule is able to interfere with the binding of another antibody molecule to the target, and therefore whether it can be said to compete, can be determined using a competition binding assay, for example, a FACS assay, an ELISA or BIACORE assay. In an embodiment, a competition binding assay is a quantitative competition assay. In an embodiment, a first antibody molecule is said to compete for binding to the target with a second antibody molecule when the binding of the first antibody molecule to the target is reduced by 10% or more, *e.g.*, 20% or more, 30% or more, 40% or more, 50% or more, 55% or more, 60% or

more, 65% or more, 70% or more, 75% or more, 80% or more, 85% or more, 90% or more, 95% or more, 98% or more, 99% or more in a competition binding assay (*e.g.*, a competition assay described herein).

The terms “monoclonal antibody” or “monoclonal antibody composition” as used herein refer to a preparation of antibody molecules of single molecular composition. A monoclonal antibody composition displays a single binding specificity and affinity for a particular epitope. A monoclonal antibody can be made by hybridoma technology or by methods that do not use hybridoma technology (*e.g.*, recombinant methods).

An “effectively human” protein is a protein that does not evoke a neutralizing antibody response, *e.g.*, the human anti-murine antibody (HAMA) response. HAMA can be problematic in a number of circumstances, *e.g.*, if the antibody molecule is administered repeatedly, *e.g.*, in treatment of a chronic or recurrent disease condition. A HAMA response can make repeated antibody administration potentially ineffective because of an increased antibody clearance from the serum (*see, e.g.*, Saleh *et al.*, *Cancer Immunol. Immunother.* 32:180-190 (1990)) and also because of potential allergic reactions (*see, e.g.*, LoBuglio *et al.*, *Hybridoma*, 5:5117-5123 (1986)).

The antibody molecule can be a polyclonal or a monoclonal antibody. In an embodiment, the antibody can be recombinantly produced, *e.g.*, produced by any suitable phage display or combinatorial methods.

Various phage display and combinatorial methods for generating antibodies are known in the art (as described in, *e.g.*, Ladner *et al.* U.S. Patent No. 5,223,409; Kang *et al.* International Publication No. WO 92/18619; Dower *et al.* International Publication No. WO 91/17271; Winter *et al.* International Publication WO 92/20791; Markland *et al.* International Publication No. WO 92/15679; Breitling *et al.* International Publication WO 93/01288; McCafferty *et al.* International Publication No. WO 92/01047; Garrard *et al.* International Publication No. WO 92/09690; Ladner *et al.* International Publication No. WO 90/02809; Fuchs *et al.* (1991) *Bio/Technology* 9:1370-1372; Hay *et al.* (1992) *Hum Antibod Hybridomas* 3:81-85; Huse *et al.* (1989) *Science* 246:1275-1281; Griffiths *et al.* (1993) *EMBO J* 12:725-734; Hawkins *et al.* (1992) *J Mol Biol* 226:889-896; Clackson *et al.* (1991) *Nature* 352:624-628; Gram *et al.* (1992) *PNAS* 89:3576-3580; Garrad *et al.* (1991) *Bio/Technology* 9:1373-1377; Hoogenboom *et al.* (1991) *Nuc Acid Res* 19:4133-4137; and Barbas *et al.* (1991) *PNAS* 88:7978-7982, the contents of all of which are incorporated by reference herein).

In an embodiment, the antibody molecule is a fully human antibody (*e.g.*, an antibody made in a mouse which has been genetically engineered to produce an antibody from a human immunoglobulin sequence), or a non-human antibody, *e.g.*, a rodent (mouse or rat), goat, primate (*e.g.*, monkey), camel antibody. In an embodiment, the non-human antibody is a rodent (mouse or rat antibody). Methods of producing rodent antibodies are known in the art.

Human monoclonal antibodies can be generated using transgenic mice carrying the human immunoglobulin genes rather than the mouse system. Splenocytes from these transgenic mice

immunized with the antigen of interest are used to produce hybridomas that secrete human mAbs with specific affinities for epitopes from a human protein (*see e.g.*, Wood et al. International Application WO 91/00906, Kucherlapati et al. PCT publication WO 91/10741; Lonberg et al. International Application WO 92/03918; Kay et al. International Application 92/03917; Lonberg et al. 1994 *Nature* 368:856-859; Green, L.L. et al. 1994 *Nature Genet.* 7:13-21; Morrison, S.L. et al. 1994 *Proc. Natl. Acad. Sci. USA* 81:6851-6855; Bruggeman et al. 1993 *Year Immunol* 7:33-40; Tuaillon et al. 1993 *PNAS* 90:3720-3724; Bruggeman et al. 1991 *Eur J Immunol* 21:1323-1326).

An antibody can be one in which the variable region, or a portion thereof, *e.g.*, the CDRs, are generated in a non-human organism, *e.g.*, a rat or mouse. Chimeric, CDR-grafted, and humanized antibodies are within the invention. Antibodies generated in a non-human organism, *e.g.*, a rat or mouse, and then modified, *e.g.*, in the variable framework or constant region, to decrease antigenicity in a human are within the invention.

Chimeric antibodies can be produced by any suitable recombinant DNA technique. Several are known in the art (see Robinson et al., International Patent Publication PCT/US86/02269; Akira, et al., European Patent Application 184,187; Taniguchi, M., European Patent Application 171,496; Morrison et al., European Patent Application 173,494; Neuberger *et al.*, International Application WO 86/01533; Cabilly *et al.* U.S. Patent No. 4,816,567; Cabilly et al., European Patent Application 125,023; Better *et al.* (1988 *Science* 240:1041-1043); Liu et al. (1987) *PNAS* 84:3439-3443; Liu *et al.*, 1987, *J. Immunol.* 139:3521-3526; Sun et al. (1987) *PNAS* 84:214-218; Nishimura *et al.*, 1987, *Canc. Res.* 47:999-1005; Wood et al. (1985) *Nature* 314:446-449; and Shaw *et al.*, 1988, *J. Natl Cancer Inst.* 80:1553-1559).

A humanized or CDR-grafted antibody will have at least one or two but generally all three recipient CDRs (of heavy and or light immunoglobulin chains) replaced with a donor CDR. The antibody may be replaced with at least a portion of a non-human CDR or only some of the CDRs may be replaced with non-human CDRs. It is only necessary to replace the number of CDRs required for binding of the humanized antibody to lipopolysaccharide. In an embodiment, the donor will be a rodent antibody, *e.g.*, a rat or mouse antibody, and the recipient will be a human framework or a human consensus framework. Typically, the immunoglobulin providing the CDRs is called the “donor” and the immunoglobulin providing the framework is called the “acceptor.” In an embodiment, the donor immunoglobulin is a non-human (*e.g.*, rodent). The acceptor framework is typically a naturally-occurring (*e.g.*, a human) framework or a consensus framework, or a sequence about 85% or higher, *e.g.*, 90%, 95%, 99% or higher identical thereto.

As used herein, the term “consensus sequence” refers to the sequence formed from the most frequently occurring amino acids (or nucleotides) in a family of related sequences (See *e.g.*, Winnaker, From Genes to Clones (Verlagsgesellschaft, Weinheim, Germany 1987). In a family of proteins, each position in the consensus sequence is occupied by the amino acid occurring most frequently at that position in the family. If two amino acids occur equally frequently, either can be included in the

consensus sequence. A “consensus framework” refers to the framework region in the consensus immunoglobulin sequence.

An antibody can be humanized by any suitable method, and several such methods known in the art (*see e.g.*, Morrison, S. L., 1985, *Science* 229:1202-1207, by Oi et al., 1986, *BioTechniques* 5 4:214, and by Queen et al. US 5,585,089, US 5,693,761 and US 5,693,762, the contents of all of which are hereby incorporated by reference).

Humanized or CDR-grafted antibodies can be produced by CDR-grafting or CDR substitution, wherein one, two, or all CDRs of an immunoglobulin chain can be replaced. *See e.g.*, U.S. Patent 5,225,539; Jones et al. 1986 *Nature* 321:552-525; Verhoeyan et al. 1988 *Science* 10 239:1534; Beidler et al. 1988 *J. Immunol.* 141:4053-4060; Winter US 5,225,539, the contents of all of which are hereby expressly incorporated by reference. Winter describes a CDR-grafting method which may be used to prepare humanized antibodies (UK Patent Application GB 2188638A, filed on March 26, 1987; Winter US 5,225,539), the contents of which is expressly incorporated by reference.

Also provided are humanized antibodies in which specific amino acids have been substituted, 15 deleted or added. Criteria for selecting amino acids from the donor are described in, *e.g.*, US 5,585,089, *e.g.*, columns 12-16 of US 5,585,089, the contents of which are hereby incorporated by reference. Other techniques for humanizing antibodies are described in Padlan et al. EP 519596 A1, published on December 23, 1992.

In an embodiment, the antibody molecule has a heavy chain constant region chosen from, 20 *e.g.*, the heavy chain constant regions of IgG1, IgG2 (*e.g.*, IgG2a), IgG3, IgG4, IgM, IgA1, IgA2, IgD, and IgE; particularly, chosen from, *e.g.*, the (*e.g.*, human) heavy chain constant regions of IgG1, IgG2, IgG3, and IgG4. In another embodiment, the antibody molecule has a light chain constant region chosen from, *e.g.*, the (*e.g.*, human) light chain constant regions of kappa or lambda. The constant region can be altered, *e.g.*, mutated, to modify the properties of the antibody molecule (*e.g.*, 25 to increase or decrease one or more of: Fc receptor binding, antibody glycosylation, the number of cysteine residues, effector cell function, and/or complement function). In an embodiment, the antibody molecule has effector function and can fix complement. In another embodiment, the antibody molecule does not recruit effector cells or fix complement. In certain embodiments, the antibody molecule has reduced or no ability to bind an Fc receptor. For example, it may be an isotype 30 or subtype, fragment or other mutant, which does not support binding to an Fc receptor, *e.g.*, it has a mutagenized or deleted Fc receptor binding region.

In an embodiment, a constant region of the antibody molecule is altered. Methods for altering an antibody constant region are known in the art. Antibody molecules with altered function, *e.g.* altered affinity for an effector ligand, such as FcR on a cell, or the C1 component of complement can 35 be produced by replacing at least one amino acid residue in the constant portion of the antibody with a different residue (*see e.g.*, EP 388,151 A1, U.S. Pat. No. 5,624,821 and U.S. Pat. No. 5,648,260, the contents of all of which are hereby incorporated by reference). Amino acid mutations which stabilize

antibody structure, such as S228P (EU nomenclature, S241P in Kabat nomenclature) in human IgG4 are also contemplated. Similar type of alterations could be described which if applied to the murine, or other species immunoglobulin would reduce or eliminate these functions.

In an embodiment, the only amino acids in the antibody molecule are canonical amino acids.

- 5 In an embodiment, the antibody molecule comprises naturally-occurring amino acids; analogs, derivatives and congeners thereof; amino acid analogs having variant side chains; and/or all stereoisomers of any of any of the foregoing. The antibody molecule may comprise the D- or L-optical isomers of amino acids and peptidomimetics.

- 10 A polypeptide of an antibody molecule described herein may be linear or branched, it may comprise modified amino acids, and it may be interrupted by non-amino acids. The antibody molecule may also be modified; for example, by disulfide bond formation, glycosylation, lipidation, acetylation, phosphorylation, or any other manipulation, such as conjugation with a labeling component. The polypeptide can be isolated from natural sources, can be a produced by recombinant techniques from a eukaryotic or prokaryotic host, or can be a product of synthetic procedures.

- 15 The antibody molecule described herein can be used alone in unconjugated form, or can be bound to a substance, *e.g.*, a toxin or moiety (*e.g.*, a therapeutic drug; a compound emitting radiation; molecules of plant, fungal, or bacterial origin; or a biological protein (*e.g.*, a protein toxin) or particle (*e.g.*, a recombinant viral particle, *e.g.*, via a viral coat protein). For example, the antibody molecule can be coupled to a radioactive isotope such as an α -, β -, or γ -emitter, or a β -and γ -emitter.

- 20 An antibody molecule can be derivatized or linked to another functional molecule (*e.g.*, another peptide or protein). As used herein, a “derivatized” antibody molecule is one that has been modified. Methods of derivatization include but are not limited to the addition of a fluorescent moiety, a radionucleotide, a toxin, an enzyme or an affinity ligand such as biotin. Accordingly, the antibody molecules are intended to include derivatized and otherwise modified forms of the
25 antibodies described herein, including immunoadhesion molecules. For example, an antibody molecule can be functionally linked (by chemical coupling, genetic fusion, noncovalent association or otherwise) to one or more other molecular entities, such as another antibody (*e.g.*, a bispecific antibody or a diabody), a detectable agent, a toxin, a pharmaceutical agent, and/or a protein or peptide that can mediate association of the antibody or antibody portion with another molecule (such as a
30 streptavidin core region or a polyhistidine tag).

- Some types of derivatized antibody molecule are produced by crosslinking two or more antibodies (of the same type or of different types, *e.g.*, to create bispecific antibodies). Suitable crosslinkers include those that are heterobifunctional, having two distinctly reactive groups separated by an appropriate spacer (*e.g.*, m-maleimidobenzoyl-N-hydroxysuccinimide ester) or
35 homobifunctional (*e.g.*, disuccinimidyl suberate). Such linkers are available from Pierce Chemical Company, Rockford, Ill.

Useful detectable agents with which an anti-dengue antibody molecule may be derivatized (or labeled) to include fluorescent compounds, various enzymes, prosthetic groups, luminescent materials, bioluminescent materials, fluorescent emitting metal atoms, *e.g.*, europium (Eu), and other anthanides, and radioactive materials (described below). Exemplary fluorescent detectable agents

5 include fluorescein, fluorescein isothiocyanate, rhodamine, 5dimethylamine-1-naphthalenesulfonyl chloride, phycoerythrin and the like. An antibody may also be derivatized with detectable enzymes, such as alkaline phosphatase, horseradish peroxidase, β -galactosidase, acetylcholinesterase, glucose oxidase and the like. When an antibody is derivatized with a detectable enzyme, it is detected by adding additional reagents that the enzyme uses to produce a detectable reaction product. For

10 example, when the detectable agent horseradish peroxidase is present, the addition of hydrogen peroxide and diaminobenzidine leads to a colored reaction product, which is detectable. An antibody molecule may also be derivatized with a prosthetic group (*e.g.*, streptavidin/biotin and avidin/biotin). For example, an antibody may be derivatized with biotin, and detected through indirect measurement of avidin or streptavidin binding. Examples of suitable fluorescent materials include umbelliferone,

15 fluorescein, fluorescein isothiocyanate, rhodamine, dichlorotriazinylamine fluorescein, dansyl chloride or phycoerythrin; an example of a luminescent material includes luminol; and examples of bioluminescent materials include luciferase, luciferin, and aequorin.

Labeled antibody molecules can be used, for example, diagnostically and/or experimentally in a number of contexts, including (i) to isolate a predetermined antigen by standard techniques, such as

20 affinity chromatography or immunoprecipitation; (ii) to detect a predetermined antigen (*e.g.*, in a cellular lysate or cell supernatant) in order to evaluate the abundance and pattern of expression of the protein; (iii) to monitor protein levels in tissue as part of a clinical testing procedure, *e.g.*, to determine the efficacy of a given treatment regimen.

An antibody molecule may be conjugated to another molecular entity, typically a label or a

25 therapeutic (*e.g.*, antimicrobial (*e.g.*, antibacterial or bactericidal), immunomodulatory, immunostimulatory, cytotoxic, or cytostatic) agent or moiety. Radioactive isotopes can be used in diagnostic or therapeutic applications. Radioactive isotopes that can be coupled to the antibody molecules include, but are not limited to α -, β -, or γ -emitters, or β - and γ -emitters. Such radioactive isotopes include, but are not limited to iodine (^{131}I or ^{125}I), yttrium (^{90}Y), lutetium (^{177}Lu), actinium

30 (^{225}Ac), praseodymium, astatine (^{211}At), rhenium (^{186}Re), bismuth (^{212}Bi or ^{213}Bi), indium (^{111}In), technetium ($^{99\text{m}}\text{Tc}$), phosphorus (^{32}P), rhodium (^{188}Rh), sulfur (^{35}S), carbon (^{14}C), tritium (^3H), chromium (^{51}Cr), chlorine (^{36}Cl), cobalt (^{57}Co or ^{58}Co), iron (^{59}Fe), selenium (^{75}Se), or gallium (^{67}Ga). Radioisotopes useful as therapeutic agents include yttrium (^{90}Y), lutetium (^{177}Lu), actinium (^{225}Ac), praseodymium, astatine (^{211}At), rhenium (^{186}Re), bismuth (^{212}Bi or ^{213}Bi), and rhodium (^{188}Rh).

35 Radioisotopes useful as labels, *e.g.*, for use in diagnostics, include iodine (^{131}I or ^{125}I), indium (^{111}In), technetium ($^{99\text{m}}\text{Tc}$), phosphorus (^{32}P), carbon (^{14}C), and tritium (^3H), or one or more of the therapeutic isotopes listed above.

In an aspect, this disclosure provides a method of making an IL-2 complex described herein. The method includes, *e.g.*, contacting an IL-2 variant described herein with an anti-IL-2 antibody molecule (*e.g.*, an anti-IL-2 antibody molecule that binds to the IL-2 variant), to thereby producing the IL-2 complex. In an embodiment, the method further comprises evaluating the efficacy of the IL-2 complex *in vitro*, *ex vivo*, or *in vivo*.

This disclosure provides an isolated nucleic acid molecule encoding an IL-2 complex (or a portion thereof) described herein, and vectors and host cells thereof. The nucleic acid molecule includes, but is not limited to, RNA, genomic DNA and cDNA.

10 *IL-2 Conjugates*

In an embodiment, the IL-2 agent comprises a conjugate, *e.g.*, an IL-2 conjugate described herein.

In an embodiment, the IL-2 conjugate comprises an IL-2 variant described herein and a non-IL-2 moiety. In an embodiment, the IL-2 conjugate comprises one or more amino acid alterations (*e.g.*, substitutions) described in **Table 9**. In an embodiment, the IL-2 conjugate comprises an amino acid sequence described in **Table 9**, or a functional fragment thereof. In an embodiment, the non-IL-2 moiety comprises an antibody molecule, *e.g.*, an antibody molecule described herein. In an embodiment, the non-IL-2 moiety comprises a polymer, *e.g.*, a polyether compound. In an embodiment, the polyether compound comprises polyethylene glycol (PEG). In an embodiment, the non-IL-2 moiety comprises a cytokine. The IL-2 variant can be coupled to the non-IL-2 moiety directly, or indirectly, *e.g.*, through a linker. In an embodiment, the IL-2 conjugate is an IL-2 fusion protein.

In an embodiment, the IL-2 conjugate comprises an amino acid sequence chosen from: SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 12, SEQ ID NO: 13, SEQ ID NO: 14, SEQ ID NO: 15, SEQ ID NO: 16, SEQ ID NO: 17, SEQ ID NO: 18, SEQ ID NO: 19, SEQ ID NO: 20, SEQ ID NO: 21, SEQ ID NO: 22, SEQ ID NO: 23, SEQ ID NO: 24, SEQ ID NO: 25, SEQ ID NO: 26, SEQ ID NO: 27, SEQ ID NO: 28, SEQ ID NO: 29, SEQ ID NO: 30, SEQ ID NO: 31, SEQ ID NO: 32, SEQ ID NO: 33, SEQ ID NO: 34, SEQ ID NO: 35, SEQ ID NO: 36, SEQ ID NO: 37, SEQ ID NO: 38, SEQ ID NO: 1000, SEQ ID NO: 1001, SEQ ID NO: 1002, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto.

In an embodiment, the IL-2 conjugate is an immunoconjugate, *e.g.*, comprising an antibody molecule. In an embodiment, the IL-2 variant is coupled to the antibody molecule by a covalent bond. In an embodiment, the IL-2 variant is coupled to the antibody molecule by a peptide bond. In an embodiment, the IL-2 variant and the antibody molecule forms a fusion protein. In an

embodiment, the fusion protein comprises a linker between the IL-2 variant and the antibody molecule (*e.g.*, a heavy chain, a light chain, or both). In an embodiment, the IL-2 variant is coupled to the antibody molecule by a non-peptide bond. In an embodiment, the IL-2 variant is not coupled to the antibody molecule by a non-peptide bond.

5 In an embodiment, the IL-2 variant is coupled to the backbone of the antibody molecule. In another embodiment, the IL-2 variant is coupled to a side chain of the antibody molecule. In an embodiment, the antibody molecule is coupled to the backbone of the IL-2 variant. In an embodiment, the antibody molecule is coupled to a side-chain of the IL-2 variant.

10 In an embodiment, two or more (*e.g.*, three, four, five, six, seven, eight, or more) IL-2 variants are coupled to the antibody molecule. In an embodiment, four IL-2 variants are coupled to the antibody molecule. For example, the IL-2 variants can be the same, or at least some of the IL-2 variants are different from each other. In an embodiment, the IL-2 variant is coupled to the antibody molecule in a bivalent manner. In another embodiment, the IL-2 variant is coupled to the antibody molecule in a tetravalent manner.

15 In an embodiment, the IL-2 conjugate is produced by enzymatic synthesis. For example, IL-2 conjugates can be produced by chemical synthesis of an IL-2 variant, expression of an antibody molecule, and enzymatic ligation of the IL-2 variant to the antibody molecule. In an embodiment, 90% or more, *e.g.*, 92% or more, 95% or more, 97% or more, or 99% or more, reaction efficiency is achieved. In another embodiment, the method further comprises purifying the ADC. In an
20 embodiment, the yield is 60% or more (*e.g.*, 70% or more, 75% or more, 80% or more, 90% or more, or 95% or more) after purification.

In an aspect, the disclosure provides a combination of (a) an immunoconjugate comprising a first antibody molecule having a reduced effector function and an IL-2 variant described herein, and (b) a second antibody molecule having an increased effector function, for use in treating a disorder,
25 *e.g.*, a disorder described herein.

In an embodiment, the reduced effector function of the first antibody comprises reduced binding to an activating Fc receptor, reduced ADCC, reduced ADCP, reduced CDC, reduced cytokine secretion, or a combination thereof. In an embodiment, the reduced effector function is reduced binding to an activating Fc receptor, *e.g.*, a human Fc receptor. In an embodiment, the activating Fc
30 receptor is an Fcγ receptor. In an embodiment, the activating Fc receptor is FcγRIIIa, FcγRI, or FcγRIIa. In an embodiment, the reduced effector function comprises reduced ADCC. In an embodiment, the increased effector function comprises reduced binding to an activating Fc receptor and reduced ADCC.

In an embodiment, the first antibody molecule comprises one or more amino acid mutations
35 (*e.g.*, substitutions) in the Fc region as described herein. In an embodiment, the first antibody molecule comprises an amino acid substitution at position P329 of an immunoglobulin heavy chain. In an embodiment, the amino acid substitution comprises P329A or P329G, *e.g.*, P329G. In an

embodiment, the antibody molecule comprises a further amino acid substitution at a position of S228, E233, L234, L235, N297, P331, or a combination thereof, of an immunoglobulin heavy chain. In an embodiment, the further amino acid substitution comprises S228P, E233P, L234A, L235A, L235E, N297A, N297D, P331S, or a combination thereof. In a particular embodiment the antibody comprises

5 amino acid substitutions at positions P329, L234 and L235 of an immunoglobulin heavy chain. In an embodiment, the amino acid substitutions comprise L234A, L235A and P329G (LALA P329G).

In an embodiment, the first antibody molecule is directed to an antigen presented on a tumor cell or in a tumor cell environment. In an embodiment, the first antibody is directed to an antigen chosen from Fibroblast Activation Protein (FAP), the A1 domain of Tenascin-C (TNC A1), the A2

10 domain of Tenascin-C (TNC A2), the Extra Domain B of Fibronectin (EDB), Carcinoembryonic Antigen (CEA), and Melanoma-associated Chondroitin Sulfate Proteoglycan (MCSP).

In an embodiment the increased effector function of the second antibody molecule comprises increased binding to an activating Fc receptor, increased ADCC, increased ADCP, increased CDC, increased cytokine secretion, or a combination thereof. In an embodiment, the increased effector

15 function comprises increased binding to an activating Fc receptor. In an embodiment, the activating Fc receptor is FcγRIIIa, FcγRI, or FcγRIIa. In an embodiment, the increased effector function comprises increased ADCC. In an embodiment, the increased effector function comprises increased binding to an activating Fc receptor and increased ADCC.

In an embodiment, the second antibody molecule comprises one or more amino acid

20 mutations (*e.g.*, substitutions) in the Fc region. In an embodiment, the second antibody molecule comprises a modification of the glycosylation in the Fc region. In an embodiment, the modification of the glycosylation in the Fc region comprises an increased proportion of non-fucosylated oligosaccharides in the Fc region (*e.g.*, increased to at least 20%, 30%, 40%, 50%, 60%, 70%, 80%, or 90%) as compared to a non-modified antibody molecule. In an embodiment, the modification

25 comprises an increased proportion of bisected oligosaccharides in the Fc region (*e.g.*, increased to at least 20%, 30%, 40%, 50%, 60%, 70%, 80%, or 90%), as compared to a non-modified antibody molecule. In an embodiment, the modification of the glycosylation in the Fc region comprises an increased proportion of bisected, non-fucosylated oligosaccharides in the Fc region (*e.g.*, increased to at least 20%, 30%, 40%, 50%, 60%, 70%, 80%, or 90%), as compared to a non-modified antibody

30 molecule.

In an embodiment, the second antibody molecule is directed to an antigen presented on a tumor cell. In an embodiment, the second antibody molecule is directed to an antigen chosen from CD20, Epidermal Growth Factor Receptor (EGFR), HER2, HER3, Insulin-like Growth Factor 1 Receptor (IGF-1R), c-Met, CUB domain-containing protein-1 (CDCP1), Carcinoembryonic Antigen

35 (CEA) and Melanoma-associated Chondroitin Sulfate Proteoglycan (MCSP).

In an embodiment, the disease is a disorder treatable by stimulation of effector cell function. In an aspect, the disclosure provides a composition comprising: (a) an immunoconjugate comprising a

first antibody molecule having a reduced effector function and an IL-2 variant described herein, (b) a second antibody molecule having an increased effector function, and (c) a pharmaceutically acceptable carrier.

5 IL-2 Receptors

The IL-2 agents (*e.g.*, IL-2 variants, IL-2 fusion proteins, IL-2 complexes, or IL-2 conjugates) described herein can bind to an IL-2 receptor (IL-2R) and/or modulate one or more functions associated with an IL-2R.

10 IL-2R is a heterotrimeric protein expressed on the surface of certain immune cells, such as lymphocytes, that binds and responds to IL-2. IL-2 receptor typically has three forms, generated by different combinations of three different chains: α (alpha) (also known as IL-2R α , CD25, or Tac antigen), β (beta) (also known as IL-2R β , or CD122), and γ (gamma) (also known as IL-2R γ , γ c, common gamma chain, or CD132).

The IL-2R chains are expressed separately and differently on various cell types and can 15 assemble in different combinations and orders to generate low, intermediate, and high affinity IL-2Rs. IL-2R α binds IL-2 with low affinity; IL-2R β and IL-2R γ together form a complex that binds IL-2 with intermediate affinity (*e.g.*, on memory T cells and NK cells); and IL-2R α , IL-2R β , and IL-2R γ together form a complex that binds IL-2 with high affinity (*e.g.*, on activated T cells and regulatory T cells).

20 IL-2R β and IL-2R γ complex with Janus kinase 1 (JAK1) and Janus kinase 3 (JAK3), respectively. The binding of IL-2 to IL-2R can activate JAK1/JAK2 and initiate downstream intracellular signaling, *e.g.*, the MAP kinase pathway, the Phosphoinositide 3-kinase (PI3K) pathway, or the JAK-STAT pathway (Liao *et al.*, *Curr Opin Immunol.* 2011; 23(5): 598-604; Malek and Castro. *Immunity.* 2010; 33(2): 153-165).

25 IL-2R plays important roles in the immune system, tolerance and immunity. For example, the interaction between IL-2 and IL-2R is involved in promoting the differentiation of certain immature T cells into regulatory T cells, and the differentiation of T cells into effector T cells and into memory T cells. The interaction between IL-2 and IL-2R is also associated with autoimmune diseases, infections, and cell-mediated immunity.

30 In an aspect, the disclosure provides IL-2 agents comprising an IL-2 variant described herein that has an altered binding affinity to an IL-2R, *e.g.*, one, two, or all of IL-2R α , IL-2R β , or IL-2R γ . For example, the IL-2 variant can have one or more (*e.g.*, two, three, four, five, or more) amino acid alternations (*e.g.*, substitutions or mutations) associated with the interaction between IL-2 and IL-2R, *e.g.*, one, two, or all of IL-2R α , IL-2R β , or IL-2R γ .

35 In an embodiment, the IL-2 agent has an altered (*e.g.*, reduced) binding affinity to IL-2R α . In an embodiment, the binding affinity to IL-2R α is reduced by about 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, or more, relative to an IL-2 agent comprising a wild-type IL-2 or an IL-2 agent

comprising a reference IL-2 variant. In an embodiment, the IL-2 agent has an altered (*e.g.*, reduced) binding affinity to IL-2R β . In an embodiment, the binding affinity to IL-2R β is reduced by about 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, or more, relative to an IL-2 agent comprising a wild-type IL-2 or an IL-2 agent comprising a reference IL-2 variant. In an embodiment, the IL-2 agent has an altered (*e.g.*, reduced) binding affinity to IL-2R γ . In an embodiment, the binding affinity to IL-2R γ is reduced by about 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, or more, relative to an IL-2 agent comprising a wild-type IL-2 or an IL-2 agent comprising a reference IL-2 variant.

In an embodiment, the IL-2 agent has an altered (*e.g.*, reduced) binding affinity to IL-2R α and an altered (*e.g.*, reduced) binding affinity to IL-2R β . In an embodiment, the binding affinity to IL-2R α is reduced by about 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, or more, and the binding affinity to IL-2R β is reduced by about 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, or more. In an embodiment, the binding affinities to IL-2R α and IL-2R β are reduced by about 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, or more, relative to an IL-2 agent comprising a wild-type IL-2 or an IL-2 agent comprising a reference IL-2 variant.

In an embodiment, the IL-2 agent has an altered (*e.g.*, reduced) binding affinity to IL-2R α and an altered (*e.g.*, reduced) binding affinity to IL-2R γ . In an embodiment, the binding affinity to IL-2R α is reduced by about 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, or more, and the binding affinity to IL-2R γ is reduced by about 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, or more. In an embodiment, the binding affinities to IL-2R α and IL-2R γ are reduced by about 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, or more, relative to an IL-2 agent comprising a wild-type IL-2 or an IL-2 agent comprising a reference IL-2 variant.

In an embodiment, the IL-2 agent has an altered (*e.g.*, reduced) binding affinity to IL-2R β and an altered (*e.g.*, reduced) binding affinity to IL-2R γ . In an embodiment, the binding affinity to IL-2R β is reduced by about 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, or more, and the binding affinity to IL-2R γ is reduced by about 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, or more. In an embodiment, the binding affinities to IL-2R β and IL-2R γ are reduced by about 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, or more, relative to an IL-2 agent comprising a wild-type IL-2 or an IL-2 agent comprising a reference IL-2 variant.

In an embodiment, the IL-2 agent has an altered (*e.g.*, reduced) binding affinity to IL-2R α , an altered (*e.g.*, reduced) binding affinity to IL-2R β , and an altered (*e.g.*, reduced) binding affinity to IL-2R γ . In an embodiment, the binding affinity to IL-2R α is reduced by about 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, or more, the binding affinity to IL-2R β is reduced by about 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, or more, and the binding affinity to IL-2R γ is reduced by about 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, or more. In an embodiment, the binding affinities to IL-2R α , IL-2R β , and IL-2R γ are reduced by about 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, or more, relative to an IL-2 agent comprising a wild-type IL-2 or an IL-2 agent comprising a reference IL-2 variant.

In an embodiment, the binding affinity of an IL-2 agent provided by the disclosure to any of IL-2R α , IL-2R β , or IL-2R γ is reduced, but not abolished. For example, the reduction can range from about 10% to about 90%, *e.g.*, from about 20% to about 80%, from about 30% to about 70%, from about 40% to about 60%, from about 10% to about 50%, or from about 50% to about 90%, relative to
 5 an IL-2 agent comprising a wild-type IL-2 or an IL-2 agent comprising a reference IL-2 variant.

Fc Region

The present disclosure provides IL-2 agents (*e.g.*, IL-2 variants, fusion polypeptides, complexes, or immunoconjugates) comprising an Fc region or a fragment thereof, *e.g.*, an Fc region,
 10 or a fragment thereof (*e.g.*, a functional fragment thereof), described herein.

In an embodiment, the IL-2 agent comprises an IL-2 variant described herein and an Fc region described herein. In an embodiment, the IL-2 agent further comprises a linker between the IL-2 variant and the Fc region. In an embodiment, the IL-2 agent comprises an IL-2 fusion protein comprising an Fc region described herein. In an embodiment, the Fc region comprises one or more
 15 mutations described herein.

A fragment crystallizable region, or Fc region, refers to a region of an immunoglobulin that interacts with an Fc receptor. In an embodiment, the Fc region interacts with a protein of the complement system. While without wishing to be bound by theory, it is believed that in an embodiment, the interaction between the Fc region with an Fc receptor, allows for activation of
 20 the immune system.

In IgG, IgA and IgD antibody isotypes, the naturally-occurring Fc region generally comprises two identical protein fragments, derived from the second and third constant domains of the antibody's two heavy chains. Naturally-occurring IgM and IgE Fc regions generally comprise three heavy chain constant domains (C_H domains 2–4) in each polypeptide chain. The Fc regions of IgGs can contain a
 25 highly conserved N-glycosylation site (Stadlmann *et al.* (2008). *Proteomics* 8 (14): 2858–2871; Stadlmann (2009) *Proteomics* 9 (17): 4143–4153). While not wishing to be bound by theory, it is believed that in an embodiment, glycosylation of the Fc fragment contributes to Fc receptor-mediated activities (Peipp *et al.* (2008) *Blood* 112 (6): 2390–2399). In an embodiment, the N-glycans attached to this site are predominantly core-fucosylated diantennary structures of the complex type. In another
 30 embodiment, small amounts of these N-glycans also contain bisecting GlcNAc and/or α -2,6 linked sialic acid residues.

An exemplary fragment of an Fc region amino acid sequence from human IgG1 is provided in SEQ ID NO: 40 and is shown below:

DKTHTCPGPCAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAK
 35 TKPREEQYGSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRD
 ELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFS
 CSVMHEALHNHYTQKSLSLSPGK (SEQ ID NO: 40)

In SEQ ID NO: 40, the first amino acid residue in this sequence is referred to as position 221 herein. The three histidine residues shown in bold and underlined are positions 310, 433 and 435, respectively.

- 5 An IL-2 agent comprising an Fc region or fragment thereof (*e.g.*, IL-2-Fc fusion protein) described herein can have one or more (*e.g.*, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, or more) of mutations or combinations of mutations described in **Table 1** (*e.g.*, according to EU numbering).

Table 1. Exemplary Fc mutations

Name	Mutation
FcMut001	I253M
FcMut002	L309H_D312A_N315D
FcMut003	L309N
FcMut004	M252E_S254R
FcMut005	M252E_S254R_R255Y
FcMut006	S254H
FcMut007	S254M
FcMut008	T256D_T307R
FcMut009	T256L_N286I_T307I
FcMut010	T256I_N286I_T307I
FcMut011	K248S_D376Q
FcMut012	K248S_D376N
FcMut013	D376Q_E380A
FcMut014	D376N_E380A
FcMut015	D376Q_M428L
FcMut016	K248S_A378I
FcMut017	L314K
FcMut018	T250Q_M428L
FcMut019	M428L_N434A
FcMut020	N434A
FcMut021	T307A_E380A_N434A
FcMut022	M252W
FcMut023	V308F
FcMut024	V308F_N434Y
FcMut026	T256D_T307R_D376N
FcMut027	L309R_D312E
FcMut028	L309R_Q311P_D312E
FcMut029	K246N_P247A
FcMut030	K246N_P247A_D376N
FcMut031	T256E_T307R
FcMut032	T256R_T307D
FcMut033	T256R_T307E
FcMut034	Q311P
FcMut035	D376Q
FcMut036	L234A_L235A
FcMut037	L235V_G236A

FcMut038	L234P_L235P
FcMut039	L235P
FcMut040	P329G
FcMut041	P329E
FcMut042	E233K
FcMut043	T256D_N286D_A287S_T307R
FcMut044	T256D_P257L_T307R
FcMut045	T256D_T307R_Q311V
FcMut046	P247D_T256D_T307R
FcMut047	P247D_N286D_A287S_Q311V
FcMut048	P257M_V308N
FcMut049	V279I_Q311L_N315T
FcMut050	M428L_N434S
FcMut051	N434S
FcMut052	H433G_N434P
FcMut053	V259I_V308F_M428L
FcMut067	T256D_N286D_T307R
FcMut068	T256D_N286E_T307R
FcMut069	T256D_N286Q_T307R
FcMut070	T256D_P257T_T307R
FcMut071	T256D_P257V_T307R
FcMut072	T256D_T307R_Q311I
FcMut073	T256D_T307R_Q311L
FcMut074	T256D_T307R_Q311M
FcMut075	T256D_P257L_N286D_T307R_Q311V
FcMut076	T256D_T307R_M428L
FcMut077	M428L
FcMut078	M252Y_S254T_T256Q
FcMut079	M252Y_S254T_T256E_K288E
FcMut080	T256K_K288E
FcMut081	T256D_E258T
FcMut082	E283Q_H285E
FcMut083	R344D_D401R
FcMut084	K248E_E380K
FcMut085	K248E_E380R
FcMut086	K246H
FcMut087	K248H
FcMut088	T250I
FcMut089	T250V
FcMut090	L251F
FcMut091	L251M
FcMut093	P257V
FcMut094	N276D
FcMut095	H285N
FcMut096	H285D
FcMut097	K288H
FcMut098	K288Q
FcMut099	K288E
FcMut100	T307E

FcMut101	T307Q
FcMut102	V308P
FcMut103	V308I
FcMut104	V308L
FcMut105	L309H
FcMut106	L309M
FcMut107	Q311H
FcMut108	L314F
FcMut109	Y319H
FcMut110	I336T
FcMut111	P343D
FcMut112	P343V
FcMut113	E345Q
FcMut114	P346V
FcMut115	P374T
FcMut116	D376N
FcMut117	A378S
FcMut118	A431T
FcMut119	A431P
FcMut120	A431G
FcMut121	L432V
FcMut122	L432I
FcMut123	L432Q
FcMut124	N434T
FcMut125	H435N
FcMut126	Y436H
FcMut127	K439Q
FcMut128	T256D
FcMut129	T307R
FcMut130	A378T
FcMut131	A378D
FcMut132	A378H
FcMut133	A378Y
FcMut134	A378V
FcMut135	D376R
FcMut136	D376F
FcMut137	D376W
FcMut138	L314H
FcMut139	L432E_T437Q
FcMut140	D376Q_A378T
FcMut141	D376Q_I377M_A378T
FcMut142	P244Q_D376Q
FcMut143	P247T_A378T
FcMut144	P247N_A378T
FcMut145	T256D_T307R_L309T
FcMut146	A339T_S375E_F404Y
FcMut147	L235V_G236A_T256D_T307R
FcMut148	L235V_G236A_D376Q_M428L
FcMut149	L314N

FcMut150	N315D
FcMut151	A378T
FcMut152	T437Q
FcMut153	L432E
FcMut154	Y436R
FcMut155	L314M
FcMut156	L234A_L235A_T256D_T307R_Q311V
FcMut157	L234A_L235A_T256D_P257V_T307R
FcMut158	L234A_L235A_T256D_P257L_N286D_T307R_Q311V
FcMut159	L235V_G236A_T256D_T307R_Q311V
FcMut160	L235V_G236A_T256D_P257V_T307R
FcMut161	L235V_G236A_T256D_P257L_N286D_T307R_Q311V
FcMut162	S267T_A327N_A330M
FcMut163	S267T_A327N
FcMut164	L235V_G236A_S267T_A327N_A330M
FcMut165	L235V_G236A_S267T_A327N
FcMut166	M252Y_S254T
FcMut167	T256E
FcMut168	G236A_I332E
FcMut169	S239D_I332E
FcMut170	G236A_S239D_I332E
FcMut171	T256D_N286D_T307R_Q311V
FcMut172	T256D_E258T_T307R
FcMut173	T256D_E258T_T307R_Q311V
FcMut174	T256D_P257V_E258T_T307R
FcMut175	T256D_P257L_E258T_N286D_T307R_Q311V
FcMut176	T256D_E258T_N286D_T307R_Q311V
FcMut177	A378V_M428L
FcMut178	A378V_M428I
FcMut179	A378V_M428V
FcMut180	T256D_N286D
FcMut181	T256D_A378V
FcMut182	T256D_Q311V
FcMut183	T256D_Q311V_A378V
FcMut184	T256D_T307R_A378V
FcMut185	T256D_N286D_T307R_A378V
FcMut186	T256D_T307R_Q311V_A378V
FcMut187	H285D_A378V
FcMut188	H285D_Q311V
FcMut189	T256D_H285D
FcMut190	T256D_H285D_Q311V
FcMut191	T256D_H285D_T307R
FcMut192	T256D_H285D_T307R_A378V
FcMut193	H285D_L314M_A378V
FcMut194	T256D_E258T_H285D_Q311H
FcMut195	T256D_E258T_H285D
FcMut196	H285D_N315D
FcMut197	H285N_T307Q_N315D
FcMut198	H285D_L432E_T437Q

FcMut199	T256D_E258T_N315D
FcMut200	P257V_H285N
FcMut201	H285N_L432F
FcMut202	H285N_T437I
FcMut203	T256D_E258T_L314M
FcMut204	T256D_E258T_T307Q
FcMut205	T256D_E258T_A378V
FcMut206	V308P_A378V
FcMut207	P257V_A378T
FcMut208	P257V_V308P_A378V
FcMut209	N315D_A378T
FcMut210	H285N_L314M
FcMut211	L314M_L432E_T437Q
FcMut212	T307Q_N315D
FcMut213	H285D_T307Q_A378V
FcMut214	L314M_N315D
FcMut215	T307Q_Q311V_A378V
FcMut216	H285D_Q311V_A378V
FcMut217	Q311V_N315D_A378V
FcMut218	T256D_E258T_Q311V
FcMut219	T256D_N315D_A378V
FcMut220	T256D_Q311V_N315D
FcMut221	T256D_T307Q_A378V
FcMut222	T256D_T307Q_Q311V
FcMut223	T256D_H285D_A378V
FcMut224	T256D_H285D_T307R_Q311V
FcMut225	T256D_H285D_N286D_T307R
FcMut226	T256D_H285D_N286D_T307R_Q311V
FcMut227	T256D_H285D_N286D_T307R_A378V
FcMut228	T256D_N286D_T307R_Q311V_A378V
FcMut229	T256D_H285D_T307R_Q311V_A378V
FcMut230	V308P_Q311V_A378V
FcMut231	T256D_V308P_A378V
FcMut232	T256D_V308P_Q311V
FcMut233	T256D_E258T_V308P
FcMut234	H285D_V308P_Q311V
FcMut242	E258T
FcMut243	N286D
FcMut244	Q311V
YTE	M252Y_S254T_T256E

- In an embodiment, the Fc region comprises FcMut001. In an embodiment, the Fc region comprises FcMut002. In an embodiment, the Fc region comprises FcMut003. In an embodiment, the Fc region comprises FcMut004. In an embodiment, the Fc region comprises FcMut005. In an embodiment, the Fc region comprises FcMut006. In an embodiment, the Fc region comprises FcMut007. In an embodiment, the Fc region comprises FcMut008. In an embodiment, the Fc region comprises FcMut009. In an embodiment, the Fc region comprises FcMut010. In an embodiment, the

[illegible]

[illegible]

[illegible]

comprises FcMut220. In an embodiment, the Fc region comprises FcMut221. In an embodiment, the Fc region comprises FcMut222. In an embodiment, the Fc region comprises FcMut223. In an embodiment, the Fc region comprises FcMut224. In an embodiment, the Fc region comprises FcMut225. In an embodiment, the Fc region comprises FcMut226. In an embodiment, the Fc region comprises FcMut227. In an embodiment, the Fc region comprises FcMut228. In an embodiment, the Fc region comprises FcMut229. In an embodiment, the Fc region comprises FcMut230. In an embodiment, the Fc region comprises FcMut231. In an embodiment, the Fc region comprises FcMut232. In an embodiment, the Fc region comprises FcMut233. In an embodiment, the Fc region comprises FcMut234. In an embodiment, the Fc region comprises FcMut242. In an embodiment, the Fc region comprises FcMut243. In an embodiment, the Fc region comprises FcMut244.

In an embodiment, the Fc region comprises one or more (*e.g.*, 2, 3, 4, 5, 6, 7, 8, 9, or more) of mutations or combinations of mutations chosen from FcMut045, FcMut171, FcMut183, FcMut186, FcMut190, FcMut197, FcMut213, FcMut215, FcMut216, FcMut219, FcMut222, FcMut223, FcMut224, FcMut226, FcMut227, FcMut228, or FcMut229. In an embodiment, the Fc region comprises one or more (*e.g.*, 2, 3, 4, 5, 6, or all) of mutations or combinations of mutations chosen from FcMut045, FcMut183, FcMut197, FcMut213, FcMut215, FcMut228, or FcMut156. In another embodiment, the Fc region comprises one or more (*e.g.*, 2, 3, 4, 5, or all) of mutations or combinations of mutations chosen from FcMut183, FcMut197, FcMut213, FcMut215, FcMut228, or FcMut229.

In an embodiment, the Fc region does not comprise one or more (*e.g.*, 2, 3, 4, or all) of mutations or combinations of mutations chosen from FcMut018, FcMut021, FcMut050, FcMut102, or YTE. In an embodiment, the Fc region comprises one or more (*e.g.*, 2, 3, 4, or all) of mutations or combinations of mutations chosen from FcMut018, FcMut021, FcMut050, FcMut102, or YTE, and one or more other mutations or combinations of mutations described in **Table 1**.

In an embodiment, the Fc region comprises one or more (*e.g.*, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, or more) of mutations or combinations of mutations described in **Table 1** that result in a synergistic effect (*e.g.*, binding affinity or circulating half-life) as described herein.

In an embodiment, the Fc region comprises one or more (*e.g.*, 2, 3, 4, 5, 6, or 7) mutations in residues chosen from T256, H285, N286, T307, Q311, N315, or A378. In an embodiment, the Fc region comprises one or more (*e.g.*, 2, 3, 4, 5, 6, or 7) mutations chosen from T256D, H285N, N286D, T307Q, Q311V, N315D, or A378V.

In an embodiment, the Fc region comprises a half-life enhancing mutation, a mutation that is capable of disrupting an Fc effector function, or both. In an embodiment, the Fc region comprises one or more mutations or combinations of mutations described herein, *e.g.*, chosen from M252W, V308F/N434Y, R255Y, P257L/N434Y, V308F, P257N/M252Y, G385N, P257N/V308Y, N434Y, M252Y/S254T/T256E ("YTE"), M428L/N434S ("LS"), or any combination thereof. Alternatively, or additionally, in an embodiment, the Fc region comprises (a) one or more (*e.g.*, 2, 3, 4, 5, or all)

combinations of mutations chosen from: T256D/Q311V/A378V, H285N/T307Q/N315D, H285D/T307Q/A378V, T307Q/Q311V/A378V, T256D/N286D/T307R/Q311V/A378V, or T256D/T307R/Q311V; (b) a mutation or a combination of mutations capable of disrupting an Fc effector function, *e.g.*, N297G, L234A/L235A (also known as “LALA” mutation),

5 L234A/L235A/P329G (also known as “LALAPG” mutation), or (c) both (a) and (b).

In an embodiment, the Fc region comprises mutations T256D/Q311V/A378V and a mutation or a combination of mutations capable of disrupting an Fc effector function, *e.g.*, L234A/L235A. In an embodiment, the Fc region comprises mutations H285N/T307Q/N315D and a mutation or a combination of mutations capable of disrupting an Fc effector function, *e.g.*, L234A/L235A. In an embodiment, the Fc region comprises mutations H285D/T307Q/A378V and a mutation or a combination of mutations capable of disrupting an Fc effector function, *e.g.*, L234A/L235A. In an embodiment, the Fc region comprises mutations T307Q/Q311V/A378V and a mutation or a combination of mutations capable of disrupting an Fc effector function, *e.g.*, L234A/L235A. In an embodiment, the Fc region comprises mutations T256D/N286D/T307R/Q311V/A378V and a

10 mutation or a combination of mutations capable of disrupting an Fc effector function, *e.g.*, L234A/L235A. In an embodiment, the Fc region comprises mutations T256D/T307R/Q311V and a mutation or a combination of mutations capable of disrupting an Fc effector function, *e.g.*, L234A/L235A. Other exemplary Fc mutations are described, *e.g.*, in International Application Publication No. WO2018/052556, U.S. Application Publication No. US2018/0037634, and Booth et

15 al. MAbs. 2018; 10(7): 1098-1110, the contents of which are incorporated by reference in their entirety.

In an embodiment the Fc region comprises the Fc region of human IgG1, *e.g.*, human IgG1 m3 allotype. In an embodiment, the Fc region comprises the mutation N297G. In an embodiment, the Fc region comprises the Fc region of human IgG1 allotype m3, human IgG1 allotype m3 comprising

25 the mutation N297G and/or other mutations of the Fc region of human IgG1 allotype m3, or a fragment thereof. In an embodiment, the Fc region comprises the sequence of SEQ ID NO: 1003, or an amino acid sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 amino acids thereto.

30 Any of the mutations in the Fc region that extend half-life described herein can be used in combination with any Fc mutation capable of enhancing or disrupting an Fc effector function.

In an embodiment the Fc region comprises the Fc region of human IgG4, human IgG4 containing S228P mutation, and/or R409K mutation, and/or other mutations of the Fc region of human IgG4, or a fragment thereof. An exemplary fragment of an Fc region amino acid sequence

35 from human IgG4 is provided in SEQ ID NO: 44 and is shown below:

E₂₁₉SKYGPPCPP₂₂₈CPAPEFLGGPSV₂₄₀FLFPKPKDT₂₅₀LMISRTPEVT₂₆₀CVVVDVSQED₂₇₀PEVQ
FNWYVD₂₈₀GVEVHNAKTK₂₉₀PREEQFNSTY₃₀₀RVVSVLT₃₀₇VLHQ₃₁₁DWLNKEYK₃₂₀CKVSNKGLPS₃

30SIEKTISKAK₃₄₀GQPREPQVYT₃₅₀LPPSQEEMTK₃₆₀NQVSLTCLVK₃₇₀GFYPSDIA₃₇₈VEWESNGQP
ENNYKTTTPVLSDSGSFFLYSRLTVDKSRWQEGNVFSCSVMEALHNHYTQKSLSLSLGK (SEQ ID
NO: 44)

In SEQ ID NO: 44, the first amino acid residue in this sequence is referred to as position 219
5 herein. Mutations described to extend the half-life of human IgG1 can be applied to human IgG4 Fc.
For example, Mut215 corresponds to mutations T307Q/Q311V/A378V in SEQ ID NO: 44.

The Fc region can bind to various cell receptors (*e.g.*, Fc receptors) and complement proteins.
The Fc region can also mediate different physiological effects of antibody molecules, *e.g.*, detection
of opsonized particles; cell lysis; degranulation of mast cells, basophils, and eosinophils; and other
10 processes.

There are several different types of Fc receptors (FcR), which can be classified based on the
type of antibody that they recognize.

Fcγ receptors (FcγR) belong to the immunoglobulin superfamily, and are involved, *e.g.*, in
inducing phagocytosis of opsonized microbes. This family includes several members, FcγRI (CD64),
15 FcγRIIA (CD32), FcγRIIB (CD32), FcγRIIA (CD16a), FcγRIIB (CD16b), which differ in their
antibody affinities due to their different molecular structure. For instance, FcγRI can bind to IgG
more strongly than FcγRII or FcγRIII does. FcγRI also has an extracellular portion comprising three
immunoglobulin (Ig)-like domains, one more domain than FcγRII or FcγRIII has. This property
allows FcγRI to bind a sole IgG molecule (or monomer), but Fcγ receptors generally need to bind
20 multiple IgG molecules within an immune complex to be activated.

The Fcγ receptors differ in their affinity for IgG and the different IgG subclasses can have
unique affinities for each of the Fcγ receptors. These interactions can be further tuned by the glycan
(oligosaccharide) at certain position of IgG. For example, by creating steric hindrance, fucose
containing CH2-84.4 glycans reduce IgG affinity for FcγRIIA, whereas G0 glycans, which lack
25 galactose and terminate instead with GlcNAc moieties, have increased affinity for FcγRIIA
(Maverakis *et al.* (2015) *Journal of Autoimmunity* 57 (6): 1-13).

The neonatal Fc receptor (FcRn) is expressed on multiple cell types and is similar in structure
to MHC class I. This receptor also binds IgG and is involved in preservation of this antibody (Zhu *et al.* (2001). *Journal of Immunology* 166 (5): 3266–76.). FcRn is also involved in transferring IgG from
30 a mother either via the placenta to her fetus or in milk to her suckling infant. This receptor may also
play a role in the homeostasis of IgG serum levels.

FcαRI (or CD89) belongs to the FcαR subgroup. FcαRI is found on the surface of
neutrophils, eosinophils, monocytes, macrophages (including Kupffer cells), and dendritic cells. It
comprises two extracellular Ig-like domains and is a member of both the immunoglobulin superfamily
35 and the multi-chain immune recognition receptor (MIRR) family. It signals by associating with two
Fcγ signaling chains.

Fc-alpha/mu receptor (Fc α / μ R) is a type I transmembrane protein. It can bind IgA, although it has higher affinity for IgM (Shibuya and Honda (2006) *Springer Seminars in Immunopathology* 28 (4): 377–82). With one Ig-like domain in its extracellular portion, this Fc receptor is also a member of the immunoglobulin superfamily.

- 5 There are two known types of Fc ϵ R. The high-affinity receptor Fc ϵ RI is a member of the immunoglobulin superfamily (it has two Ig-like domains). Fc ϵ RI is found on epidermal Langerhans cells, eosinophils, mast cells and basophils. This receptor can play a role in controlling allergic responses. Fc ϵ RI is also expressed on antigen-presenting cells, and controls the production of immune mediators, *e.g.*, cytokines that promote inflammation (von Bubnoff et al. (2003) *Clinical and*
10 *Experimental Dermatology* 28 (2): 184–7). The low-affinity receptor Fc ϵ RII (CD23) is a C-type lectin. Fc ϵ RII has multiple functions as a membrane-bound or soluble receptor. It can also control B cell growth and differentiation and blocks IgE-binding of eosinophils, monocytes, and basophils (Kikutani et al. (1989) *Ciba Foundation Symposium* 147: 23–31).

- In an embodiment, the Fc region can be engineered to contain an antigen-binding site to
15 generate an Fcab fragment (Wozniak-Knopp et al. (2010) *Protein Eng Des* 23 (4): 289–297). Fcab fragments can be inserted into a full immunoglobulin by swapping the Fc region, thus obtaining a bispecific antibody (with both Fab and Fcab regions containing distinct binding sites).

- The binding and recycling of FcRn can be illustrated below. For example, IgG and albumin are internalized into vascular endothelial cells through pinocytosis. The pH of the endosome is 6.0,
20 facilitating association with membrane-bound FcRn. The contents of endosomes can be processed in one of two ways: either recycling back to the apical cell membrane or transcytosis from the apical to the basolateral side. IgG not associated with FcRn is degraded by lysosomes.

- While not wishing to be bound by theory, it is believed that FcRn interaction with IgG is mediated through Fc. The binding of Fc to FcRn is pH specific, *e.g.*, no significant binding at pH 7.4
25 and strong binding in acidic environment. Structure of FcRn in complex with Fc domain of IgG1 molecule is described, *e.g.*, in FIG. 1 of International Application Publication No. WO2018/052556 or U.S. Application Publication No. US2018/0037634. Each FcRn molecule generally binds to an Fc-monomer. In an embodiment, Fab domains can also influence binding of IgG to FcRn, *e.g.*, have either a negative or no influence on the affinity of the IgG for FcRn.

- 30 There can be multiple considerations when an Fc region is engineered to enhance half-life of a polypeptide. For example, prolonging half-life and efficient recirculation of antibody molecules or fusion proteins often requires pH specific affinity enhancement (*e.g.*, only at low pH of the endosome). FcRn binds proximal to the linker region between CH2 and CH3 domains of a Fc region. Modifications to the linker can impact Fc engagement with Fc γ receptors. Modifications on the Fc
35 region can impact thermal stability and aggregation properties of the polypeptide.

Pharmaceutical Compositions and Kits

The present disclosure provides compositions, *e.g.*, pharmaceutical compositions, which include an IL-2 agent described herein, and optionally a pharmaceutically acceptable carrier.

As used herein, “pharmaceutically acceptable carrier” includes any and all solvents, dispersion media, isotonic and absorption delaying agents, and the like that are physiologically compatible. The carrier can be suitable for intravenous, intramuscular, subcutaneous, parenteral, rectal, spinal or epidermal administration (*e.g.*, by injection or infusion). In an embodiment, less than about 5%, *e.g.*, less than about 4%, 3%, 2%, or 1% of the IL-2 agents in the composition are present as aggregates. In an embodiment, at least about 95%, *e.g.*, at least about 96%, 97%, 98%, 98.5%, 99%, 99.5%, 99.8%, or more of the IL-2 agents in the composition are present as monomers. In an embodiment, at least about 95%, *e.g.*, at least about 96%, 97%, 98%, 98.5%, 99%, 99.5%, 99.8%, or more of the IL-2 agents in the composition are present as dimers. In an embodiment, the level of aggregates, dimers, or monomers is determined by chromatography, *e.g.*, high performance liquid chromatography size exclusion chromatography (HPLC-SEC). In an embodiment, the IL-2 agent is formulated together with the pharmaceutically acceptable carrier.

The compositions set out herein may be in a variety of forms. These include, for example, liquid, semi-solid and solid dosage forms, such as liquid solutions (*e.g.*, injectable and infusible solutions), dispersions or suspensions, liposomes, and suppositories. A suitable form depends on the intended mode of administration and therapeutic application. Typical suitable compositions are in the form of injectable or infusible solutions. One suitable mode of administration is parenteral (*e.g.*, intravenous, subcutaneous, intraperitoneal, intramuscular). In an embodiment, the IL-2 agent is administered by intravenous infusion or injection. In another embodiment, the IL-2 agent is administered by intramuscular or subcutaneous injection. In an embodiment, the IL-2 agent is administered subcutaneously (*e.g.*, presented in an autoinjector or prefilled syringe).

The terms “parenteral administration” and “administered parenterally” as used herein means modes of administration other than enteral and topical administration, usually by injection, and includes, without limitation, intravenous, intramuscular, intraarterial, intrathecal, intracapsular, intraorbital, intracardiac, intradermal, intraperitoneal, transtracheal, subcutaneous, subcuticular, intraarticular, subcapsular, subarachnoid, intraspinal, epidural and intrasternal injection and infusion.

Pharmaceutical compositions (*e.g.*, for therapeutic applications) typically should be sterile and stable under the conditions of manufacture and storage. The composition can be formulated as a solution, microemulsion, dispersion, liposome, or other ordered structure suitable to high antibody concentration. Sterile injectable solutions can be prepared by incorporating the active compound (*i.e.*, antibody or antibody portion) in the required amount in an appropriate solvent with one or a combination of ingredients enumerated above, as required, followed by filtered sterilization. Generally, dispersions are prepared by incorporating the active compound into a sterile vehicle that contains a basic dispersion medium and the required other ingredients from those enumerated above.

In the case of sterile powders for the preparation of sterile injectable solutions, the preferred methods of preparation are vacuum drying and freeze-drying that yields a powder of the active ingredient plus any additional desired ingredient from a previously sterile-filtered solution thereof. The proper fluidity of a solution can be maintained, for example, by the use of a coating such as lecithin, by the maintenance of the required particle size in the case of dispersion and by the use of surfactants. Prolonged absorption of injectable compositions can be brought about by including in the composition an agent that delays absorption, for example, monostearate salts and gelatin.

The IL-2 agents described herein can be administered by a variety of methods. Several are known in the art, and for many therapeutic, prophylactic, or diagnostic applications, an appropriate route/mode of administration is intravenous injection or infusion. For example, the IL-2 agents can be administered by intravenous infusion at a rate of less than 10mg/min; preferably less than or equal to 5 mg/min to reach a dose of about 1 to 100 mg/m², preferably about 5 to 50 mg/m², about 7 to 25 mg/m² and more preferably, about 10 mg/m². As will be appreciated by the skilled artisan, the route and/or mode of administration will vary depending upon the desired results. In certain embodiments, the active compound may be prepared with a carrier that will protect the compound against rapid release, such as a controlled release formulation, including implants, transdermal patches, and microencapsulated delivery systems. Biodegradable, biocompatible polymers can be used, such as ethylene vinyl acetate, polyanhydrides, polyglycolic acid, collagen, polyorthoesters, and polylactic acid. Many methods for the preparation of such formulations are patented or generally known to those skilled in the art. See, *e.g.*, *Sustained and Controlled Release Drug Delivery Systems*, J. R. Robinson, ed., Marcel Dekker, Inc., New York, 1978.

In an embodiment, the IL-2 agent is orally administered, for example, with an inert diluent or an assimilable edible carrier. The IL-2 agent (and other ingredients, if desired) may also be enclosed in a hard or soft shell gelatin capsule, compressed into tablets, or incorporated directly into the subject's diet. For oral therapeutic administration, the IL-2 agent may be incorporated with excipients and used in the form of ingestible tablets, buccal tablets, troches, capsules, elixirs, suspensions, syrups, wafers, and the like. To administer an IL-2 agent by other than parenteral administration, it may be necessary to coat the compound with, or co-administer the compound with, a material to prevent its inactivation. Therapeutic, prophylactic, or diagnostic compositions can also be administered with medical devices, and several are known in the art.

Dosage regimens are adjusted to provide the desired response (*e.g.*, a therapeutic, prophylactic, or diagnostic response). For example, a single bolus may be administered, several divided doses may be administered over time or the dose may be proportionally reduced or increased as indicated by the exigencies of the therapeutic situation. It is especially advantageous to formulate parenteral compositions in dosage unit form for ease of administration and uniformity of dosage. Dosage unit form as used herein refers to physically discrete units suited as unitary dosages for the subjects to be treated; each unit contains a predetermined quantity of active compound calculated to

produce the desired therapeutic effect in association with the required pharmaceutical carrier. The specification for the dosage unit forms is dictated by and directly dependent on (a) the unique characteristics of the molecule and the particular therapeutic, prophylactic, or diagnostic effect to be achieved, and (b) the limitations inherent in the art of compounding such a molecule for the treatment of sensitivity in individuals.

An exemplary, non-limiting range for a therapeutically, prophylactically, or diagnostically effective amount of an IL-2 agent is about 0.1-50 mg/kg, *e.g.*, about 0.1-30 mg/kg, *e.g.*, about 1-30, 1-15, 1-10, 1-5, 5-10, or 1-3 mg/kg, *e.g.*, about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 15, 20, 30, 40, or 50 mg/kg. The IL-2 agent can be administered by intravenous infusion at a rate of less than 10 mg/min, *e.g.*, less than or equal to 5 mg/min to reach a dose of about 1 to 100 mg/m², *e.g.*, about 5 to 50 mg/m², about 7 to 25 mg/m², *e.g.*, about 10 mg/m². It is to be noted that dosage values may vary with the type and severity of the condition to be alleviated. It is to be further understood that for any particular subject, specific dosage regimens should be adjusted over time according to the individual need and the professional judgment of the person administering or supervising the administration of the compositions, and that dosage ranges set forth herein are exemplary only and are not intended to limit the scope or practice of the claimed compositions.

The pharmaceutical compositions herein may include a “therapeutically effective amount,” “prophylactically effective amount,” or “diagnostically effective amount” of an IL-2 agent described herein.

A “therapeutically effective amount” refers to an amount effective, at dosages and for periods of time necessary, to achieve the desired therapeutic result. A therapeutically effective amount of the polypeptide (*e.g.*, antibody molecule or fusion protein) may vary according to factors such as the disease state, age, sex, and weight of the individual, and the ability of the antibody or antibody portion to elicit a desired response in the individual. A therapeutically effective amount is also one in which any toxic or detrimental effect of the antibody molecule is outweighed by the therapeutically beneficial effects. A “therapeutically effective dosage” typically inhibits a measurable parameter by at least about 20%, *e.g.*, by at least about 40%, by at least about 60%, or by at least about 80% relative to untreated subjects. The measurable parameter may vary, *e.g.*, based on the disorder being treated. The ability of an IL-2 agent to inhibit a measurable parameter can be evaluated in an animal model system predictive of efficacy in treating or preventing a disorder described herein. Alternatively, this property of a composition can be evaluated by examining the ability of the IL-2 agent to modulate a biological function of a target molecule or cell, *e.g.*, by an *in vitro* assay.

A “prophylactically effective amount” refers to an amount effective, at dosages and for periods of time necessary, to achieve the desired prophylactic result. Typically, since a prophylactic dose is used in subjects prior to or at an earlier stage of disease, the prophylactically effective amount will be less than the therapeutically effective amount.

A “diagnostically effective amount” refers to an amount effective, at dosages and for periods of time necessary, to achieve the desired diagnostic result. Typically, a diagnostically effective amount is one in which a disorder, *e.g.*, a disorder described herein, can be diagnosed *in vitro*, *ex vivo*, or *in vivo*.

5 In an embodiment, the pharmaceutical composition is a good manufacturing practices (GMP)-grade pharmaceutical composition. In an embodiment, the pharmaceutical composition has greater than 99% purity, *e.g.*, greater than 99.5%, 99.8%, or 99.9% purity. In an embodiment, greater than 50%, 60%, 70%, 80%, 90%, 95%, 98%, or 99% of the contaminants in the pharmaceutical composition are removed. In an embodiment, the pharmaceutical composition is in large scale, *e.g.*,
10 at least 20g, 30g, 40g, 50g, 100g, 200g, 300g, 400g, 500g, 600g, 700g, 800g, 900g, 1000g, or more.

The disclosure also provides kits that comprise IL-2 agents described herein. The kits can include one or more other elements including: instructions for use; other reagents, *e.g.*, a label, a therapeutic agent, or an agent useful for chelating, or otherwise coupling, an antibody molecule coupled to a label or therapeutic agent, or a radioprotective composition; devices or other materials
15 for preparing the IL-2 agent for administration; pharmaceutically acceptable carriers; and devices or other materials for administration to a subject.

Nucleic Acids

The present disclosure also provides nucleic acids comprising a nucleotide sequence that
20 encodes an IL-2 agent described herein.

In an embodiment, the nucleic acid comprises a nucleotide sequence encoding an amino acid sequence of an IL-2 variant described herein, or a nucleotide sequence substantially identical thereto (*e.g.*, a sequence at least about 85%, 90%, 95%, 99% or more identical thereto, and/or capable of hybridizing under the stringency conditions described herein). In an embodiment, the nucleic acid
25 comprises a nucleotide sequence encoding an IL-2 variant comprising one or more of the mutations described herein.

In an embodiment, the nucleic acid further comprises a nucleotide sequence encoding an Fc region, *e.g.*, an Fc region described herein, or having a nucleotide sequence substantially identical thereto (*e.g.*, a sequence at least about 85%, 90%, 95%, 99% or more identical thereto, and/or capable
30 of hybridizing under the stringency conditions described herein). In an embodiment, the Fc region comprises one or more mutations, *e.g.*, one or more mutations described herein. In an embodiment, the nucleic acid comprises from 5' to 3' a nucleotide sequence encoding an IL-2 variant described herein and a nucleotide sequence encoding an Fc region described herein.

In another embodiment, the nucleic acid further comprises a nucleotide sequence encoding a linker, *e.g.*, a linker described herein, or a nucleotide sequence substantially homologous thereto (*e.g.*, a sequence at least about 85%, 90%, 95%, 99% or more identical thereto, and/or capable of hybridizing under the stringency conditions described herein). In an embodiment, the nucleic acid
35

comprises from 5' to 3' a nucleotide sequence encoding an IL-2 variant described herein and a nucleotide sequence encoding a linker described herein. In an embodiment, the nucleic acid comprises from 5' to 3' a nucleotide sequence encoding a linker described herein, and a nucleotide sequence encoding an Fc region described herein.

5 In another embodiment, the nucleic acid comprises a nucleotide sequence encoding an IL-2 fusion protein, *e.g.*, an IL-2 fusion protein described herein, or a nucleotide sequence substantially homologous thereto (*e.g.*, a sequence at least about 85%, 90%, 95%, 99% or more identical thereto, and/or capable of hybridizing under the stringency conditions described herein). In an embodiment, the nucleic acid encoding the IL-2 fusion protein comprises from 5' to 3' a nucleotide sequence
10 encoding an IL-2 variant described herein and a nucleotide sequence encoding an Fc region described herein. In an embodiment, the nucleic acid encoding the IL-2 fusion protein comprises from 5' to 3' a nucleotide sequence encoding an IL-2 variant described herein, a nucleotide sequence encoding a linker described herein, and a nucleotide sequence encoding an Fc region described herein.

In an embodiment, the nucleic acid comprises a portion of a nucleotide sequence described
15 herein. The portion may encode, for example, one, two, or all of an IL-2 variant, a linker, or an Fc region.

In an embodiment, the nucleic acid comprises a nucleotide sequence encoding an amino acid sequence described in **Table 9**, or a functional fragment thereof. In an embodiment, the nucleic acid comprises a nucleotide sequence described in **Table 10**.

20 In an embodiment, the nucleic acid comprises a nucleotide sequence encoding the amino acid sequence of any of SEQ ID NOs: 2-38 or 1000-1002, or a functional fragment thereof. In an embodiment, the nucleic acid comprises a nucleotide sequence encoding the amino acid sequence of any of SEQ ID NOs: 56-359 or 1004-1009, or a functional fragment thereof.

In an embodiment, the nucleic acid comprises a nucleotide sequence of any of SEQ ID NOs:
25 361-398 or 1010-1012, or a nucleotide sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, 30, 35, 40, 45, or 50 nucleotides thereto. In an embodiment, the nucleic acid further comprises a nucleotide sequence of any of SEQ ID NOs: 399-407 or 1013, or a nucleotide sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%,
30 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 nucleotides thereto. In an embodiment, the nucleic acid further comprises a nucleotide sequence of any of SEQ ID NOs: 408-415.

In an embodiment, the nucleic acid comprises a nucleotide sequence of any of SEQ ID NOs:
416-481 or 1014-1019, or a nucleotide sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%,
35 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, or 100 nucleotides thereto. In an embodiment, the nucleic acid comprises a nucleotide sequence of any of

SEQ ID NOs: 416-453 or 1014-1019. In an embodiment, the nucleic acid comprises a nucleotide sequence of any of SEQ ID NOs: 454-491. In an embodiment, the nucleic acid comprises a nucleotide sequence of any of SEQ ID NOs: 492-529. In an embodiment, the nucleic acid comprises a nucleotide sequence of any of SEQ ID NOs: 416-453. In an embodiment, the nucleic acid comprises a nucleotide sequence of any of SEQ ID NOs: 454-491. In an embodiment, the nucleic acid comprises a nucleotide sequence of any of SEQ ID NOs: 492-529. In an embodiment, the nucleic acid comprises a nucleotide sequence of any of SEQ ID NOs: 530-567. In an embodiment, the nucleic acid comprises a nucleotide sequence of any of SEQ ID NOs: 568-605. In an embodiment, the nucleic acid comprises a nucleotide sequence of any of SEQ ID NOs: 606-643. In an embodiment, the nucleic acid comprises a nucleotide sequence of any of SEQ ID NOs: 644-681.

In an embodiment, the nucleic acid comprises the nucleotide sequence of any of SEQ ID NOs: 364, 365, 371, or 1010-1012, or a nucleotide sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, 30, 35, 40, 45, or 50 nucleotides thereto. In an embodiment, the nucleic acid comprises the nucleotide sequence of SEQ ID NO: 364. In an embodiment, the nucleic acid comprises the nucleotide sequence of SEQ ID NO: 365. In an embodiment, the nucleic acid comprises the nucleotide sequence of SEQ ID NO: 371. In an embodiment, the nucleic acid comprises the nucleotide sequence of SEQ ID NO: 1010. In an embodiment, the nucleic acid comprises the nucleotide sequence of SEQ ID NO: 1011. In an embodiment, the nucleic acid comprises the nucleotide sequence of SEQ ID NO: 1012.

In an embodiment, the nucleic acid further comprises the nucleotide sequence of SEQ ID NO: 1013, or a nucleotide sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, or 30 nucleotides thereto. In an embodiment, the nucleic acid further comprises the nucleotide sequence of SEQ ID NO: 48.

In an embodiment, the nucleic acid comprises the nucleotide sequence of any of SEQ ID NOs: 1014-1017, or a nucleotide sequence with at least 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more sequence identity thereof, or differing by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, 30, 35, 40, 45, or 50 nucleotides thereto. In an embodiment, the nucleic acid comprises the nucleotide sequence of SEQ ID NO: 1014. In an embodiment, the nucleic acid comprises the nucleotide sequence of SEQ ID NO: 1015. In an embodiment, the nucleic acid comprises the nucleotide sequence of SEQ ID NO: 1016. In an embodiment, the nucleic acid comprises the nucleotide sequence of SEQ ID NO: 1017. In an embodiment, the nucleic acid comprises the nucleotide sequence of SEQ ID NO: 1018. In an embodiment, the nucleic acid comprises the nucleotide sequence of SEQ ID NO: 1019.

In an embodiment, the nucleic acid comprises the nucleotide sequence of SEQ ID NO: 364. In an embodiment, the nucleic acid comprises the nucleotide sequence of SEQ ID NO: 365. In an

embodiment, the nucleic acid comprises the nucleotide sequence of SEQ ID NO: 371. In an embodiment, the nucleic acid comprises the nucleotide sequence of SEQ ID NO: 1010. In an embodiment, the nucleic acid comprises the nucleotide sequence of SEQ ID NO: 1011. In an embodiment, the nucleic acid comprises the nucleotide sequence of SEQ ID NO: 1012. In an embodiment, the nucleic acid further comprises the nucleotide sequence of SEQ ID NO: 1013. In an embodiment, the nucleic acid further comprises the nucleotide sequence of SEQ ID NO: 48. In an embodiment, the nucleic acid comprises the nucleotide sequence of SEQ ID NO: 1014. In an embodiment, the nucleic acid comprises the nucleotide sequence of SEQ ID NO: 1015. In an embodiment, the nucleic acid comprises the nucleotide sequence of SEQ ID NO: 1016. In an embodiment, the nucleic acid comprises the nucleotide sequence of SEQ ID NO: 1017. In an embodiment, the nucleic acid comprises the nucleotide sequence of SEQ ID NO: 1018. In an embodiment, the nucleic acid comprises the nucleotide sequence of SEQ ID NO: 1019.

The nucleic acids disclosed herein include deoxyribonucleotides or ribonucleotides, or analogs thereof. The polynucleotide may be either single-stranded or double-stranded, and if single-stranded may be the coding strand or non-coding (antisense) strand. A polynucleotide may comprise modified nucleotides, such as methylated nucleotides and nucleotide analogs. The sequence of nucleotides may be interrupted by non-nucleotide components. A polynucleotide may be further modified after polymerization, such as by conjugation with a labeling component. The nucleic acid may be a recombinant polynucleotide, or a polynucleotide of genomic, cDNA, semisynthetic, or synthetic origin which either does not occur in nature or is linked to another polynucleotide in a non-natural arrangement.

In an aspect, the disclosure features host cells and vectors comprising the nucleic acids described herein. The nucleic acids may be present in a single vector or separate vectors present in the same host cell or separate host cell, as described in more detail below.

In an aspect, the disclosure features methods of treating a disorder (*e.g.*, a disorder described herein) comprising administering to a subject in need thereof an effective amount of a nucleic acid described herein.

Vectors

The present disclosure features vectors that comprise a nucleotide sequence encoding an IL-2 agent described herein. In an embodiment, the vector comprises a nucleic acid described herein (*e.g.*, in **Table 10**).

In an embodiment, the vector comprises a nucleotide sequence encoding an amino acid sequence of an IL-2 variant described herein (*e.g.*, in **Table 9**), or a nucleotide sequence substantially identical thereto (*e.g.*, a sequence at least about 85%, 90%, 95%, 99% or more identical thereto, and/or capable of hybridizing under the stringency conditions described herein). In an embodiment,

the vector comprises a nucleotide sequence encoding an IL-2 variant comprising one or more of the mutations described herein.

In an embodiment, the vector further comprises a nucleotide sequence encoding an Fc region, *e.g.*, an Fc region described herein, or having a nucleotide sequence substantially identical thereto (*e.g.*, a sequence at least about 85%, 90%, 95%, 99% or more identical thereto, and/or capable of hybridizing under the stringency conditions described herein). In an embodiment, the Fc region comprises one or more mutations, *e.g.*, one or more mutations described herein. In an embodiment, the vector comprises from 5' to 3' a nucleotide sequence encoding an IL-2 variant described herein and a nucleotide sequence encoding an Fc region described herein.

In another embodiment, the vector further comprises a nucleotide sequence encoding a linker, *e.g.*, a linker described herein, or a nucleotide sequence substantially homologous thereto (*e.g.*, a sequence at least about 85%, 90%, 95%, 99% or more identical thereto, and/or capable of hybridizing under the stringency conditions described herein). In an embodiment, the vector comprises from 5' to 3' a nucleotide sequence encoding an IL-2 variant described herein and a nucleotide sequence encoding a linker described herein. In an embodiment, the vector comprises from 5' to 3' a nucleotide sequence encoding a linker described herein, and a nucleotide sequence encoding an Fc region described herein.

In another embodiment, the vector comprises a nucleotide sequence encoding an IL-2 fusion protein, *e.g.*, an IL-2 fusion protein described herein, or a nucleotide sequence substantially homologous thereto (*e.g.*, a sequence at least about 85%, 90%, 95%, 99% or more identical thereto, and/or capable of hybridizing under the stringency conditions described herein). In an embodiment, the vector encoding the IL-2 fusion protein comprises from 5' to 3' a nucleotide sequence encoding an IL-2 variant described herein and a nucleotide sequence encoding an Fc region described herein. In an embodiment, the vector encoding the IL-2 fusion protein comprises from 5' to 3' a nucleotide sequence encoding an IL-2 variant described herein, a nucleotide sequence encoding a linker described herein, and a nucleotide sequence encoding an Fc region described herein.

In an embodiment, the vector further comprises a nucleotide sequence encoding a heavy chain variable region of an anti-IL-2 antibody molecule, *e.g.*, an anti-IL-2 antibody molecule described herein. In an embodiment, the vector further comprises a nucleotide sequence encoding a light chain variable region of an anti-IL-2 antibody molecule, *e.g.*, an anti-IL-2 antibody molecule described herein. In yet another embodiment, the vector further comprises a nucleotide sequence encoding a heavy chain variable region and a light chain variable region of an anti-IL-2 antibody molecule, *e.g.*, an anti-IL-2 antibody molecule described herein.

In an embodiment, the vector further comprises a nucleotide sequence encoding at least one, two, or three CDRs from a heavy chain variable region of an anti-IL-2 antibody molecule, *e.g.*, an anti-IL-2 antibody molecule described herein. In another embodiment, the vector further comprises a nucleotide sequence encoding at least one, two, or three CDRs from a light chain variable region of an

anti-IL-2 antibody molecule, *e.g.*, an anti-IL-2 antibody molecule described herein. In yet another embodiment, the vector comprises a nucleotide sequence encoding at least one, two, three, four, five, or six CDRs from heavy and light chain variable regions of an anti-IL-2 antibody molecule, *e.g.*, an anti-IL-2 antibody molecule described herein.

5 In an embodiment, the vector comprises a portion of a nucleotide sequence described herein. The portion may encode, for example, an IL-2 variant; a linker an Fc region; a variable region (*e.g.*, VH or VL); one, two, or three or more (*e.g.*, four, five, or six) CDRs; or one, two, three, or four or more framework regions.

10 The vectors include, but are not limited to, a virus, plasmid, cosmid, lambda phage or a yeast artificial chromosome (YAC).

 Numerous vector systems can be employed. For example, one class of vectors utilizes DNA elements which are derived from animal viruses such as, for example, bovine papilloma virus, polyoma virus, adenovirus, vaccinia virus, baculovirus, retroviruses (Rous Sarcoma Virus, MMTV or MOMLV) or SV40 virus. Another class of vectors utilizes RNA elements derived from RNA viruses
15 such as Semliki Forest virus, Eastern Equine Encephalitis virus and Flaviviruses.

 Additionally, cells which have stably integrated the DNA into their chromosomes may be selected by introducing one or more markers which allow for the selection of transfected host cells. The marker may provide, for example, prototrophy to an auxotrophic host, biocide resistance (*e.g.*, antibiotics), or resistance to heavy metals such as copper, or the like. The selectable marker gene can
20 be either directly linked to the DNA sequences to be expressed or introduced into the same cell by cotransformation. Additional elements may also be needed for optimal synthesis of mRNA. These elements may include splice signals, as well as transcriptional promoters, enhancers, and termination signals.

 Once the expression vector or DNA sequence containing the constructs has been prepared for
25 expression, the expression vectors may be transfected or introduced into an appropriate host cell. Various techniques may be employed to achieve this, such as, for example, protoplast fusion, calcium phosphate precipitation, electroporation, retroviral transduction, viral transfection, gene gun, lipid-based transfection or other conventional techniques. In the case of protoplast fusion, the cells are grown in media and screened for the appropriate activity.

30 Methods and conditions for culturing the resulting transfected cells and for recovering the polypeptides (*e.g.*, IL-2 variants or IL-2 fusion proteins) produced are known to those skilled in the art and may be varied or optimized depending upon the specific expression vector and mammalian host cell employed, based upon the present description.

35 **Cells**

 The present disclosure also provides cells comprising a nucleic acid or vector encoding an IL-2 agent described herein.

In an embodiment, the cell is a host cell. For example, the host cell can comprise an IL-2 agent engineered in accordance with a method described herein. In an embodiment, the cell is an isolated cell. In an embodiment, the cell is a cultured cell.

In an embodiment, the cell comprises a nucleic acid comprising a nucleotide sequence encoding an IL-2 agent described herein (*e.g.*, in **Table 10**), a nucleotide sequence substantially homologous thereto (*e.g.*, a sequence at least about 85%, 90%, 95%, 99% or more identical thereto, and/or capable of hybridizing under the stringency conditions described herein), or a portion of the aforesaid nucleic acid. In an embodiment, the cell comprises a vector comprising a nucleotide sequence encoding an IL-2 agent described herein, a nucleotide sequence substantially homologous thereto (*e.g.*, a sequence at least about 85%, 90%, 95%, 99% or more identical thereto, and/or capable of hybridizing under the stringency conditions described herein), or a portion of the aforesaid vector.

In an embodiment, the cell is genetically engineered to comprise a nucleic acid or vector encoding an IL-2 agent described herein. In an embodiment, the host cells are genetically engineered by using an expression cassette. The phrase “expression cassette,” refers to nucleotide sequences, which are capable of affecting expression of a gene in hosts compatible with such sequences. Such cassettes may include a promoter, an open reading frame with or without introns, and a termination signal. Additional factors necessary or helpful in effecting expression may also be used, for example, an inducible promoter.

The cell can be, but is not limited to, a eukaryotic cell, a bacterial cell, an insect cell, or a human cell. Suitable eukaryotic cells include, but are not limited to, Vero cells, HeLa cells, COS cells, CHO cells, HEK293 cells, BHK cells and MDCKII cells. Suitable insect cells include, but are not limited to, Sf9 cells.

Uses of IL-2 agents

The IL-2 agents (*e.g.*, IL-2 variants, fusion polypeptides, complexes, or immunoconjugates) described herein, as well as the compositions described herein and the nucleic acids described herein, have *in vitro*, *ex vivo*, and *in vivo* therapeutic, prophylactic, and/or diagnostic utilities.

In an embodiment, the IL-2 agent modulates (*e.g.*, reduces (*e.g.*, inhibits, blocks, or neutralizes) or increases (*e.g.*, activates, initiates, or enhances)) one or more biological activities associated with IL-2. For example, these IL-2 agents can be administered to cells in culture, *in vitro* or *ex vivo*, or to a subject, *e.g.*, a human subject, *e.g.*, *in vivo*, to modulate one or more biological activities associated with IL-2. Accordingly, in an aspect, the disclosure provides a method of treating, preventing, or diagnosing a disorder, *e.g.*, a disorder described herein, in a subject, comprising administering to the subject an IL-2 agent described herein, such that the disorder is treated, prevented, or diagnosed. For example, the disclosure provides a method comprising contacting the IL-2 agent described herein with cells in culture, *e.g.*, *in vitro* or *ex vivo*, or

administering the IL-2 agent described herein to a subject, *e.g.*, *in vivo*, to treat, prevent, or diagnose a disorder, *e.g.*, a disorder associated with IL-2 (*e.g.*, a disorder described herein).

As used herein, the term “subject” is intended to include human and non-human animals. In an embodiment, the subject is a human subject, *e.g.*, a human patient having a disorder described herein, or at risk of having a disorder described herein. The term “non-human animals” includes mammals and non-mammals, such as non-human primates. In an embodiment, the subject is a human. The methods and compositions described herein are suitable for treating human patients for a disorder described herein. Patients having a disorder described herein include those who have developed a disorder described herein but are (at least temporarily) asymptomatic, patients who have exhibited a symptom of a disorder described herein, or patients having a disorder related to or associated with a disorder described herein.

Without wishing to be bound by theory, it is believed that in an embodiment, the IL-2 agents described herein selectively stimulate regulatory T cells (Tregs). For example, the IL-2 agents described herein can promote the proliferation, survival, activation, and/or function of CD3+FoxP3+ T cells over CD3+FoxP3- T cells. Methods of measuring the ability to selectively stimulate Tregs can be measured by flow cytometry of peripheral blood leukocytes, in which there is an observed increase in the percentage of FOXP3+CD4+ T cells among total CD4+ T cells, an increase in percentage of FOXP3+CD8+ T cells among total CD8+ T cells, an increase in percentage of FOXP3+ T cells relative to NK cells, and/or a greater increase in the expression level of CD25 on the surface of FOXP3+ T cells relative to the increase of CD25 expression on other T cells. Preferential growth of Treg cells can also be detected as increased representation of demethylated FOXP3 promoter DNA (*i.e.*, the Treg-specific demethylated region, or TSDR) relative to demethylated CD3 genes in DNA extracted from whole blood, as detected by sequencing of polymerase chain reaction (PCR) products from bisulfite-treated genomic DNA (J. Schouli, et al. 2011. *Epigenetics* 6:2, 236-246). Without wishing to be bound by theory, it is believed that in an embodiment, the IL-2 agents described herein can achieve immune modulation through selective activation of regulatory T cells, resulting in Treg stimulation with minimal effect on T effector and NK cells. The IL-2 agents described herein are particularly suitable for treating transplant rejection, *e.g.*, heart transplant rejection. In an embodiment, the IL-2 agent results in immune modulation without immunosuppression, which is highly desired in an IL-2 therapy.

In an aspect, the disclosure provides a method of increasing the ratio of regulatory T cells (Tregs) to non-regulatory T cells (non-Tregs) within a population of T cells, comprising contacting the population of T cells with an effective amount of an IL-2 agent described herein.

In an embodiment, the IL-2 agent selectively increases the ratio of Tregs over non-Tregs by about 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 100%, or more, or about 2, 3, 4, 5, 6, 7, 8, 9, 10-fold or more. In an embodiment, the IL-2 agent selectively increases the ratio of CD3+FoxP3+ cells

to CD3+FoxP3⁻ cells by about 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 100%, or more, or about 2, 3, 4, 5, 6, 7, 8, 9, 10-fold or more.

In an aspect, the disclosure provides a method of increasing the ratio of regulatory T cells (Tregs) to non-regulatory T cells (non-Tregs) in a subject (*e.g.*, in the peripheral blood of a subject),
 5 comprising contacting the subject or sample with an effective amount of an IL-2 agent described herein.

In an embodiment, the IL-2 agent selectively increases the ratio of Tregs over non-Tregs in the subject, or in a sample (*e.g.*, a peripheral blood sample) from the subject, by about 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 100%, or more, or about 2, 3, 4, 5, 6, 7, 8, 9, 10-fold or more. In
 10 an embodiment, the IL-2 agent selectively increases the ratio of CD3+FoxP3⁺ cells to CD3+FoxP3⁻ cells in the subject, or in a sample (*e.g.*, a peripheral blood sample) from the subject, by about 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 100%, or more, or about 2, 3, 4, 5, 6, 7, 8, 9, 10-fold or more.

In an aspect, the disclosure provides a method of increasing the ratio of regulatory T cells (Tregs) to natural killer cells (NKs) in a subject (*e.g.*, in the peripheral blood of a subject), comprising
 15 contacting the subject or sample with an effective amount of an IL-2 agent described herein.

In an embodiment, the IL-2 agent selectively increases the ratio of Tregs over NKs in the subject, or in a sample (*e.g.*, a peripheral blood sample) from the subject, by about 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 100%, or more, or about 2, 3, 4, 5, 6, 7, 8, 9, 10-fold or more. In an
 20 embodiment, the IL-2 agent selectively increases the ratio of CD3+FoxP3⁺ cells to CD3-CD19⁻ lymphocytes expressing CD56 and/or CD16 in the subject, or in a sample (*e.g.*, a peripheral blood sample) from the subject, by about 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 100%, or more, or about 2, 3, 4, 5, 6, 7, 8, 9, 10-fold or more.

Methods of Treating or Preventing Disorders

25 The IL-2 agents (*e.g.*, IL-2 variants, fusion polypeptides, complexes, or immunoconjugates) described herein, as well as the pharmaceutical compositions disclosed herein and the nucleic acids described herein, can be used to treat or prevent various disorders or conditions.

In an embodiment, the disorder is a transplant rejection. In an embodiment, the disorder is a heart transplant rejection. In an embodiment, the disorder is a heart disease, *e.g.*, a heart disease that
 30 can be treated by a heart transplant.

The IL-2 agents described herein can have an optimal or improved half-life, which can be desirable for treating or preventing a wide range of disorders or conditions. While not wishing to be bound by theory, it is believed that in an embodiment, the IL-2 agents described herein can provide one or more benefits over another IL-2 agent having the same or similar binding affinity and/or
 35 specificity (*e.g.*, an IL-2 agent that does not have, or has not been engineered to have, an optimal or improved half-life). These benefits can include, but are not limited to, an increased therapeutic or

preventive efficacy, a reduced dosage regimen, or an improved pharmacokinetic property. In an embodiment, the IL-2 includes a mutated Fc region as described herein.

In an embodiment, the ratio of regulatory T cells (Tregs) to non-regulatory T cells within the subject (*e.g.*, in the peripheral blood of the subject) increases after the administration. In an
 5 embodiment, the ratio of regulatory T cells (Tregs) to non-regulatory T cells within the subject (*e.g.*, in the peripheral blood of the subject) remains essentially the same after the administration. In an embodiment, the method further comprises identifying a subject who needs an increased level of Tregs. In an embodiment, the method further comprises determining the level of Tregs in the subject prior to and/or after the administration.

10 The IL-2 agents described herein are typically administered at a frequency that keeps a therapeutically effective level of IL-2 agents in the patient's system until the patient recovers. For example, the IL-2 agents may be administered at a frequency that achieves a serum concentration sufficient for at least about 1, 2, 5, 10, 20, 30, or 40 agents to bind each target molecule or cell. In an
 15 embodiment, the IL-2 agent is administered every 1, 2, 3, 4, 5, 6, or 7 days, every 1, 2, 3, 4, 5, or 6 weeks, or every 1, 2, 3, 4, 5, or 6 months. In an embodiment, the IL-2 agent is administered once a month. In an embodiment, the IL-2 agent is administered once a week.

Methods of administering various agents (*e.g.*, antibody molecules or fusion proteins) are known in the art and are described below. Suitable dosages of the agents used will depend on the age and weight of the subject and the particular drug used.

20 In an embodiment, the ratio of regulatory T cells (Tregs) to non-regulatory T cells within the subject (*e.g.*, in the peripheral blood of the subject) increases after the administration. In an embodiment, the ratio of regulatory T cells (Tregs) to non-regulatory T cells within the subject (*e.g.*, in the peripheral blood of the subject) remains essentially the same after the administration.

The IL-2 agents can be used by themselves or conjugated to a second agent, *e.g.*, a protein,
 25 *e.g.*, an antibody molecule, a polymer (*e.g.*, polyethylene glycol (PEG)), or a cytokine. In an embodiment, the second agent comprises a second IL-2 agent. This method includes administering the IL-2 agent, alone or conjugated to a second agent, to a subject requiring such treatment.

Combination Therapies

30 The IL-2 agents (*e.g.*, *e.g.*, IL-2 variants, IL-2 fusion proteins, IL-2 complexes, or IL-2 conjugates) described herein, as well as the pharmaceutical compositions disclosed herein, can be used in combination with other therapies.

For example, the combination therapy can include an IL-2 agent described herein co-formulated with, and/or co-administered with, one or more additional therapeutic agents, *e.g.*, one or
 35 more additional therapeutic agents described herein. In other embodiments, the IL-2 agents are administered in combination with other therapeutic treatment modalities, *e.g.*, other therapeutic treatment modalities described herein. Such combination therapies may advantageously utilize lower

dosages of the administered therapeutic agents, thus avoiding possible toxicities or complications associated with the various monotherapies.

- Administered “in combination,” as used herein, means that two (or more) different treatments are delivered to the subject before, or during the course of the subject's affliction with a disorder. In an embodiment, two or more treatments are delivered prophylactically, *e.g.*, before the subject has the disorder or is diagnosed with the disorder. In another embodiment, the two or more treatments are delivered after the subject has developed or diagnosed with the disorder. In an embodiment, the delivery of one treatment is still occurring when the delivery of the second begins, so that there is overlap. This is sometimes referred to herein as “simultaneous” or “concurrent delivery.” In other embodiments, the delivery of one treatment ends before the delivery of the other treatment begins. In an embodiment of either case, the treatment is more effective because of combined administration. For example, the second treatment is more effective, *e.g.*, an equivalent effect is seen with less of the second treatment, or the second treatment reduces symptoms to a greater extent, than would be seen if the second treatment were administered in the absence of the first treatment, or the analogous situation is seen with the first treatment. In an embodiment, delivery is such that the reduction in a symptom, or other parameter related to the disorder is greater than what would be observed with one treatment delivered in the absence of the other. The effect of the two treatments can be partially additive, wholly additive, or greater than additive. The delivery can be such that an effect of the first treatment delivered is still detectable when the second is delivered.
- In an embodiment, the IL-2 agent is administered in combination with a second therapy (*e.g.*, an additional agent) to treat or prevent a disorder described herein. In an embodiment, the additional agent is a second IL-2 agent, *e.g.*, an IL-2 agent different from a first IL-2 agent. Exemplary IL-2 agents that can be used in combination include, but are not limited to, any combination of the IL-2 agents described herein. In another embodiment, the additional agent is other than an IL-2 agent. For example, the additional agent can be a small molecule or a nucleic acid molecule. In yet another embodiment, the second therapy is a transplant, *e.g.*, a heart transplant. In an embodiment, the second therapy comprises an immunosuppressive agent. In an embodiment, the immunosuppressive agent comprises rapamycin.

30 ENUMERATED EMBODIMENTS

1. A method of treating a transplant rejection or a symptom thereof, comprising administering to a subject in need thereof an effective amount of an IL-2 agent described herein, *e.g.*, an IL-2 variant described herein, or an IL-2 fusion protein described herein, thereby treating the transplant rejection or the symptom thereof.
2. A method of preventing a transplant rejection or a symptom thereof, comprising administering to a subject in need thereof an effective amount of an IL-2 agent described herein, *e.g.*,

an IL-2 variant described herein, or an IL-2 fusion protein described herein, thereby preventing the transplant rejection or the symptom thereof.

3. A method of modulating (e.g., increasing or inducing) immunosuppression for a transplant, comprising administering to a subject in need thereof an effective amount of an IL-2 agent described
5 herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein, thereby modulating (e.g., increasing or inducing) immunosuppression for a transplant.
4. The method of any of embodiments 1-3, wherein the subject has received, is receiving, or will receive a transplant, when the IL-2 agent is administered to the subject.
5. A method of conditioning a subject prior to a transplant, comprising administering to a
10 subject in need thereof an effective amount of an IL-2 agent described herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein, thereby conditioning the subject prior to the transplant.
6. A method of selectively increasing Tregs, comprising administering to a subject in need thereof an effective amount of an IL-2 agent described herein, e.g., an IL-2 variant described herein,
15 or an IL-2 fusion protein described herein, wherein the subject has received, is receiving, or will receive a transplant, thereby selectively increasing Tregs.
7. The method of any of embodiments 1-6, wherein the transplant is a heart transplant.
8. A method of treating a heart disease or a symptom thereof, comprising:
administering to a subject in need thereof an effective amount of an IL-2 agent described
20 herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein; and providing a heart transplant to the subject, thereby treating the heart disease or the symptom thereof.
9. The method of embodiment 8, wherein the heart transplant is provided to the subject prior to, concurrent with, or after administration of the IL-2 fusion protein.
- 25 10. The method of any of embodiments 1-9, wherein the level of Tregs in the subject is increased by about 2, 3, 4, 5, 6, 7, 8, 9, 10-fold or more, compared to the level of Tregs in the subject prior to administration of the IL-2 fusion protein.
11. The method of embodiment 10, wherein the level of Tregs is determined in a sample from the subject.
- 30 12. The method of any of embodiments 1-11, wherein the IL-2 fusion protein comprises an IL-2 variant comprising:
 - (i) (a) the amino acid substitution H16L or H16N, (b) the amino acid substitution I92S, or (c) both (a) and (b); and
 - (ii) the amino acid substitutions V69A, Q74P, and C125S,
35 corresponding to human IL-2 (SEQ ID NO: 1031),
13. The method of embodiment 12, wherein the IL-2 variant further comprises the amino acid substitution T3A.

14. The method of any of embodiments 1-13, wherein the IL-2 variant comprises the amino acid sequence of any of SEQ ID NOs: 4, 5, 11, 1000, 1001, or 1002, an amino acid sequence that is at least 95% identical thereto or differs by no more than 1, 2, 3, 4, or 5 amino acids therefrom, or a functional fragment thereof.
- 5 15. The method of any of embodiments 1-14, wherein the IL-2 fusion protein further comprises an Fc region.
16. The method of embodiment 15, wherein the Fc region comprises an Fc region of IgG1 allotype m3 comprising an N297G substitution according to EU numbering.
17. The method of embodiment 15 or 16, wherein the Fc region comprises the amino acid
- 10 sequence of SEQ ID NO: 1003, or an amino acid sequence that is at least 95% identical thereto or differs by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 amino acids therefrom, or a functional fragment thereof.
18. The method of any of embodiments 15-17, wherein the Fc region is fused to the C-terminus of the IL-2 variant.
- 15 19. The method of any of embodiments 1-18, wherein the IL-2 fusion protein further comprises a linker.
20. The method of embodiment 19, wherein the linker comprises (G₄S)₄ (SEQ ID NO: 48).
21. The method of any of embodiments 1-20, wherein the fusion protein comprises an amino acid sequence of any of SEQ ID NOs: 1004, 1005, 1006, 1007, 1008, or 1009, an amino acid sequence that
- 20 is at least 95% identical thereto or differs by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 amino acids therefrom, or a functional fragment thereof.
22. The method of any of embodiments 1-21, wherein the fusion protein forms a dimer.
23. The method of any of embodiments 1-22, further comprising administering an immunosuppressive agent to the subject.
- 25 24. The method of embodiment 23, wherein the immunosuppressive agent comprises rapamycin.
25. The method of any of embodiments 1-24, wherein the subject is a human or a non-human primate.
26. The method of any of embodiments 1-24, wherein the subject is a mouse.
27. A combination comprising an IL-2 agent described herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein, and a transplant.
28. The combination of embodiment 27, wherein the transplant is a heart transplant.
29. The combination of embodiment 27 or 28, further comprising one or more additional immunosuppressive agents, e.g., rapamycin.
30. The combination of any of embodiment 27-29 for use in treating or preventing a transplant rejection in a subject.
31. The combination for use of embodiment 30, wherein the transplant rejection is a heart transplant rejection.

32. The combination for use of embodiment 30 or 31, wherein the IL-2 agent is administered to the subject prior to, during, and/or after the transplant.
33. The combination of any of embodiments 27-29 for use in modulating (e.g., increasing or inducing), immunosuppression in a subject.
34. The combination of any of embodiments 27-29 for use in selectively increasing T regulatory cells in a subject.
35. The combination of any of embodiments 30-34, wherein the subject is a human or a non-human primate.
36. The combination of any of embodiments 30-34, wherein the subject is a mouse.

EXAMPLES

Example 1: IL-2 Mutein Therapy Induces FOXP3+ Treg Expansion and Donor-Specific Allograft Tolerance

5 The ability of human IL-2, engineered with amino acid mutations to promote its binding to CD25 vs. CD122 or CD132 and fused to human Fc to promote its half-life *in vivo*, was evaluated as a tool to enhance Foxp3+ Treg functions in murine allograft recipients. In the presence of TGF- β , an exemplary IL-2 mutein (IL-2m) described herein induced Stat5b phosphorylation and promoted inducible Treg development *in vitro* by 5-fold (**FIG. 1A, 1B, 2A, and 2B**), and by 8-fold when used in
10 conjunction with a Cdk8/19i. Similarly, upon injection *in vivo* (10 μ g s.c. twice/week), the IL-2 mutein expanded the Foxp3+ Treg population by 4-5-fold (**FIG. 3**).

 The effects of IL-2 mutein therapy were therefore tested in a fully MHC-mismatched cardiac allograft model (BALB/c->C57BL/6) in which recipients also received low-dose rapamycin (RPM, 0.5 mg/kg/d via Alzet pump for 2 wk post-Tx). Two injections of an exemplary IL-2 mutein (IL-2C)
15 10 μ g s.c. twice in the week pre-Tx, plus low dose RPM for 2 weeks led to 80% long-term survival (>100 d, p<0.01 vs. RPM alone; **FIG. 4**) but acutely rejected (7-8 d) third-party C3H allografts when challenged at >100 d. Efficacy of post-Tx an exemplary IL-2 mutein (IL-2C) therapy alone in murine cardiac allograft recipients (BALB/c -> C57BL/6) was also assessed (**FIG. 5**). In a more clinically relevant protocol, the same dose of the IL-2 mutein for 3 wks post-Tx, in conjunction with low-dose
20 RPM for 2 weeks, resulted in 100% survival for >100 d (p<0.01 vs. RPM alone) and again was associated with the rapid (7-8 d) rejection of third-party C3H challenge allografts (**FIG. 6A and 6B**). Histologic examination of BALB/c allografts at >100 d post-Tx showed excellent myocardial preservation, normal vessels and only minor focal mononuclear cell infiltrates (**FIG. 7**). These results demonstrate that pre-and post-Tx therapy with an IL-2 mutein described herein prolonged allograft
25 survival, especially when combined with a brief subtherapeutic course of RPM. In summary, brief therapy with an IL-2 mutein described herein can expand recipient Treg cells and induce donor-specific allograft tolerance. IL-2 muteins promote iTreg development *in vitro* and *in vivo*. Their efficacy is superior to that of native IL-2 in terms of promoting murine allograft survival.

Other aspects, embodiments, examples, and figures are described in International Application Publication No. WO 2021/021606, the contents of which are incorporated by references in their entirety.

5

INCORPORATION BY REFERENCE

All publications, patents, and Accession numbers mentioned herein are hereby incorporated by reference in their entirety as if each individual publication or patent was specifically and individually indicated to be incorporated by reference.

10

EQUIVALENTS

While specific embodiments of the subject invention have been discussed, the above specification is illustrative and not restrictive. Many variations of the invention will become apparent to those skilled in the art upon review of this specification and the claims below. The full scope of the invention should be determined by reference to the claims, along with their full scope of equivalents, and the specification, along with such variations.

15

TABLE 9: SEQUENCE LISTING (AMINO ACID)

SEQ ID NO	Description	Substitutions	Sequence (amino acid)
Exemplary IL-2 Variants (Muteins)			
1	IL2 C125S	C125S	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEVL NLAQSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
2	Stabilized IL-2	V69A/Q74P /C125S	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
3	IL2-037	H16D/V69A /Q74P/C125 S	APTSSSTKKTQLQLEDLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
4	IL2-062	H16N/V69A /Q74P/C125 S	APTSSSTKKTQLQLENLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
5	IL2-118	H16L/V69A /Q74P/C125 S	APTSSSTKKTQLQLELLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
6	IL2-035	I28T/V69A/ Q74P/C125 S	APTSSSTKKTQLQLEHLLLDLQMILNGTNNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
7	IL2-073	V69A/Q74P /D84V/C125 S	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
8	IL2-077	V69A/Q74P /S87R/C125 S	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLIRNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
9	IL2-043	V69A/Q74P /N88L/C125 S	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISLINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
10	IL2-036	V69A/Q74P /N88S/C125 S	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISSINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
11	IL2-068	V69A/Q74P /I92S/C125S	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
12	IL2-106	K35E/V69A /Q74P/C125 S	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT

13	IL2-107	K35E/H16N /V69A/Q74 P/C125S	APTSSSTKKTQLQLENLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
14	IL2-119	K35E/H16L /V69A/Q74P /C125S	APTSSSTKKTQLQLELLLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
15	K35E/D84V mutein	K35E/D84V /V69A/Q74 P/C125S	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
16	IL2-115	K35E/I92S/ V69A/Q74P /C125S	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
17	IL2-109	R38Q/V69A /Q74P/C125 S	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
18	IL2-113	R38Q/H16N /V69A/Q74 P/C125S	APTSSSTKKTQLQLENLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
19	IL2-120	R38Q/H16L /V69A/Q74 P/C125S	APTSSSTKKTQLQLELLLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
20	R38Q/D84 V mutein	R38Q/D84V /V69A/Q74 P/C125S	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
21	IL2-116	R38Q/I92S/ Q74P/C125 S	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
22	IL2-088	R38N/V69A /Q74P/C125 S	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
23	IL2-097	R38N/H16N /V69A/Q74 P/C125S	APTSSSTKKTQLQLENLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
24	R38N/H16L mutein	R38N/H16L /V69A/Q74 P/C125S	APTSSSTKKTQLQLELLLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
25	IL2-098	R38N/D84V /V69A/Q74 P/C125S	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT

26	IL2-100	R38N/I92S/ Q74P/C125 S	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
27	IL2-090	R38E/V69A/ Q74P/C125 S	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEMMLTFKFYMPKKATELKHLQCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
28	IL2-092	F42K/V69A/ Q74P/C125 S	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTKKFYMPKKATELKHLQCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
29	IL2-110	F42Q/V69A/ Q74P/C125 S	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTQKFYMPKKATELKHLQCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
30	IL2-Inactive	F42A/Y45A/ L72G/N88 D/V69A/Q7 4P/C125S	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTAKFAMPKKATELKHLQCLEELKPLEEAL NGAPSKNFHLRPRDLISDINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
31	IL2-99	R38N/S87R/ V69A/Q74P/ C125S	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEELKPLEEAL NLAPSKNFHLRPRDLIRNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
32	IL2-101	R38E/H16N/ V69A/Q74 P/C125S	APTSSSTKKTQLQLENLLLDLQMILNGINNYKNPK LTEMMLTFKFYMPKKATELKHLQCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
33	IL2-102	R38E/D84V/ V69A/Q74 P/C125S	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEMMLTFKFYMPKKATELKHLQCLEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
34	IL2-103	R38E/S87R/ V69A/Q74P/ C125S	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEMMLTFKFYMPKKATELKHLQCLEELKPLEEAL NLAPSKNFHLRPRDLIRNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
35	IL2-104	R38E/I92S/ V69A/Q74P/ C125S	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEMMLTFKFYMPKKATELKHLQCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
36	IL2-114	F42Q/H16N/ V69A/Q74 P/C125S	APTSSSTKKTQLQLENLLLDLQMILNGINNYKNPK LTRMLTQKFYMPKKATELKHLQCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
37	IL2-117	F42Q/I92S/ V69A/Q74P/ C125S	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTQKFYMPKKATELKHLQCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
38	IL2-108	K35E/R38N/ H16N/V69 A/Q74P/C12 5S	APTSSSTKKTQLQLENLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT

1000	IL2-124	T3A/H16N/ V69A/Q74P /C125S	APASSSTKKTQLQLENLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
1001	IL2-127	T3A/H16L/ V69A/Q74P /C125S	APASSSTKKTQLQLELLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
1002	IL2-130	T3A/I92S/V 69A/Q74P/C 125S	APASSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVSIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLT
Exemplary Fc Regions			
39	IgG1 Fc		DKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISR TPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTK PREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSN KALPAPIEKTISKAKGQPREPQVYITLPPSRDELTK NQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP PVLDSGDSFFLYSKLTVDKSRWQQGNVFSQSVMHE ALHNHYTQKSLSLSPGK
40	IgG1 Fc N297G	N297G	DKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISR TPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTK PREEQYGSTYRVVSVLTVLHQDWLNGKEYKCKVSN KALPAPIEKTISKAKGQPREPQVYITLPPSRDELTK NQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP PVLDSGDSFFLYSKLTVDKSRWQQGNVFSQSVMHE ALHNHYTQKSLSLSPGK
41	IgG1 Fc LALAPG	L234A/L235 A/P329G	DKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISR TPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTK PREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSN KALGAPIEKTISKAKGQPREPQVYITLPPSRDELTK NQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP PVLDSGDSFFLYSKLTVDKSRWQQGNVFSQSVMHE ALHNHYTQKSLSLSPGK
42	IgG1 Fc N297G Mut215	N297G/T30 7Q/Q311V/ A378V	DKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISR TPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTK PREEQYGSTYRVVSVLQVLHVDWLNGKEYKCKVSN KALPAPIEKTISKAKGQPREPQVYITLPPSRDELTK NQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP PVLDSGDSFFLYSKLTVDKSRWQQGNVFSQSVMHE ALHNHYTQKSLSLSPGK
43	IgG1 Fc LALAPG Mut215	L234A/L235 A/P329G/T3 07Q/Q311V/ A378V	DKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISR TPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTK PREEQYNSTYRVVSVLQVLHVDWLNGKEYKCKVSN KALGAPIEKTISKAKGQPREPQVYITLPPSRDELTK NQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP PVLDSGDSFFLYSKLTVDKSRWQQGNVFSQSVMHE ALHNHYTQKSLSLSPGK

44	IgG4 Fc S228P	S228P	ESKYGPPCPPCPAPEFLGGPSVFLFPPKPKDTLMI SRTPEVTCVVVDVSQEDPEVQFNWYVDGVEVHNAK TKPREEQFNSTYRVVSVLTVLHQDWLNGKEYKCKV SNKGLPSSIEKTIKAKGQPREPQVYTLPPSQEEM TKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT TPPVLDSDGSFFLYSRLTVDKSRWQEGNVFSCSV HEALHNHYTQKSLSLGLGK
45	IgG4 Fc S228P/R409 K	S228P/R409 K	ESKYGPPCPPCPAPEFLGGPSVFLFPPKPKDTLMI SRTPEVTCVVVDVSQEDPEVQFNWYVDGVEVHNAK TKPREEQFNSTYRVVSVLTVLHQDWLNGKEYKCKV SNKGLPSSIEKTIKAKGQPREPQVYTLPPSQEEM TKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT TPPVLDSDGSFFLYSKLTVDKSRWQEGNVFSCSV HEALHNHYTQKSLSLGLGK
46	IgG4 Fc S228P Mut215	S228P/T307 Q/Q311V/A 378V	ESKYGPPCPPCPAPEFLGGPSVFLFPPKPKDTLMI SRTPEVTCVVVDVSQEDPEVQFNWYVDGVEVHNAK TKPREEQFNSTYRVVSVLQVLHVDWLNGKEYKCKV SNKGLPSSIEKTIKAKGQPREPQVYTLPPSQEEM TKNQVSLTCLVKGFYPSDIVVEWESNGQPENNYKT TPPVLDSDGSFFLYSRLTVDKSRWQEGNVFSCSV HEALHNHYTQKSLSLGLGK
47	IgG4 Fc S228P/R409 K Mut215	S228P/R409 K/T307Q/Q 311V/A378 V	ESKYGPPCPPCPAPEFLGGPSVFLFPPKPKDTLMI SRTPEVTCVVVDVSQEDPEVQFNWYVDGVEVHNAK TKPREEQFNSTYRVVSVLQVLHVDWLNGKEYKCKV SNKGLPSSIEKTIKAKGQPREPQVYTLPPSQEEM TKNQVSLTCLVKGFYPSDIVVEWESNGQPENNYKT TPPVLDSDGSFFLYSKLTVDKSRWQEGNVFSCSV HEALHNHYTQKSLSLGLGK
1003	IgG1 Fc N297G m3 allotype		DKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISR TPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTK PREEQYGSTYRVVSVLTVLHQDWLNGKEYKCKVSN KALPAPIEKTISKAKGQPREPQVYTLPPSREEMTK NQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV MHEALHNHYTQKSLSLSPGK
Linkers			
48	(G4S)4 linker		GGGGSGGGSGGGSGGGGS
49	Linker v1		AGSGSGSGSGSPVPSTPPTNSSTPPTSPSPSAGS S
50	Linker v2		AGSGSGSGSGSPVPSTPPTPSPSTPPTSPSPSGGS GNSSGSGGS
51	Linker v3		AGSGNSGSGSGSGSGNSGSGSPVPSTPPTSPSP STPPTSPSPSAGS
52	Linker v4		AEAAAKEAAAKEAAAKEAAAKAGS
53	Linker v5		GTTPNPPASSSTTGSSSTPTNPPAGS
54	Linker v6		AGSPGAGNGGNGGNPPPTTTTSSAPATTTTASAGS
55	Linker v7		GGGSAGGGSAGGGSAGGGSAGS
Exemplary IL-2-Fc Fusion Proteins (IgG1 Fc N297G)			

56	IL2 C125S fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMI L N G I N N Y K N P K</p> <p>L T R M L T F K F Y M P K K A T E L K H L Q C L E E E L K P L E E V L</p> <p>N L A Q S K N F H L R P R D L I S N I N V I V L E L K G S E T T F M C</p> <p>E Y A D E T A T I V E F L N R W I T F S Q S I I S T L T G G G G S G G</p> <p>G G S G G G S G G G S D K T H T C P P C P A P E L L G G P S V F L</p> <p>F P P K P K D T L M I S R T P E V T C V V D V S H E D P E V K F N W</p> <p>Y V D G V E V H N A K T K P R E E Q Y G S T Y R V V S V L T V L H Q D</p> <p>W L N G K E Y K C K V S N K A L P A P I E K T I S K A K G Q P R E P Q</p> <p>V Y T L P P S R D E L T K N Q V S L T C L V K G F Y P S D I A V E W E</p> <p>S N G Q P E N N Y K T T P P V L D S D G S F F L Y S K L T V D K S R W</p> <p>Q Q G N V F S C S V M H E A L H N H Y T Q K S L S L S P G K</p>
57	Stabilized IL-2 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMI L N G I N N Y K N P K</p> <p>L T R M L T F K F Y M P K K A T E L K H L Q C L E E E L K P L E E A L</p> <p>N L A P S K N F H L R P R D L I S N I N V I V L E L K G S E T T F M C</p> <p>E Y A D E T A T I V E F L N R W I T F S Q S I I S T L T G G G G S G G</p> <p>G G S G G G S G G G S D K T H T C P P C P A P E L L G G P S V F L</p> <p>F P P K P K D T L M I S R T P E V T C V V D V S H E D P E V K F N W</p> <p>Y V D G V E V H N A K T K P R E E Q Y G S T Y R V V S V L T V L H Q D</p> <p>W L N G K E Y K C K V S N K A L P A P I E K T I S K A K G Q P R E P Q</p> <p>V Y T L P P S R D E L T K N Q V S L T C L V K G F Y P S D I A V E W E</p> <p>S N G Q P E N N Y K T T P P V L D S D G S F F L Y S K L T V D K S R W</p> <p>Q Q G N V F S C S V M H E A L H N H Y T Q K S L S L S P G K</p>
58	IL2-037 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMI L N G I N N Y K N P K</p> <p>L T R M L T F K F Y M P K K A T E L K H L Q C L E E E L K P L E E A L</p> <p>N L A P S K N F H L R P R D L I S N I N V I V L E L K G S E T T F M C</p> <p>E Y A D E T A T I V E F L N R W I T F S Q S I I S T L T G G G G S G G</p> <p>G G S G G G S G G G S D K T H T C P P C P A P E L L G G P S V F L</p> <p>F P P K P K D T L M I S R T P E V T C V V D V S H E D P E V K F N W</p> <p>Y V D G V E V H N A K T K P R E E Q Y G S T Y R V V S V L T V L H Q D</p> <p>W L N G K E Y K C K V S N K A L P A P I E K T I S K A K G Q P R E P Q</p> <p>V Y T L P P S R D E L T K N Q V S L T C L V K G F Y P S D I A V E W E</p> <p>S N G Q P E N N Y K T T P P V L D S D G S F F L Y S K L T V D K S R W</p> <p>Q Q G N V F S C S V M H E A L H N H Y T Q K S L S L S P G K</p>
59	IL2-062 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMI L N G I N N Y K N P K</p> <p>L T R M L T F K F Y M P K K A T E L K H L Q C L E E E L K P L E E A L</p> <p>N L A P S K N F H L R P R D L I S N I N V I V L E L K G S E T T F M C</p> <p>E Y A D E T A T I V E F L N R W I T F S Q S I I S T L T G G G G S G G</p> <p>G G S G G G S G G G S D K T H T C P P C P A P E L L G G P S V F L</p> <p>F P P K P K D T L M I S R T P E V T C V V D V S H E D P E V K F N W</p> <p>Y V D G V E V H N A K T K P R E E Q Y G S T Y R V V S V L T V L H Q D</p> <p>W L N G K E Y K C K V S N K A L P A P I E K T I S K A K G Q P R E P Q</p> <p>V Y T L P P S R D E L T K N Q V S L T C L V K G F Y P S D I A V E W E</p> <p>S N G Q P E N N Y K T T P P V L D S D G S F F L Y S K L T V D K S R W</p> <p>Q Q G N V F S C S V M H E A L H N H Y T Q K S L S L S P G K</p>
60	IL2-118 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMI L N G I N N Y K N P K</p> <p>L T R M L T F K F Y M P K K A T E L K H L Q C L E E E L K P L E E A L</p> <p>N L A P S K N F H L R P R D L I S N I N V I V L E L K G S E T T F M C</p> <p>E Y A D E T A T I V E F L N R W I T F S Q S I I S T L T G G G G S G G</p> <p>G G S G G G S G G G S D K T H T C P P C P A P E L L G G P S V F L</p> <p>F P P K P K D T L M I S R T P E V T C V V D V S H E D P E V K F N W</p> <p>Y V D G V E V H N A K T K P R E E Q Y G S T Y R V V S V L T V L H Q D</p> <p>W L N G K E Y K C K V S N K A L P A P I E K T I S K A K G Q P R E P Q</p> <p>V Y T L P P S R D E L T K N Q V S L T C L V K G F Y P S D I A V E W E</p> <p>S N G Q P E N N Y K T T P P V L D S D G S F F L Y S K L T V D K S R W</p> <p>Q Q G N V F S C S V M H E A L H N H Y T Q K S L S L S P G K</p>

61	IL2-035 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGTNNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
62	IL2-073 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
63	IL2-077 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLIRNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
64	IL2-043 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISLINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
65	IL2-036 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISSINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>

66	IL2-068 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
67	IL2-106 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
68	IL2-107 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
69	IL2-119 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
70	K35E/D84V mutein fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>

71	IL2-115 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
72	IL2-109 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
73	IL2-113 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
74	IL2-120 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
75	R38Q/D84V mutein fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>

76	IL2-116 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
77	IL2-088 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
78	IL2-097 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
79	R38N/H16L mutein fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
80	IL2-098 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>

81	IL2-100 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTMMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
82	IL2-090 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTMMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
83	IL2-092 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTKKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
84	IL2-110 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTQKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
85	IL2-Inactive fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTAKFAMPKKATELKHLQCLEEELKPLEEAL NGAPSKNFHLRPRDLISDINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>

86	IL2-99 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTMMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLIRNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
87	IL2-101 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEMMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
88	IL2-102 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEMMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
89	IL2-103 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEMMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLIRNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
90	IL2-104 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEMMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>

91	IL2-114 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLENLLLDLQMILNGINNYKNPK LTRMLTQKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
92	IL2-117 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTQKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
93	IL2-108 fused to IgG1 Fc N297G	<p>APTSSSTKKTQLQLENLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
1004	IL2-124 fused to IgG1 Fc N297G allotype m3	<p>APASSSTKKTQLQLENLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
1005	IL2-127 fused to IgG1 Fc N297G allotype m3	<p>APASSSTKKTQLQLELLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>

1006	IL2-130 fused to IgG1 Fc N297G allotype m3	APASSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1007	IL2-062 fused to IgG1 Fc N297G allotype m3	APTSSSTKKTQLQLENLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1008	IL2-118 fused to IgG1 Fc N297G allotype m3	APTSSSTKKTQLQLELLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1009	IL2-068 fused to IgG1 Fc N297G allotype m3	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQD WLNKKEYCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK
IL-2-Fc Fusion Proteins (IgG1 Fc LALAPG)		

94	IL2 C125S fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLCLEEEELKPLEEVL NLAQSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
95	Stabilized IL-2 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
96	IL2-037 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
97	IL2-062 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
98	IL2-118 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>

99	IL2-035 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGTNNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
100	IL2-073 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
101	IL2-077 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLIRNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
102	IL2-043 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISLINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
103	IL2-036 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISSINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>

104	IL2-068 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
105	IL2-106 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
106	IL2-107 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
107	IL2-119 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
108	K35E/D84V mutein fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>

109	IL2-115 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
110	IL2-109 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
111	IL2-113 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
112	IL2-120 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
113	R38Q/D84V mutein fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>

114	IL2-116 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTQMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCP PCAPEAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
115	IL2-088 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTNMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCP PCAPEAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
116	IL2-097 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTNMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCP PCAPEAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
117	R38N/H16L mutein fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTNMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCP PCAPEAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
118	IL2-098 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTNMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCP PCAPEAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>

119	IL2-100 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTMMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
120	IL2-090 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTMMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
121	IL2-092 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTKKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
122	IL2-110 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTQKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
123	IL2-Inactive fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTAKFAMPKKATELKHLCLEEEELKPLEEAL NGAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>

124	IL2-99 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTMMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLIRNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPAEAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
125	IL2-101 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEMMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPAEAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
126	IL2-102 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEMMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPAEAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
127	IL2-103 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEMMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLIRNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPAEAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
128	IL2-104 fused to IgG1 Fc LALAPG	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEMMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPAEAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>

129	IL2-114 fused to IgG1 Fc LALAPG	APTSSSTKKTQLQLENLLLDLQMILNGINNYKNPK LTRMLTQKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GSGGGGGSGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKGKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK
130	IL2-117 fused to IgG1 Fc LALAPG	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTQKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GSGGGGGSGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKGKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK
131	IL2-108 fused to IgG1 Fc LALAPG	APTSSSTKKTQLQLENLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GSGGGGGSGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNKGKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK
Exemplary IL-2-Fc Fusion Proteins (IgG1 Fc N297G Mut215)		
132	IL2 C125S fused to IgG1 Fc N297G Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLCLEEEELKPLEEVL NLAQSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GSGGGGGSGGGSDKTHTCPAPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKGKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIIVEWE SNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK

133	Stabilized IL-2 fused to IgG1 Fc N297G Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPPVLSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
134	IL2-037 fused to IgG1 Fc N297G Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPPVLSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
135	IL2-062 fused to IgG1 Fc N297G Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPPVLSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
136	IL2-118 fused to IgG1 Fc N297G Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPPVLSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
137	IL2-035 fused to IgG1 Fc N297G Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPPVLSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>

138	IL2-073 fused to IgG1 Fc N297G Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
139	IL2-077 fused to IgG1 Fc N297G Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLIRNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
140	IL2-043 fused to IgG1 Fc N297G Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISLINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
141	IL2-036 fused to IgG1 Fc N297G Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISSINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
142	IL2-068 fused to IgG1 Fc N297G Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>

143	IL2-106 fused to IgG1 Fc N297G Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
144	IL2-107 fused to IgG1 Fc N297G Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
145	IL2-119 fused to IgG1 Fc N297G Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
146	K35E/D84V mutein fused to IgG1 Fc N297G Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
147	IL2-115 fused to IgG1 Fc N297G Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>

148	IL2-109 fused to IgG1 Fc N297G Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK
149	IL2-113 fused to IgG1 Fc N297G Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK
150	IL2-120 fused to IgG1 Fc N297G Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK
151	R38Q/D84V mutein fused to IgG1 Fc N297G Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK
152	IL2-116 fused to IgG1 Fc N297G Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK

153	IL2-088 fused to IgG1 Fc N297G Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GSGGGGGSGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPPVLSDGSFFLYSKLTVDKSRW QQGNVFSCSVMEALHNHYTQKSLSLSPGK</p>
154	IL2-097 fused to IgG1 Fc N297G Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GSGGGGGSGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPPVLSDGSFFLYSKLTVDKSRW QQGNVFSCSVMEALHNHYTQKSLSLSPGK</p>
155	R38N/H16L mutein fused to IgG1 Fc N297G Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GSGGGGGSGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPPVLSDGSFFLYSKLTVDKSRW QQGNVFSCSVMEALHNHYTQKSLSLSPGK</p>
156	IL2-098 fused to IgG1 Fc N297G Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GSGGGGGSGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPPVLSDGSFFLYSKLTVDKSRW QQGNVFSCSVMEALHNHYTQKSLSLSPGK</p>
157	IL2-100 fused to IgG1 Fc N297G Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GSGGGGGSGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPPVLSDGSFFLYSKLTVDKSRW QQGNVFSCSVMEALHNHYTQKSLSLSPGK</p>

158	IL2-090 fused to IgG1 Fc N297G Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEM LTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
159	IL2-092 fused to IgG1 Fc N297G Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTKKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
160	IL2-110 fused to IgG1 Fc N297G Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTQKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
161	IL2-Inactive fused to IgG1 Fc N297G Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTAKFAMPKKATELKHLCLEEEELKPLEEAL NGAPSKNFHLRPRDLISDINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
162	IL2-99 fused to IgG1 Fc N297G Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLIRNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>

163	IL2-101 fused to IgG1 Fc N297G Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEM LTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK
164	IL2-102 fused to IgG1 Fc N297G Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEM LTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK
165	IL2-103 fused to IgG1 Fc N297G Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEM LTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLIRNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK
166	IL2-104 fused to IgG1 Fc N297G Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEM LTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK
167	IL2-114 fused to IgG1 Fc N297G Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTQKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK

168	IL2-117 fused to IgG1 Fc N297G Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTQKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK
169	IL2-108 fused to IgG1 Fc N297G Mut215	APTSSSTKKTQLQLENLLLDLQMILNGINNYKNPE LTNMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYGSTYRVVSVLQVLHVD WLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK
Exemplary IL-2-Fc Fusion Proteins (IgG1 Fc LALAPG Mut215)		
170	IL2 C125S fused to IgG1 Fc LALAPG Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLCLEEEELKPLEEVL NLAQSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPPEAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVLHVD WLNKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK
171	Stabilized IL-2 fused to IgG1 Fc LALAPG Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPPEAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVLHVD WLNKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK

172	IL2-037 fused to IgG1 Fc LALAPG Mut215	APTSSSTKKTQLQLEDLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAEAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK
173	IL2-062 fused to IgG1 Fc LALAPG Mut215	APTSSSTKKTQLQLENLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAEAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK
174	IL2-118 fused to IgG1 Fc LALAPG Mut215	APTSSSTKKTQLQLELLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAEAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK
175	IL2-035 fused to IgG1 Fc LALAPG Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGTNNYKNPK LTRMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAEAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK
176	IL2-073 fused to IgG1 Fc LALAPG Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAEAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVLHVD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDII VVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK

177	IL2-077 fused to IgG1 Fc LALAPG Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLIRNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
178	IL2-043 fused to IgG1 Fc LALAPG Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISLINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
179	IL2-036 fused to IgG1 Fc LALAPG Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISSINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
180	IL2-068 fused to IgG1 Fc LALAPG Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
181	IL2-106 fused to IgG1 Fc LALAPG Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>

182	IL2-107 fused to IgG1 Fc LALAPG Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
183	IL2-119 fused to IgG1 Fc LALAPG Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
184	K35E/D84V mutein fused to IgG1 Fc LALAPG Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
185	IL2-115 fused to IgG1 Fc LALAPG Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
186	IL2-109 fused to IgG1 Fc LALAPG Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>

187	IL2-113 fused to IgG1 Fc LALAPG Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
188	IL2-120 fused to IgG1 Fc LALAPG Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
189	R38Q/D84V mutein fused to IgG1 Fc LALAPG Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
190	IL2-116 fused to IgG1 Fc LALAPG Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
191	IL2-088 fused to IgG1 Fc LALAPG Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>

192	IL2-097 fused to IgG1 Fc LALAPG Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
193	R38N/H16L mutein fused to IgG1 Fc LALAPG Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
194	IL2-098 fused to IgG1 Fc LALAPG Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
195	IL2-100 fused to IgG1 Fc LALAPG Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
196	IL2-090 fused to IgG1 Fc LALAPG Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEMMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>

197	IL2-092 fused to IgG1 Fc LALAPG Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTKKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK
198	IL2-110 fused to IgG1 Fc LALAPG Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTQKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK
199	IL2-Inactive fused to IgG1 Fc LALAPG Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTAKFAMPKKATELKHLCLEELKPLEEAL NGAPSKNFHLRPRDLISDINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK
200	IL2-99 fused to IgG1 Fc LALAPG Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLIRNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK
201	IL2-101 fused to IgG1 Fc LALAPG Mut215	APTSSSTKKTQLQLENLLLDLQMILNGINNYKNPK LTEMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK

202	IL2-102 fused to IgG1 Fc LALAPG Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
203	IL2-103 fused to IgG1 Fc LALAPG Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLIRNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
204	IL2-104 fused to IgG1 Fc LALAPG Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
205	IL2-114 fused to IgG1 Fc LALAPG Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTQKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
206	IL2-117 fused to IgG1 Fc LALAPG Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTQKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGGGGSDKTHTCPAPAPAAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVHLVD WLNKKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYTLPPSRDELTKNQVSLTCLVKGFYPSDIIVVEWE SNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>

207	IL2-108 fused to IgG1 Fc LALAPG Mut215	APTSSSTKKTQLQLENLLLDLQMILNGINNYKNPE LTNMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSDKTHTCPPEPAEAAGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPREEQYNSTYRVVSVLQVLHVD WLNKGKEYKCKVSNKALGAPIEKTISKAKGQPREPQ VYITLPPSRDELTKNQVSLTCLVKGFYPSDIVEWE SNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRW QQGNVFSCSVMHEALHNHYTQKSLSLSPGK
Exemplary IL-2-Fc Fusion Proteins (IgG4 Fc S228P)		
208	IL2 C125S fused to IgG4 Fc S228P	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLCLEEEELKPLEEVL NLAQSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNKGKEYKCKVSNKGLPSSIEKTISKAKGQPRE PQVYITLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMHEALHNHYTQKSLSLSLGK
209	Stabilized IL-2 fused to IgG4 Fc S228P	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNKGKEYKCKVSNKGLPSSIEKTISKAKGQPRE PQVYITLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMHEALHNHYTQKSLSLSLGK
210	IL2-037 fused to IgG4 Fc S228P	APTSSSTKKTQLQLEDLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNKGKEYKCKVSNKGLPSSIEKTISKAKGQPRE PQVYITLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMHEALHNHYTQKSLSLSLGK

211	IL2-062 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK</p> <p>LTRMLTFKFYMPKKATELKHLCLEEEELKPLEEAL</p> <p>NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC</p> <p>EYADETATIVEEFLNRWITFSQSIISTLTGGGGSGG</p> <p>GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV</p> <p>FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF</p> <p>NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH</p> <p>QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE</p> <p>PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE</p> <p>WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS</p> <p>RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK</p>
212	IL2-118 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK</p> <p>LTRMLTFKFYMPKKATELKHLCLEEEELKPLEEAL</p> <p>NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC</p> <p>EYADETATIVEEFLNRWITFSQSIISTLTGGGGSGG</p> <p>GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV</p> <p>FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF</p> <p>NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH</p> <p>QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE</p> <p>PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE</p> <p>WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS</p> <p>RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK</p>
213	IL2-035 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK</p> <p>LTRMLTFKFYMPKKATELKHLCLEEEELKPLEEAL</p> <p>NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC</p> <p>EYADETATIVEEFLNRWITFSQSIISTLTGGGGSGG</p> <p>GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV</p> <p>FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF</p> <p>NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH</p> <p>QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE</p> <p>PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE</p> <p>WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS</p> <p>RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK</p>
214	IL2-073 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK</p> <p>LTRMLTFKFYMPKKATELKHLCLEEEELKPLEEAL</p> <p>NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC</p> <p>EYADETATIVEEFLNRWITFSQSIISTLTGGGGSGG</p> <p>GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV</p> <p>FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF</p> <p>NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH</p> <p>QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE</p> <p>PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE</p> <p>WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS</p> <p>RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK</p>
215	IL2-077 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK</p> <p>LTRMLTFKFYMPKKATELKHLCLEEEELKPLEEAL</p> <p>NLAPSKNFHLRPRDLIRNINVIVLELKGSETTFMC</p> <p>EYADETATIVEEFLNRWITFSQSIISTLTGGGGSGG</p> <p>GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV</p> <p>FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF</p> <p>NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH</p> <p>QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE</p> <p>PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE</p> <p>WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS</p> <p>RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK</p>

216	IL2-043 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK</p> <p>LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL</p> <p>NLAPSKNFHLRPRDLISLINVIVLELKGSETTFMC</p> <p>EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG</p> <p>GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV</p> <p>FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF</p> <p>NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH</p> <p>QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE</p> <p>PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE</p> <p>WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS</p> <p>RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>
217	IL2-036 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK</p> <p>LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL</p> <p>NLAPSKNFHLRPRDLISSINVIVLELKGSETTFMC</p> <p>EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG</p> <p>GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV</p> <p>FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF</p> <p>NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH</p> <p>QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE</p> <p>PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE</p> <p>WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS</p> <p>RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>
218	IL2-068 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK</p> <p>LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL</p> <p>NLAPSKNFHLRPRDLISNINVSIVLELKGSETTFMC</p> <p>EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG</p> <p>GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV</p> <p>FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF</p> <p>NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH</p> <p>QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE</p> <p>PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE</p> <p>WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS</p> <p>RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>
219	IL2-106 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPE</p> <p>LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL</p> <p>NLAPSKNFHLRPRDLISNINVSIVLELKGSETTFMC</p> <p>EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG</p> <p>GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV</p> <p>FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF</p> <p>NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH</p> <p>QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE</p> <p>PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE</p> <p>WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS</p> <p>RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>
220	IL2-107 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPE</p> <p>LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL</p> <p>NLAPSKNFHLRPRDLISNINVSIVLELKGSETTFMC</p> <p>EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG</p> <p>GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV</p> <p>FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF</p> <p>NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH</p> <p>QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE</p> <p>PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE</p> <p>WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS</p> <p>RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>

221	IL2-119 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLELLLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>
222	K35E/D84V mutein fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>
223	IL2-115 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>
224	IL2-109 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>
225	IL2-113 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>

226	IL2-120 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTQMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>
227	R38Q/D84V mutein fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTQMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>
228	IL2-116 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTQMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>
229	IL2-088 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTNMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>
230	IL2-097 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTNMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>

231	R38N/H16L mutein fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTNMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>
232	IL2-098 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTNMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>
233	IL2-100 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTNMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>
234	IL2-090 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTEM LTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>
235	IL2-092 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTRMLTKKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>

236	IL2-110 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTQKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>
237	IL2-Inactive fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTAKFAMPKKATELKHLCLEEEELKPLEEAL NGAPSKNFHLRPRDLISDINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>
238	IL2-99 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLIRNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>
239	IL2-101 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>
240	IL2-102 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEMLTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>

241	IL2-103 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTEM LTFKFYMPKKATEL KHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLIRNINVI VLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSV MHEALHNHYTQKSLSLGLK</p>
242	IL2-104 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTEM LTFKFYMPKKATEL KHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVS VLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSV MHEALHNHYTQKSLSLGLK</p>
243	IL2-114 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTRMLTQKFYMPKKATEL KHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVI VLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSV MHEALHNHYTQKSLSLGLK</p>
244	IL2-117 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTRMLTQKFYMPKKATEL KHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVS VLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSV MHEALHNHYTQKSLSLGLK</p>
245	IL2-108 fused to IgG4 Fc S228P	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTNMLTQKFYMPKKATEL KHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVI VLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSV MHEALHNHYTQKSLSLGLK</p>

Exemplary IL-2-Fc Fusion Proteins (IgG4 Fc S228P/R409K)		
246	IL2 C125S fused to IgG4 Fc S228P/R409K	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEEELKPLEEVL NLAQSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK
247	Stabilized IL-2 fused to IgG4 Fc S228P/R409K	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK
248	IL2-037 fused to IgG4 Fc S228P/R409K	APTSSSTKKTQLQLEDLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK
249	IL2-062 fused to IgG4 Fc S228P/R409K	APTSSSTKKTQLQLENLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK

250	IL2-118 fused to IgG4 Fc S228P/R409K	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYITLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>
251	IL2-035 fused to IgG4 Fc S228P/R409K	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYITLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>
252	IL2-073 fused to IgG4 Fc S228P/R409K	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYITLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>
253	IL2-077 fused to IgG4 Fc S228P/R409K	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLIRNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYITLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>
254	IL2-043 fused to IgG4 Fc S228P/R409K	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISLINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYITLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>

255	IL2-036 fused to IgG4 Fc S228P/R409K	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISSINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYITLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>
256	IL2-068 fused to IgG4 Fc S228P/R409K	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYITLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>
257	IL2-106 fused to IgG4 Fc S228P/R409K	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYITLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>
258	IL2-107 fused to IgG4 Fc S228P/R409K	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYITLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>
259	IL2-119 fused to IgG4 Fc S228P/R409K	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYITLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>

260	K35E/D84V mutein fused to IgG4 Fc S228P/R409K	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYITLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>
261	IL2-115 fused to IgG4 Fc S228P/R409K	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYITLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>
262	IL2-109 fused to IgG4 Fc S228P/R409K	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYITLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>
263	IL2-113 fused to IgG4 Fc S228P/R409K	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYITLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>
264	IL2-120 fused to IgG4 Fc S228P/R409K	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYITLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>

265	R38Q/D84V mutein fused to IgG4 Fc S228P/R409K	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>
266	IL2-116 fused to IgG4 Fc S228P/R409K	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>
267	IL2-088 fused to IgG4 Fc S228P/R409K	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>
268	IL2-097 fused to IgG4 Fc S228P/R409K	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>
269	R38N/H16L mutein fused to IgG4 Fc S228P/R409K	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>

270	IL2-098 fused to IgG4 Fc S228P/R409K	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK
271	IL2-100 fused to IgG4 Fc S228P/R409K	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK
272	IL2-090 fused to IgG4 Fc S228P/R409K	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEMMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK
273	IL2-092 fused to IgG4 Fc S228P/R409K	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTKKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK
274	IL2-110 fused to IgG4 Fc S228P/R409K	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTQKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK

275	IL2-Inactive fused to IgG4 Fc S228P/R409K	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK</p> <p>LTRMLTAKFAMPKKATELKHLCLEELKPLEEAL</p> <p>NGAPSKNFHLRPRDLISDINVIVLELKGSETTFMC</p> <p>EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG</p> <p>GGSGGGSGGGGSESKEYGPCPPCPAPEFLGGPSV</p> <p>FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF</p> <p>NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH</p> <p>QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE</p> <p>PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE</p> <p>WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS</p> <p>RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK</p>
276	IL2-99 fused to IgG4 Fc S228P/R409K	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK</p> <p>LTNMLTFKFYMPKKATELKHLCLEELKPLEEAL</p> <p>NLAPSKNFHLRPRDLIRNINVIVLELKGSETTFMC</p> <p>EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG</p> <p>GGSGGGSGGGGSESKEYGPCPPCPAPEFLGGPSV</p> <p>FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF</p> <p>NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH</p> <p>QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE</p> <p>PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE</p> <p>WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS</p> <p>RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK</p>
277	IL2-101 fused to IgG4 Fc S228P/R409K	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK</p> <p>LTEMLTFKFYMPKKATELKHLCLEELKPLEEAL</p> <p>NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC</p> <p>EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG</p> <p>GGSGGGSGGGGSESKEYGPCPPCPAPEFLGGPSV</p> <p>FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF</p> <p>NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH</p> <p>QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE</p> <p>PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE</p> <p>WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS</p> <p>RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK</p>
278	IL2-102 fused to IgG4 Fc S228P/R409K	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK</p> <p>LTEMLTFKFYMPKKATELKHLCLEELKPLEEAL</p> <p>NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC</p> <p>EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG</p> <p>GGSGGGSGGGGSESKEYGPCPPCPAPEFLGGPSV</p> <p>FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF</p> <p>NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH</p> <p>QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE</p> <p>PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE</p> <p>WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS</p> <p>RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK</p>
279	IL2-103 fused to IgG4 Fc S228P/R409K	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK</p> <p>LTEMLTFKFYMPKKATELKHLCLEELKPLEEAL</p> <p>NLAPSKNFHLRPRDLIRNINVIVLELKGSETTFMC</p> <p>EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG</p> <p>GGSGGGSGGGGSESKEYGPCPPCPAPEFLGGPSV</p> <p>FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF</p> <p>NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH</p> <p>QDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE</p> <p>PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE</p> <p>WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS</p> <p>RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK</p>

280	IL2-104 fused to IgG4 Fc S228P/R409K	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEMMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK
281	IL2-114 fused to IgG4 Fc S228P/R409K	APTSSSTKKTQLQLENLLLDLQMILNGINNYKNPK LTRMLTQKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK
282	IL2-117 fused to IgG4 Fc S228P/R409K	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTQKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK
283	IL2-108 fused to IgG4 Fc S228P/R409K	APTSSSTKKTQLQLENLLLDLQMILNGINNYKNPE LTNMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK
Exemplary IL-2-Fc Fusion Proteins (IgG4 Fc S228P Mut215)		

284	IL2 C125S fused to IgG4 Fc S228P Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK</p> <p>LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEVL</p> <p>NLAQSKNFHLRPRDLISNINVIVLELKGSETTFMC</p> <p>EYADETATIVEEFLNRWITFSQSIISTLTGGGGSGG</p> <p>GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV</p> <p>FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF</p> <p>NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH</p> <p>VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE</p> <p>PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE</p> <p>WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS</p> <p>RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>
285	Stabilized IL-2 fused to IgG4 Fc S228P Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK</p> <p>LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL</p> <p>NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC</p> <p>EYADETATIVEEFLNRWITFSQSIISTLTGGGGSGG</p> <p>GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV</p> <p>FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF</p> <p>NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH</p> <p>VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE</p> <p>PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE</p> <p>WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS</p> <p>RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>
286	IL2-037 fused to IgG4 Fc S228P Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK</p> <p>LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL</p> <p>NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC</p> <p>EYADETATIVEEFLNRWITFSQSIISTLTGGGGSGG</p> <p>GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV</p> <p>FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF</p> <p>NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH</p> <p>VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE</p> <p>PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE</p> <p>WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS</p> <p>RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>
287	IL2-062 fused to IgG4 Fc S228P Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK</p> <p>LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL</p> <p>NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC</p> <p>EYADETATIVEEFLNRWITFSQSIISTLTGGGGSGG</p> <p>GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV</p> <p>FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF</p> <p>NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH</p> <p>VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE</p> <p>PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE</p> <p>WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS</p> <p>RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>
288	IL2-118 fused to IgG4 Fc S228P Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK</p> <p>LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL</p> <p>NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC</p> <p>EYADETATIVEEFLNRWITFSQSIISTLTGGGGSGG</p> <p>GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV</p> <p>FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF</p> <p>NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH</p> <p>VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE</p> <p>PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE</p> <p>WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS</p> <p>RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>

289	IL2-035 fused to IgG4 Fc S228P Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGTNNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>
290	IL2-073 fused to IgG4 Fc S228P Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>
291	IL2-077 fused to IgG4 Fc S228P Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLIRNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>
292	IL2-043 fused to IgG4 Fc S228P Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISLINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>
293	IL2-036 fused to IgG4 Fc S228P Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISSINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>

294	IL2-068 fused to IgG4 Fc S228P Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK</p> <p>LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL</p> <p>NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC</p> <p>EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG</p> <p>GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV</p> <p>FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF</p> <p>NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH</p> <p>VDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE</p> <p>PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE</p> <p>WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS</p> <p>RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK</p>
295	IL2-106 fused to IgG4 Fc S228P Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPE</p> <p>LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL</p> <p>NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC</p> <p>EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG</p> <p>GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV</p> <p>FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF</p> <p>NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH</p> <p>VDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE</p> <p>PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE</p> <p>WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS</p> <p>RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK</p>
296	IL2-107 fused to IgG4 Fc S228P Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPE</p> <p>LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL</p> <p>NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC</p> <p>EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG</p> <p>GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV</p> <p>FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF</p> <p>NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH</p> <p>VDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE</p> <p>PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE</p> <p>WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS</p> <p>RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK</p>
297	IL2-119 fused to IgG4 Fc S228P Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPE</p> <p>LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL</p> <p>NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC</p> <p>EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG</p> <p>GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV</p> <p>FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF</p> <p>NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH</p> <p>VDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE</p> <p>PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE</p> <p>WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS</p> <p>RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK</p>
298	K35E/D84V mutein fused to IgG4 Fc S228P Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPE</p> <p>LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL</p> <p>NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC</p> <p>EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG</p> <p>GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV</p> <p>FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF</p> <p>NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH</p> <p>VDWLNGKEYKCKVSNKGLPSSIEKTI SKAKGQPRE</p> <p>PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE</p> <p>WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS</p> <p>RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK</p>

299	IL2-115 fused to IgG4 Fc S228P Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>
300	IL2-109 fused to IgG4 Fc S228P Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>
301	IL2-113 fused to IgG4 Fc S228P Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>
302	IL2-120 fused to IgG4 Fc S228P Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>
303	R38Q/D84V mutein fused to IgG4 Fc S228P Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMI LNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTI SKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLK</p>

304	IL2-116 fused to IgG4 Fc S228P Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK
305	IL2-088 fused to IgG4 Fc S228P Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK
306	IL2-097 fused to IgG4 Fc S228P Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK
307	R38N/H16L mutein fused to IgG4 Fc S228P Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK
308	IL2-098 fused to IgG4 Fc S228P Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK

309	IL2-100 fused to IgG4 Fc S228P Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK
310	IL2-090 fused to IgG4 Fc S228P Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEMMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK
311	IL2-092 fused to IgG4 Fc S228P Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTKKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK
312	IL2-110 fused to IgG4 Fc S228P Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTQKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK
313	IL2-Inactive fused to IgG4 Fc S228P Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTAKFAMPKKATELKHLQCLEEELKPLEEAL NGAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK

314	IL2-99 fused to IgG4 Fc S228P Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLIRNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK
315	IL2-101 fused to IgG4 Fc S228P Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEMMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK
316	IL2-102 fused to IgG4 Fc S228P Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEMMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK
317	IL2-103 fused to IgG4 Fc S228P Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEMMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLIRNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK
318	IL2-104 fused to IgG4 Fc S228P Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEMMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK

319	IL2-114 fused to IgG4 Fc S228P Mut215	APTSSSTKKTQLQLENNLLDLQMILNGINNYKNPK LTRMLTQKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK
320	IL2-117 fused to IgG4 Fc S228P Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTQKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK
321	IL2-108 fused to IgG4 Fc S228P Mut215	APTSSSTKKTQLQLENNLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSRLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK
Exemplary IL-2-Fc Fusion Proteins (IgG4 Fc S228P/R409K Mut215)		
322	IL2 C125S fused to IgG4 Fc S228P/R409K Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEVL NLAQSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK

323	Stabilized IL-2 fused to IgG4 Fc S228P/R409K Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>
324	IL2-037 fused to IgG4 Fc S228P/R409K Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>
325	IL2-062 fused to IgG4 Fc S228P/R409K Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>
326	IL2-118 fused to IgG4 Fc S228P/R409K Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>
327	IL2-035 fused to IgG4 Fc S228P/R409K Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK</p>

328	IL2-073 fused to IgG4 Fc S228P/R409K Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK
329	IL2-077 fused to IgG4 Fc S228P/R409K Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLIRNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK
330	IL2-043 fused to IgG4 Fc S228P/R409K Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISLINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK
331	IL2-036 fused to IgG4 Fc S228P/R409K Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISSINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK
332	IL2-068 fused to IgG4 Fc S228P/R409K Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK

333	IL2-106 fused to IgG4 Fc S228P/R409K Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK
334	IL2-107 fused to IgG4 Fc S228P/R409K Mut215	APTSSSTKKTQLQLENLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK
335	IL2-119 fused to IgG4 Fc S228P/R409K Mut215	APTSSSTKKTQLQLELLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK
336	K35E/D84V mutein fused to IgG4 Fc S228P/R409K Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK
337	IL2-115 fused to IgG4 Fc S228P/R409K Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPE LTRMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK

338	IL2-109 fused to IgG4 Fc S228P/R409K Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK
339	IL2-113 fused to IgG4 Fc S228P/R409K Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK
340	IL2-120 fused to IgG4 Fc S228P/R409K Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK
341	R38Q/D84V mutein fused to IgG4 Fc S228P/R409K Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK
342	IL2-116 fused to IgG4 Fc S228P/R409K Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTQMLTFKFYMPKKATELKHLQCLEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK

343	IL2-088 fused to IgG4 Fc S228P/R409K Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK</p>
344	IL2-097 fused to IgG4 Fc S228P/R409K Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK</p>
345	R38N/H16L mutein fused to IgG4 Fc S228P/R409K Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK</p>
346	IL2-098 fused to IgG4 Fc S228P/R409K Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK</p>
347	IL2-100 fused to IgG4 Fc S228P/R409K Mut215	<p>APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK</p>

348	IL2-090 fused to IgG4 Fc S228P/R409K Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEM LTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK
349	IL2-092 fused to IgG4 Fc S228P/R409K Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTKKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK
350	IL2-110 fused to IgG4 Fc S228P/R409K Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTQKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK
351	IL2-Inactive fused to IgG4 Fc S228P/R409K Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTAKFAMPKKATELKHLCLEELKPLEEAL NGAPSKNFHLRPRDLISDINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK
352	IL2-99 fused to IgG4 Fc S228P/R409K Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTNMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLIRNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLGLGK

353	IL2-101 fused to IgG4 Fc S228P/R409K Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEM LTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK
354	IL2-102 fused to IgG4 Fc S228P/R409K Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEM LTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRVLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK
355	IL2-103 fused to IgG4 Fc S228P/R409K Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEM LTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLIRNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK
356	IL2-104 fused to IgG4 Fc S228P/R409K Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTEM LTFKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVSLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK
357	IL2-114 fused to IgG4 Fc S228P/R409K Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTQKFYMPKKATELKHLCLEEEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGGGSGGGSESKEYGPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNGKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK

358	IL2-117 fused to IgG4 Fc S228P/R409K Mut215	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTQKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVSVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK
359	IL2-108 fused to IgG4 Fc S228P/R409K Mut215	APTSSSTKKTQLQLENLLLDLQMILNGINNYKNPE LTNMLTFKFYMPKKATELKHLCLEELKPLEEAL NLAPSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFSQSIISTLTGGGGSGG GGSGGGSGGGGSESKEYGPPCPPCPAPEFLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQF NWYVDGVEVHNAKTKPREEQFNSTYRVVSVLQVLH VDWLNKEYKCKVSNKGLPSSIEKTIISKAKGQPRE PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIVVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS RWQEGNVFSCSVMEALHNHYTQKSLSLSLGK
360	Wild type (WT) Human IL- 2 (Uniprot P60568); signal peptide underlined	MYRQQLLSIALSLALVTNSAPTSSSTKKTQLQLE HLLLDLQMILNGINNYKNPKLTRMLTFKFYMPKKA TELKHLCLEELKPLEEVLNLAQSKNFHLRPRDL ISNINVIVLELKGSETTFMCEYADETATIVEFLNR WITFCQSIISTLT
1031	Wild type (WT) Human IL- 2 (Uniprot P60568); signal peptide not included	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPK LTRMLTFKFYMPKKATELKHLCLEELKPLEEVL NLAQSKNFHLRPRDLISNINVIVLELKGSETTFMC EYADETATIVEFLNRWITFCQSIISTLT

TABLE 10: SEQUENCE LISTING (NUCLEOTIDE)

SEQ ID NO	Description	Substitutions	Sequence (nucleotide)
Exemplary IL-2 Variants (Muteins)			
361	IL2 C125S	C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGTATTGAATCTTGCTCAGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
362	Stabilized IL-2	V69A/Q74P/ C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG

			ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
363	IL2-037	H16D/V69A/ Q74P/C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGGATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
364	IL2-062	H16N/V69A/ Q74P/C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
365	IL2-118	H16L/V69A/ Q74P/C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
366	IL2-035	I28T/V69A/ Q74P/C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAACCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
367	IL2-073	V69A/Q74P/ D84V/C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTTCTGATAAGCAACATCAACGTG

			ATCGTCCTGGAAGTCAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
368	IL2-077	V69A/Q74P/ S87R/C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATACGTAACATCAACGTG ATCGTCCTGGAAGTCAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
369	IL2-043	V69A/Q74P/ N88L/C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCCTGATCAACGTG ATCGTCCTGGAAGTCAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
370	IL2-036	V69A/Q74P/ N88S/C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAGCATCAACGTG ATCGTCCTGGAAGTCAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
371	IL2-068	V69A/Q74P/ I92S/C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTCAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
372	IL2-106	K35E/V69A/ Q74P/C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG

			ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
373	IL2-107	K35E/H16N/ V69A/Q74P/ C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
374	IL2-119	K35E/H16L/ V69A/Q74P/ C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
375	K35E/D84 V mutein	K35E/D84V/ V69A/Q74P/ C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTGCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
376	IL2-115	K35E/I92S/V 69A/Q74P/C 125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
377	IL2-109	R38Q/V69A/ Q74P/C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCTAACTTACTCAGATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG

			ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
378	IL2-113	R38Q/H16N/ V69A/Q74P/ C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTCAGATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
379	IL2-120	R38Q/H16L/ V69A/Q74P/ C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTCAGATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
380	R38Q/D84 V mutein	R38Q/D84V/ V69A/Q74P/ C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTCAGATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTGCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
381	IL2-116	R38Q/192S/Q 74P/C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTCAGATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
382	IL2-088	R38N/V69A/ Q74P/C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAACATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG

			ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
383	IL2-097	R38N/H16N/ V69A/Q74P/ C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAACATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
384	R38N/H16 L mutein	R38N/H16L/ V69A/Q74P/ C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGTTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAACATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
385	IL2-098	R38N/D84V/ V69A/Q74P/ C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAACATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
386	IL2-100	R38N/192S/Q 74P/C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAACATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
387	IL2-090	R38E/V69A/ Q74P/C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG

			ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
388	IL2-092	F42K/V69A/ Q74P/C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGAAGAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
389	IL2-110	F42Q/V69A/ Q74P/C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGAGAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
390	IL2- Inactive	F42A/Y45A/ L72G/N88D/ V69A/Q74P/ C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGGCAAAGTTTGCTATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATGGTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCGATATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
391	IL2-99	R38N/S87R/ V69A/Q74P/ C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAACATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGGAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
392	IL2-101	R38E/H16N/ V69A/Q74P/ C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG

			ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
393	IL2-102	R38E/D84V/ V69A/Q74P/ C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTCCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
394	IL2-103	R38E/S87R/ V69A/Q74P/ C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGGAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
395	IL2-104	R38E/I92S/V 69A/Q74P/C 125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
396	IL2-114	F42Q/H16N/ V69A/Q74P/ C125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGCAGAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
397	IL2-117	F42Q/I92S/V 69A/Q74P/C 125S	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGCAGAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG

			AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
398	IL2-108	K35E/R38N/ H16N/V69A/ Q74P/C125S	GCCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAACATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
1010	IL2-124	T3A/H16N/ V69A/Q74P/ C125S	GCCCCCTGCATCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
1011	IL2-127	T3A/H16L/ V69A/Q74P/ I92S/C125S	GCCCCCTGCATCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
1012	IL2-130	T3A/V69A/Q 74P/C125S	GCCCCCTGCATCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT
Exemplary Fc Regions			

399	IgG1 Fc		GATAAAACTCATACGTGCCACCCTGCCCCGCACCGGAG CTGCTTGGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTGCGATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACAATTCTG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTGTGACCGTGGATATAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
400	IgG1 Fc N297G	N297G	GATAAAACTCATACGTGCCACCCTGCCCCGCACCGGAG CTGCTTGGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTGCGATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACGGTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTGTGACCGTGGATATAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
401	IgG1 Fc LALAPG	L234A/L235 A/P329G	GATAAAACTCATACGTGCCACCCTGCCCCGCACCGGAG GCAGCAGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTGCGATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACAATTCTG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTGTGACCGTGGATATAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA

402	IgG1 Fc N297G Mut215	N297G/T307 Q/Q311V/A3 78V	GATAAAACTCATACGTGCCACCCTGCCCCGCACCGGAG CTGCTTGGGGTCCCTTCCGTATTCTTGTTCGCGCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGATGAGGACCCGGAG GTCAAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACGGTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTGTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGTGGATTTCGGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
403	IgG1 Fc LALAPG Mut215	L234A/L235 A/P329G/T3 07Q/Q311V/ A378V	GATAAAACTCATACGTGCCACCCTGCCCCGCACCGGAG GCAGCAGGTGGTCCCTTCCGTATTCTTGTTCGCGCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGATGAGGACCCGGAG GTCAAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTGTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGTGGATTTCGGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
404	IgG4 Fc S228P	S228P	GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCTCGGCGGTCCCTCAGTGTTCCTGTTTCCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACAGCTTCCCTCCTTCTCAGGAGGAGATGACCAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA

405	IgG4 Fc S228P/R40 9K	S228P/R409 K	GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCTCGGCGGTCCCTTCAGTGTTTTTGTTC CCCAAACCTAAAGACACCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTCTGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
406	IgG4 Fc S228P Mut215	S228P/T307 Q/Q311V/A3 78V	GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCTCGGCGGTCCCTTCAGTGTTTTTGTTC CCCAAACCTAAAGACACCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTTCAGTCCTTACAGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCTGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
407	IgG4 Fc S228P/R40 9K Mut215	S228P/R409 K/T307Q/Q3 11V/A378V	GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCTCGGCGGTCCCTTCAGTGTTTTTGTTC CCCAAACCTAAAGACACCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTTCAGTCCTTACAGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCTGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA

1013	IgG1 Fc N297G m3 allotype	N297G	GATAAAACTCATACGTGCCACCCTGCCCCGCACCGGAG CTGCTTGGGGGTCCTTCCGTATTCTTGTTCGCGCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACGGTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGAAGAGATGACGAAAAACCAGGTG TCGCTCACTTGTGTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGTGGATTCCGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
Exemplary Linkers			
408	(G4S)4 linker (SEQ ID NO: 48)		GGTGGTGGAGGATCGGGAGGTGGAGGATCTGGAGGAGGA GGATCGGGTGGAGGAGGATCC
409	Linker v1		GCGGGCTCAGGCGGCTCAGGCGGAAGCGGCGGTCTCCA GTGCCTTCAACCCCTCCACCAATTCAAGCTCCACCCCA CCGACACCATCACCGTCAGCCTCTGGAAGC
410	Linker v2		GCAGGAAGTGGCGGATCCGGCGGTTCTGGTGGTTCTCCT GTGCCTTCTACTCCTCCAACTCCAGTCCGAGTACCCCA CCCACTCCGTCACCTTCCGGTGGTAGCGGTAATTCTAGT GGCAGTGGCGGATCA
411	Linker v3		GCAGGCTCTGGGAATTCATCCGGCTCTGGTGGAAAGTGGC GGGTCAAGTAATTCAAGCGGGTCTGGCGGTAGCCCTGTG CCATCCACACCGCCAACCTCCATCTCCCTCTACTCCTCCA ACGCCAAGCCCCCTCAGCATCCGGATCT
412	Linker v4		GCGGAAGCGGCGGCTAAAGAGGCAGCCGCTAAGGAAGCA GCCGCTAAGGAAGCGGCAGCGAAGGCTGGTAGC
413	Linker v5		GGCACCACCCCAAATCCCCCGGCCAGTAGCTCCACCACA GGCTCATCCACCCCAACGAACCCCCCGGCAGGTTCA
414	Linker v6		GCTGGGTACCTGGTGCTGGCAACGGTGGTAACAACGGT GGTAATCCTCCTCCCCGACTACCACGACTAGCAGCGCC CCGGCTACGACCACTACGGCGTCCGCAGGGTCA
415	Linker v7		GGCGGCGGTAGTGCCGGAGGGGGATCTGCCGGCGGTGGA TCAGCGGGTGGCGGCTCTGCGGGAAGC
Exemplary IL-2-Fc Fusion Proteins (IgG1 Fc N297G)			

416	IL2 C125S fused to IgG1 Fc N297G	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGTATTGAATCTTGCTCAGTCCAAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGACCCGGAG CTGCTTGGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGTGGATTGCGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CAGGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
417	Stabilized IL-2 fused to IgG1 Fc N297G	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGACCCGGAG CTGCTTGGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC

		AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
418	IL2-037 fused to IgG1 Fc N297G	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGGATCTTCTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATAACGTGCCCACCCTGCCCCGCACCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTGTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
419	IL2-062 fused to IgG1 Fc N297G	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAATCTTCTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATAACGTGCCCACCCTGCCCCGCACCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG

		AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTA TCTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
420	IL2-118 fused to IgG1 Fc N297G	GCCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCCACCCTGCCCCGCACCCGAG CTGCTTGGGGTCCCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGATGAGGACCCGAGT GTCAAGTTCAACTGGTATGTGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACGGTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTA TCTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
421	IL2-035 fused to IgG1 Fc N297G	GCCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAACCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCCACCCTGCCCCGCACCCGAG CTGCTTGGGGTCCCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG

		ACGTGCGTCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTCAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
422	IL2-073 fused to IgG1 Fc N297G	GCCCCACGTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTTCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTCAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA

423	IL2-077 fused to IgG1 Fc N297G	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATACGTAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGACCCGGAG CTGCTTGGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGTGGATTGCGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
424	IL2-043 fused to IgG1 Fc N297G	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCCTGATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGACCCGGAG CTGCTTGGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC

		AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
425	IL2-036 fused to IgG1 Fc N297G	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAAATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAGCATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCCACCTGCCCCGCACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
426	IL2-068 fused to IgG1 Fc N297G	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAAATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCCACCTGCCCCGCACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG

		AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTA TCTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
427	IL2-106 fused to IgG1 Fc N297G	GCCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCACCTGCCCCGCACCCGAG CTGCTTGGGGTCCCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGT ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGAG GTCAAGTTCAACTGGTATGTGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTA TCTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
428	IL2-107 fused to IgG1 Fc N297G	GCCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCACCTGCCCCGCACCCGAG CTGCTTGGGGTCCCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG

		ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
429	IL2-119 fused to IgG1 Fc N297G	GCCCCACGTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACCTTACTAGAATG CTCACGTTTAAAGTTTATATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA

430	K35E/D84V mutein fused to IgG1 Fc N297G	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTGCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTGCGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CAGGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
431	IL2-115 fused to IgG1 Fc N297G	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC

		AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
432	IL2-109 fused to IgG1 Fc N297G	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTCAGATG CTCACGTTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCCACCTGCCCCGCACCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACAGGTG TCGCTCACTTGTGTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
433	IL2-113 fused to IgG1 Fc N297G	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTCAGATG CTCACGTTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCCACCTGCCCCGCACCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG

		AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTA TCTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
434	IL2-120 fused to IgG1 Fc N297G	GCCCCCTACGTCTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTCAGATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCACCTGCCCCGCACCCGAG CTGCTTGGGGTCTCTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGT ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGAG GTCAAGTTCAACTGGTATGTGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACGGTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTA TCTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
435	R38Q/D84V mutein fused to IgG1 Fc N297G	GCCCCCTACGTCTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTCAGATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTGCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCACCTGCCCCGCACCCGAG CTGCTTGGGGTCTCTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG

		ACGTGCGTCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGGAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACC CGGAAA
436	IL2-116 fused to IgG1 Fc N297G	GCCCCACGTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTCAGATG CTCACGTTTAAAGTTTATATGCCCCAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCCGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGGAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACC CGGAAA

437	IL2-088 fused to IgG1 Fc N297G	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAACATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTCGCGCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTGGTGAAGGGTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGTGGATTGCGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
438	IL2-097 fused to IgG1 Fc N297G	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAACATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTCGCGCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTGGTGAAGGGTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC

		AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
439	R38N/H16L mutein fused to IgG1 Fc N297G	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGTTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAACATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCCACCCTGCCCCGCACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTGTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
440	IL2-098 fused to IgG1 Fc N297G	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAACATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCCACCCTGCCCCGCACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG

		AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTA TCTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
441	IL2-100 fused to IgG1 Fc N297G	GCCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAACATG CTCACGTTTAAAGTTTATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCCACCCTGCCCCGCACCCGAG CTGCTTGGGGTCTCTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGT ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACGGTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTA TCTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
442	IL2-090 fused to IgG1 Fc N297G	GCCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCCACCCTGCCCCGCACCCGAG CTGCTTGGGGTCTCTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG

		ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACGGTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
443	IL2-092 fused to IgG1 Fc N297G	GCCCTACGTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGAAGAAGTTTATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACGGTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA

444	IL2-110 fused to IgG1 Fc N297G	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGCAGAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCTGCCCACCTGCCCCGACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTCGCGCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTGGTGAAGGGTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGTGGATTGCGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCAGCCGGGAAA
445	IL2-Inactive fused to IgG1 Fc N297G	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGCAGAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATGGTGTCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCGATATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCTGCCCACCTGCCCCGACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTCGCGCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTGGTGAAGGGTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC

		AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
446	IL2-99 fused to IgG1 Fc N297G	GCCCCACGTCTCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAACATG CTCACGTTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGGAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCCACCTGCCCCGCACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
447	IL2-101 fused to IgG1 Fc N297G	GCCCCACGTCTCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTGAAATG CTCACGTTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCCACCTGCCCCGCACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG

		AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTA TCTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
448	IL2-102 fused to IgG1 Fc N297G	GCCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTCTTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCCACCCTGCCCCGCACCCGAG CTGCTTGGGGTCTCTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGT ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACGGTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTA TCTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
449	IL2-103 fused to IgG1 Fc N297G	GCCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGGAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCCACCCTGCCCCGCACCCGAG CTGCTTGGGGTCTCTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG

		ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGGAAGAACAGTACGGTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
450	IL2-104 fused to IgG1 Fc N297G	GCCCCACGTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTGAAATG CTCACGTTTAAAGTTTATATGCCCCAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCCGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGGAAGAACAGTACGGTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA

451	IL2-114 fused to IgG1 Fc N297G	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGCAGAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGACCCGGAG CTGCTTGGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGTGGATTGCGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
452	IL2-117 fused to IgG1 Fc N297G	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGCAGAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGACCCGGAG CTGCTTGGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC

		AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
453	IL2-108 fused to IgG1 Fc N297G	GCCCCACGTCTCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACCTACTAACATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTGTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
1014	IL2-124 fused to IgG1 Fc N297G allotype m3	GCCCCGTCATCTCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACTCTTCTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT GGTGGTGGAGGATCGGGAGGTGGAGGATCTGGAGGAGGA GGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG

		<p>GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGAAGAGATGACGAAAAACCAGGTG TCGCTCACTTGTGTTGGTGAAGGGTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGTGGATTTCGGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA</p>
1015	IL2-127 fused to IgG1 Fc N297G allotype m3	<p>GCCCCGTCATCCTCCTCAACTAAAAAGACGCAACTTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAACGAAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT GGTGGTGGAGGATCGGGAGGTGGAGGATCTGGAGGAGGA GGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCGGAG CTGCTTGGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTGCGATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGAAGAGATGACGAAAAACCAGGTG TCGCTCACTTGTGTTGGTGAAGGGTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGTGGATTTCGGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA</p>

1016	IL2-130 fused to IgG1 Fc N297G allotype m3	GCCCCGTCATCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAACCTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT GGTGGTGGAGGATCGGGAGGTGGAGGATCTGGAGGAGGA GGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCTGCCCCACCTGCCCCGCACCGGAG CTGCTTGGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACGGTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGAAGAGATGACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTGCGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
1017	IL2-062 fused to IgG1 Fc N297G allotype m3	GCCCCTACGTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAACCTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT GGTGGTGGAGGATCGGGAGGTGGAGGATCTGGAGGAGGA GGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCTGCCCCACCTGCCCCGCACCGGAG CTGCTTGGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACGGTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGAAGAGATGACGAAAAACCAGGTG

		TCGCTCACTTGTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
1018	IL2-118 fused to IgG1 Fc N297G allotype m3	GCCCTACGTCTCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT GGTGGTGGAGGATCGGGAGGTGGAGGATCTGGAGGAGGA GGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCACCCTGCCCCGCACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGAAGAGATGACGAAAAACAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
1019	IL2-068 fused to IgG1 Fc N297G allotype m3	GCCCTACGTCTCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACT GGTGGTGGAGGATCGGGAGGTGGAGGATCTGGAGGAGGA GGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCACCCTGCCCCGCACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTGGACGTGTCGCATGAGGACCCGGAG

		GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGAAGAGATGACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGTGATTTCGGATGGG AGCTTTTTTCTTGTAAGTCAAGTTGACCGTGGATAAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
Exemplary IL-2-Fc Fusion Proteins (IgG1 Fc LALAPG)		
454	IL2 C125S fused to IgG1 Fc LALAPG	GCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAAATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGTATTGAATCTTGCTCAGTCCAAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCACCCCTGCCCGCACCCGGAG GCAGCAGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGTGATTTCGGATGGG AGCTTTTTTCTTGTAAGTCAAGTTGACCGTGGATAAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA

455	Stabilized IL-2 fused to IgG1 Fc LALAPG	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCCACCTGCCCCGCACCGGAG GCAGCAGGGGTCTTCCGTATTCTTGTTCGCGCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTGCGATGGG AGCTTTTTCTTGTAAGTCAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
456	IL2-037 fused to IgG1 Fc LALAPG	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGGATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCCACCTGCCCCGCACCGGAG GCAGCAGGGGTCTTCCGTATTCTTGTTCGCGCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC

		AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
457	IL2-062 fused to IgG1 Fc LALAPG	GCCCCACGTCTCTCTCAACTAAAAAGACGCAACTTCAG CTTGAGAATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAAATG CTCACGTTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCCACCCTGCCCCGCACCCGGAG GCAGCAGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
458	IL2-118 fused to IgG1 Fc LALAPG	GCCCCACGTCTCTCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAAATG CTCACGTTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCCACCCTGCCCCGCACCCGGAG GCAGCAGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG

		AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
459	IL2-035 fused to IgG1 Fc LALAPG	GCCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAACCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCACCCTGCCCGCACCCGGAG GCAGCAGGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGT ACGTGCGTCGTAGTCGACGTGTCGATGAGGACCCGAGT GTCAAGTTCAACTGGTATGTGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
460	IL2-073 fused to IgG1 Fc LALAPG	GCCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACTTT CATTTGCGGCCACGAGTTCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCACCCTGCCCGCACCCGGAG GCAGCAGGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG

		ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
461	IL2-077 fused to IgG1 Fc LALAPG	GCCCTACGTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATAGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATACGTAACATCAACGTG ATCGTCTCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCCGAG GCAGCAGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA

462	IL2-043 fused to IgG1 Fc LALAPG	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGTTTAAAGTTTATATGCCCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCCTGATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCCACCTGCCCCGCACCGGAG GCAGCAGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTGCGATGGG AGCTTTTTCTTGTAAGTCAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
463	IL2-036 fused to IgG1 Fc LALAPG	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGTTTAAAGTTTATATGCCCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAGCATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCCACCTGCCCCGCACCGGAG GCAGCAGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC

		AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTA CTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
464	IL2-068 fused to IgG1 Fc LALAPG	GCCCCACGTCTCTCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGTTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCCGGAG GCAGCAGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTGTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTA CTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
465	IL2-106 fused to IgG1 Fc LALAPG	GCCCCACGTCTCTCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAAATG CTCACGTTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCCGGAG GCAGCAGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG

		AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
466	IL2-107 fused to IgG1 Fc LALAPG	GCCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCCACCCTGCCCCGCACCCGAG GCAGCAGGGGGTCCCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTGCGATGAGGACCCGAGT GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
467	IL2-119 fused to IgG1 Fc LALAPG	GCCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCCACCCTGCCCCGCACCCGAG GCAGCAGGGGGTCCCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG

		ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCAGCCGGGAAA
468	K35E/D84V mutein fused to IgG1 Fc LALAPG	GCCCCACGTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACCTTACTAGAATG CTCACGTTTAAAGTTTATATGCCCCAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTGCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCCGAG GCAGCAGGGGTCTTCCGTATTCTTGTTCGCGCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCAGCCGGGAAA

469	IL2-115 fused to IgG1 Fc LALAPG	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCCACCTGCCCCGCACCGGAG GCAGCAGGGGTCTTCCGTATTCTTGTTCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTCTG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTCTGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
470	IL2-109 fused to IgG1 Fc LALAPG	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTCAGATG CTCACGTTTAAAGTTTATATGCCCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCCACCTGCCCCGCACCGGAG GCAGCAGGGGTCTTCCGTATTCTTGTTCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTCTG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC

		AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
471	IL2-113 fused to IgG1 Fc LALAPG	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTCAGATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCCACCCTGCCCCGCACCCGAG GCAGCAGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTGTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
472	IL2-120 fused to IgG1 Fc LALAPG	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTCAGATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCCACCCTGCCCCGCACCCGAG GCAGCAGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG

		AATAAGGCACCTTGGTGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTA TCTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
473	R38Q/D84V mutein fused to IgG1 Fc LALAPG	GCCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTCAGATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACTTT CATTTGCGGCCACGAGTGCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCACCTGCCCCGCACCGGAG GCAGCAGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGT ACGTGCGTCGTAGTCGACGTGTCGATGAGGACCCGAGT GTCAAGTTCAACTGGTATGTGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACAATTCTG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTA TCTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
474	IL2-116 fused to IgG1 Fc LALAPG	GCCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTCAGATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCACCTGCCCCGCACCGGAG GCAGCAGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG

		ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
475	IL2-088 fused to IgG1 Fc LALAPG	GCCCTACGTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAACATG CTCACGTTTAAAGTTTATATGCCCCAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCCGAG GCAGCAGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA

476	IL2-097 fused to IgG1 Fc LALAPG	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAACATG CTCACGTTTAAAGTTTATATGCCCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGACCCGGAG GCAGCAGGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTCTG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTCTGGATGGG AGCTTTTTCTTGTAAGTCAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
477	R38N/H16L mutein fused to IgG1 Fc LALAPG	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGTTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAACATG CTCACGTTTAAAGTTTATATGCCCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGACCCGGAG GCAGCAGGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTCTG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC

		AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
478	IL2-098 fused to IgG1 Fc LALAPG	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAACATG CTCACGTTTAAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTCCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCCGGAG GCAGCAGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
479	IL2-100 fused to IgG1 Fc LALAPG	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAACATG CTCACGTTTAAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCCGGAG GCAGCAGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG

		AATAAGGCACCTTGGTGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
480	IL2-090 fused to IgG1 Fc LALAPG	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCACCTGCCCCGCACCCGAG GCAGCAGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGT ACGTGCGTCGTAGTCGACGTGTCGATGAGGACCCGAGT GTCAAGTTCAACTGGTATGTGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACAATTCTG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
481	IL2-092 fused to IgG1 Fc LALAPG	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGAAGAAGTTTATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCACCTGCCCCGCACCCGAG GCAGCAGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG

		ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
482	IL2-110 fused to IgG1 Fc LALAPG	GCCCCACGTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGCAGAAAGTTTATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCCGAG GCAGCAGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA

483	IL2-Inactive fused to IgG1 Fc LALAPG	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGGCAAAGTTTGCTATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATGGTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCGATATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGACCCGGAG GCAGCAGGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTCTG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTCTGGATGGG AGCTTTTTCTTGTAAGTCAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
484	IL2-99 fused to IgG1 Fc LALAPG	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAACAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGGAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGACCCGGAG GCAGCAGGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTCTG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC

		AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
485	IL2-101 fused to IgG1 Fc LALAPG	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTGAAATG CTCACGTTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATAACGTGCCCACCCTGCCCCGCACCCGAG GCAGCAGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTGTTGGTGAAGGGTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
486	IL2-102 fused to IgG1 Fc LALAPG	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTGAAATG CTCACGTTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATAACGTGCCCACCCTGCCCCGCACCCGAG GCAGCAGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTCC ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG

		AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
487	IL2-103 fused to IgG1 Fc LALAPG	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACTTT CATTTGCGGCCACGAGATCTGATAAGGAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCCACCCTGCCCCGCACCGGAG GCAGCAGGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTGCGATGAGGACCCGAGG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
488	IL2-104 fused to IgG1 Fc LALAPG	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCCACCCTGCCCCGCACCGGAG GCAGCAGGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG

		ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
489	IL2-114 fused to IgG1 Fc LALAPG	GCCCCACGTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCAGCAGAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCCGAG GCAGCAGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA

490	IL2-117 fused to IgG1 Fc LALAPG	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGCAGAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGACCCGGAG GCAGCAGGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTGCGATGGG AGCTTTTTCTTGTAAGTCAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
491	IL2-108 fused to IgG1 Fc LALAPG	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAACATG CTCACGTTTAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGACCCGGAG GCAGCAGGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTCG ACATACAGAGTAGTGAGCGTCTTGACTGTGCTGCACCAG GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGCGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC

		AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
Exemplary IL-2-Fc Fusion Proteins (IgG1 Fc N297G Mut215)		
492	IL2 C125S fused to IgG1 Fc N297G Mut215	GCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGTATTGAATCTTGCTCAGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGCACCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACGTTTCG ACATACAGAGTAGTGAGCGTCTTGCAAGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
493	Stabilized IL-2 fused to IgG1 Fc N297G Mut215	GCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGCACCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACGTTTCG ACATACAGAGTAGTGAGCGTCTTGCAAGGTGCTGCACGTT

		GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
494	IL2-037 fused to IgG1 Fc N297G Mut215	GCCCCACGTCTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGGATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCCACCCTGCCCCGCACCGGAG CTGCTTGGGGTCTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGATGAGGACCCGAG GTCAAGTTCAACTGGTATGTGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
495	IL2-062 fused to IgG1 Fc N297G Mut215	GCCCCACGTCTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCCACCCTGCCCCGCACCGGAG CTGCTTGGGGTCTCTTCCGTATTCTTGTTTCCGCCGAAG

		CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTCCGATGGG AGCTTTTTTCTTGTAAGTTGACCGTGGATAAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACC CGGAAA
496	IL2-118 fused to IgG1 Fc N297G Mut215	GCCCTACGTCTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGACCCGGAG CTGCTTGGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTCCGATGGG AGCTTTTTTCTTGTAAGTTGACCGTGGATAAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACC CGGAAA

497	IL2-035 fused to IgG1 Fc N297G Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAACCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCTGCCCACCTGCCCCGACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTCGCGCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGCAAGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTGGTGAAGGGTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTGCGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCAGCCGGGAAA
498	IL2-073 fused to IgG1 Fc N297G Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTTCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCTGCCCACCTGCCCCGACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTCGCGCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGCAAGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTGGTGAAGGGTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC

		AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
499	IL2-077 fused to IgG1 Fc N297G Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAAATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATACGTAAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATAACGTGCCCACCCTGCCCCGCACCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTGTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
500	IL2-043 fused to IgG1 Fc N297G Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAAATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCCTGATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATAACGTGCCCACCCTGCCCCGCACCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG

		AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
501	IL2-036 fused to IgG1 Fc N297G Mut215	GCCCCACGTCTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAGCATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCCACCCTGCCCCGCACCGGAG CTGCTTGGGGTCTCTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGATGAGGACCCGAGTG GTCAAGTTCAACTGGTATGTGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACGGTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGTGTCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
502	IL2-068 fused to IgG1 Fc N297G Mut215	GCCCCACGTCTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCCACCCTGCCCCGCACCGGAG CTGCTTGGGGTCTCTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG

		ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGGAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
503	IL2-106 fused to IgG1 Fc N297G Mut215	GCCCTACGTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACCTTACTAGAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGGAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA

504	IL2-107 fused to IgG1 Fc N297G Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATAACGTGCCCACCCTGCCCCGACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGCAAGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTGCGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
505	IL2-119 fused to IgG1 Fc N297G Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATAACGTGCCCACCCTGCCCCGACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGCAAGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC

		AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAACAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
506	K35E/D84V mutein fused to IgG1 Fc N297G Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAAATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTGCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCCACCTGCCCCGCACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAACAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
507	IL2-115 fused to IgG1 Fc N297G Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAAATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCCACCTGCCCCGCACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG

		AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTA TCTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
508	IL2-109 fused to IgG1 Fc N297G Mut215	GCCCCCTACGTCTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTCAGATG CTCACGTTTAAAGTTTATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCACCCTGCCCGCACCCGGAG CTGCTTGGGGTCTCTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGATGAGGACCCGAGT GTCAAGTTCAACTGGTATGTGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACGGTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGTGTCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTA TCTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
509	IL2-113 fused to IgG1 Fc N297G Mut215	GCCCCCTACGTCTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTCAGATG CTCACGTTTAAAGTTTATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCACCCTGCCCGCACCCGGAG CTGCTTGGGGTCTCTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG

		ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGGAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
510	IL2-120 fused to IgG1 Fc N297G Mut215	GCCCCACGTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTCAGATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCCGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGGAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA

511	R38Q/D84V mutein fused to IgG1 Fc N297G Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTCAGATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTGCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGCAAGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGTGGATTGCGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
512	IL2-116 fused to IgG1 Fc N297G Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTCAGATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGCAAGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC

		AATTACAAGACGACGCCACCAGTGTGGATTTCGGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
513	IL2-088 fused to IgG1 Fc N297G Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAACATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCCACCCTGCCCCGCACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGTGGATTTCGGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
514	IL2-097 fused to IgG1 Fc N297G Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAACATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCCACCCTGCCCCGCACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG

		AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTA TCTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
515	R38N/H16L mutein fused to IgG1 Fc N297G Mut215	GCCCCTACGTCTCTCAACTAAAAAGACGCAACTTCAG CTTGAGTTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAACATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCACCTGCCCCGCACCGGAG CTGCTTGGGGTCTCTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTTCGACGTGTCGATGAGGACCCGAGT GTCAAGTTCAACTGGTATGTGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACGGTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTA TCTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
516	IL2-098 fused to IgG1 Fc N297G Mut215	GCCCCTACGTCTCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAACATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTCTTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCACCTGCCCCGCACCGGAG CTGCTTGGGGTCTCTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG

		ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGGAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
517	IL2-100 fused to IgG1 Fc N297G Mut215	GCCCCACGTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAACATG CTCACGTTTAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGGAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA

518	IL2-090 fused to IgG1 Fc N297G Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTGAAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGCAAGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGTGGATTGCGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
519	IL2-092 fused to IgG1 Fc N297G Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGAAGAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGCAAGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC

		AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
520	IL2-110 fused to IgG1 Fc N297G Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGCAGAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCCACCTGCCCCGCACCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTGTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
521	IL2-Inactive fused to IgG1 Fc N297G Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGGCAAAGTTTGCTATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATGGTGTCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCGATATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCCACCTGCCCCGCACCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG

		AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTA TCTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
522	IL2-99 fused to IgG1 Fc N297G Mut215	GCCCCCTACGTCTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAACATG CTCACGTTTAAAGTTTATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACTTT CATTTGCGGCCACGAGATCTGATAAGGAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCACCTGCCCCGCACCCGAG CTGCTTGGGGTCTCTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGT ACGTGCGTCGTAGTCGACGTGTCGATGAGGACCCGAG GTCAAGTTCAACTGGTATGTGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACGGTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGTGTCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTA TCTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
523	IL2-101 fused to IgG1 Fc N297G Mut215	GCCCCCTACGTCTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCACCTGCCCCGCACCCGAG CTGCTTGGGGTCTCTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG

		ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGGAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
524	IL2-102 fused to IgG1 Fc N297G Mut215	GCCCCACGTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTGAAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTCCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGGAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA

525	IL2-103 fused to IgG1 Fc N297G Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTGAAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGGAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGACCCGGAG CTGCTTGGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTCCG ACATACAGAGTAGTGAGCGTCTTGCAAGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTGCGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
526	IL2-104 fused to IgG1 Fc N297G Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTGAAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGGAACATCAACGTG AGCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGACCCGGAG CTGCTTGGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTCCG ACATACAGAGTAGTGAGCGTCTTGCAAGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC

		AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
527	IL2-114 fused to IgG1 Fc N297G Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAAATG CTCACGCAGAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCCACCCTGCCCCGCACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
528	IL2-117 fused to IgG1 Fc N297G Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAAATG CTCACGCAGAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCCACCCTGCCCCGCACCCGGAG CTGCTTGGGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACGGTTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG

		AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTA TACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
529	IL2-108 fused to IgG1 Fc N297G Mut215	GCCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAACATG CTCACGTTTAAAGTTTTATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCACCTTCCCCCGCACCCGGAG CTGCTTGGGGTCTCTCCGTATTCTTGTTCGCGCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGATGAGGACCCGAGG GTCAAGTTCAACTGGTATGTGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACGGTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGTGTCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTCCCGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTA TACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
Exemplary IL-2-Fc Fusion Proteins (IgG1 Fc LALAPG Mut215)		
530	IL2 C125S fused to IgG1 Fc LALAPG Mut215	GCCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAAGTTTTATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTTAAACCA CTTGAGGAAGTATTGAATCTTGCTCAGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAAACTCATACGTGCCACCTTCCCCCGCACCCGGAG GCAGCAGGTGGTCTCTCCGTATTCTTGTTCGCGCGAAG

		CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
531	Stabilized IL-2 fused to IgG1 Fc LALAPG Mut215	GCCCTACGTCTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGACCCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA

532	IL2-037 fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGGATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGACCCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGCAAGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTGCGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
533	IL2-062 fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGACCCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGCAAGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC

		AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
534	IL2-118 fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAAATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCCACCCTGCCCCGCACCCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTGTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
535	IL2-035 fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAACCAATAATTACAAAAATCCTAAACTTACTAGAAATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCCACCCTGCCCCGCACCCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG

		AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTA TCTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
536	IL2-073 fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTTCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCTGCCCCGCACCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGT ACGTGCGTCGTAGTCGACGTGTCGATGAGGACCCGAGT GTCAAGTTCAACTGGTATGTGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACAATTCTG ACATACAGAGTAGTGAGCGTCTTGACGGTGTGTCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTA TCTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
537	IL2-077 fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATACGTAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCTGCCCCGCACCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG

		ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
538	IL2-043 fused to IgG1 Fc LALAPG Mut215	GCCCTACGTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCCTGATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCCGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA

539	IL2-036 fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAGCATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGACCCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGCAAGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTGCGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
540	IL2-068 fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGACCCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGCAAGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC

		AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
541	IL2-106 fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAAATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATAACGTGCCCACCCTGCCCCGACCCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTGTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
542	IL2-107 fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCCTTCTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAAATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATAACGTGCCCACCCTGCCCCGACCCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG

		AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTA TACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
543	IL2-119 fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTGCGATGAGGACCCGAGT GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGCAAGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTA TACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
544	K35E/D84V mutein fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTGCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG

		ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
545	IL2-115 fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACCTTACTAGAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCCGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA

546	IL2-109 fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTCAGATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGACCCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTCTCG ACATACAGAGTAGTGAGCGTCTTGCAAGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTCTGGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
547	IL2-113 fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTCAGATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGACCCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTCTCG ACATACAGAGTAGTGAGCGTCTTGCAAGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC

		AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
548	IL2-120 fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTCAGATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
549	R38Q/D84V mutein fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTCAGATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTGCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG

		AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
550	IL2-116 fused to IgG1 Fc LALAPG Mut215	GCCCCCTACGTCTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTCAGATG CTCACGTTTAAAGTTTATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTGCGATGAGGACCCGAGT GTCAAGTTCAACTGGTATGTGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGTGTCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
551	IL2-088 fused to IgG1 Fc LALAPG Mut215	GCCCCCTACGTCTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAACATG CTCACGTTTAAAGTTTATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG

		ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
552	IL2-097 fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAACATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCCGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA

553	R38N/H16L mutein fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGTTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAACATG CTCACGTTTAAAGTTTATATGCCCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGACCCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTCG ACATACAGAGTAGTGAGCGTCTTGCAAGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTGCGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
554	IL2-098 fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAACATG CTCACGTTTAAAGTTTATATGCCCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTCCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGACCCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTCG ACATACAGAGTAGTGAGCGTCTTGCAAGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC

		AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
555	IL2-100 fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAACATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATAACGTGCCCACCCTGCCCCGCACCCGAG GCAGCAGGTGGTCCCTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
556	IL2-090 fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTGAAATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATAACGTGCCCACCCTGCCCCGCACCCGAG GCAGCAGGTGGTCCCTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG

		AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
557	IL2-092 fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGAAGAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGATGAGGACCCGAGTG GTCAAGTTCAACTGGTATGTGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGCAGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
558	IL2-110 fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGCAGAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG

		ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
559	IL2-Inactive fused to IgG1 Fc LALAPG Mut215	GCCCTACGTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGGCAAAGTTTGCTATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATGGTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCGATATCAACGTG ATCGTCTCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCCGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA

560	IL2-99 fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAACATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGGAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGACCCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGCAAGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGTGGATTGCGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
561	IL2-101 fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTGAAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCGCCACCCTGCCCCGACCCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGCAAGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC

		AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
562	IL2-102 fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCTCTCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTGAAATG CTCACGTTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTCCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
563	IL2-103 fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCTCTCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTGAAATG CTCACGTTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGGAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTGCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG

		AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTA TCTCAAAGTTGACCGTGGATAAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
564	IL2-104 fused to IgG1 Fc LALAPG Mut215	GCCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGT ACGTGCGTCGTAGTCGACGTGTCGATGAGGACCCGAGT GTCAAGTTCAACTGGTATGTGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCGAAGAACAGTACAATTCTG ACATACAGAGTAGTGAGCGTCTTGACGGTGTGTCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTTCTTGTA TCTCAAAGTTGACCGTGGATAAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
565	IL2-114 fused to IgG1 Fc LALAPG Mut215	GCCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGCAGAAGTTTATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG

		ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
566	IL2-117 fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGCAGAAAGTTTATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACGTGCCCACCCTGCCCCGCACCCGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTTCCGCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGGAAGAACAGTACAATTTCG ACATACAGAGTAGTGAGCGTCTTGACGGTGCTGCACGTT GACTGGCTCAACGGAAGGAGTATAAGTGTAAGTATCG AATAAGGCACCTTGGTGACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTTTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTTCGGATGGG AGCTTTTTCTTGTAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA

567	IL2-108 fused to IgG1 Fc LALAPG Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAACATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GATAAACTCATACTGCCCACCCTGCCCCGACCCGGAG GCAGCAGGTGGTCTTCCGTATTCTTGTTCGCCCGAAG CCGAAGGACACGCTTATGATTAGCAGGACTCCCGAAGTG ACGTGCGTCGTAGTCGACGTGTCGCATGAGGACCCGGAG GTCAAGTTCAACTGGTATGTTCGATGGCGTAGAAGTACAC AATGCAAAGACTAAACCCCGCAAGAACAGTACAATTCG ACATACAGAGTAGTGAGCGTCTTGAGGTGCTGCACGTT GACTGGCTCAACGAAAGGAGTATAAGTGTAAGTATCG AATAAGGCACTTGGTGCACCTATCGAGAAAACGATCTCC AAGGCTAAGGGTCAGCCAAGAGAACCCCAAGTCTACACT CTGCCCCCTAGCCGCGACGAGCTTACGAAAAACCAGGTG TCGCTCACTTGTGGTGAAGGGTTTCTATCCGAGCGAT ATTGTGGTAGAGTGGGAATCCAACGGGCAGCCAGAGAAC AATTACAAGACGACGCCACCAGTGCTGGATTGCGATGGG AGCTTTTTCTTGTACTCAAAGTTGACCGTGGATAAAAGC CGGTGGCAGCAGGGTAATGTGTTTTCATGCTCGGTAATG CACGAGGCCCTCCATAACCATTATACGCAGAAAAGCCTT TCGCTCTCACCCGGGAAA
Exemplary IL-2-Fc Fusion Proteins (IgG4 Fc S228P)		
568	IL2 C125S fused to IgG4 Fc S228P	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGTATTGAATCTTGCTCAGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTAAATTGGTACGTGATGGTGTGAA GTGCATAATGCCAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGTTTTATCCC

		TCAGATATTGCTGTGCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
569	Stabilized IL-2 fused to IgG4 Fc S228P	GCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
570	IL2-037 fused to IgG4 Fc S228P	GCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGGATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG

		CACCAAGATTGGCTTAACGGAAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
571	IL2-062 fused to IgG4 Fc S228P	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
572	IL2-118 fused to IgG4 Fc S228P	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA

		CCAAACCTAAAGACACCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
573	IL2-035 fused to IgG4 Fc S228P	GCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAACCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCAAACCTAAAGACACCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA

574	IL2-073 fused to IgG4 Fc S228P	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTTCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
575	IL2-077 fused to IgG4 Fc S228P	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATACGTAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT

		GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
576	IL2-043 fused to IgG4 Fc S228P	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCCTGATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
577	IL2-036 fused to IgG4 Fc S228P	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAGCATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG

		<p>GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA</p>
578	IL2-068 fused to IgG4 Fc S228P	<p>GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCTCGGCGGTCTTCAGTGTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGAGAGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA</p>
579	IL2-106 fused to IgG4 Fc S228P	<p>GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCTCGGCGGTCTTCAGTGTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT</p>

		GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
580	IL2-107 fused to IgG4 Fc S228P	GCCCCACGTCCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACCTTACTAGAATG CTCACGTTTAAAGTTTATATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGCGGTCCCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA

581	IL2-119 fused to IgG4 Fc S228P	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
582	K35E/D84V mutein fused to IgG4 Fc S228P	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTGCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT

		GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
583	IL2-115 fused to IgG4 Fc S228P	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACCTACTAGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
584	IL2-109 fused to IgG4 Fc S228P	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTCAGATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG

		GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA
585	IL2-113 fused to IgG4 Fc S228P	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCCTTCTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTCAGATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA
586	IL2-120 fused to IgG4 Fc S228P	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTCAGATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCTTATGATCTCTCGAACACCT

		GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA
587	R38Q/D84V mutein fused to IgG4 Fc S228P	GCCCCACGTCCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTCAGATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTGCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA

588	IL2-116 fused to IgG4 Fc S228P	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTCAGATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
589	IL2-088 fused to IgG4 Fc S228P	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAACATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT

		GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
590	IL2-097 fused to IgG4 Fc S228P	GCCCCACGTCTCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAACATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
591	R38N/H16L mutein fused to IgG4 Fc S228P	GCCCCACGTCTCTCAACTAAAAAGACGCAACTTCAG CTTGAGTTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAACATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG

		GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
592	IL2-098 fused to IgG4 Fc S228P	GCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAACATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTCCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
593	IL2-100 fused to IgG4 Fc S228P	GCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAACATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT

		GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA
594	IL2-090 fused to IgG4 Fc S228P	GCCCCACGTCCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTGAAATG CTCACGTTTAAAGTTTATATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA

595	IL2-092 fused to IgG4 Fc S228P	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGAAGAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
596	IL2-110 fused to IgG4 Fc S228P	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGCAGAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT

		GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
597	IL2-Inactive fused to IgG4 Fc S228P	GCCCCACGTCTCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGGCAAAGTTTGCTATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATGGTGTCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCGATATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
598	IL2-99 fused to IgG4 Fc S228P	GCCCCACGTCTCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAACATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGGAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG

		GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA
599	IL2-101 fused to IgG4 Fc S228P	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCCTTCTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGAGAGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA
600	IL2-102 fused to IgG4 Fc S228P	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCTTATGATCTCTCGAACACCT

		GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA
601	IL2-103 fused to IgG4 Fc S228P	CCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTGAAATG CTCACGTTTAAAGTTTATATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGGAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA

602	IL2-104 fused to IgG4 Fc S228P	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTGAAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
603	IL2-114 fused to IgG4 Fc S228P	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGCAGAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT

		GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
604	IL2-117 fused to IgG4 Fc S228P	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGCAGAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTC CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
605	IL2-108 fused to IgG4 Fc S228P	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAACATG CTCACGTTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTC CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG

		GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
Exemplary IL-2-Fc Fusion Proteins (IgG4 Fc S228P/R409K)		
606	IL2 C125S fused to IgG4 Fc S228P/R409K	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGTATTGAATCTTGCTCAGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTGAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
607	Stabilized IL-2 fused to IgG4 Fc S228P/R409K	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA

		CCAAACCTAAAGACACCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA
608	IL2-037 fused to IgG4 Fc S228P/R409K	GCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGGATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAGTTTATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCAAACCTAAAGACACCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA

609	IL2-062 fused to IgG4 Fc S228P/R409K	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTCTTGGGAAA
610	IL2-118 fused to IgG4 Fc S228P/R409K	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT

		GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
611	IL2-035 fused to IgG4 Fc S228P/R409K	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAACCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
612	IL2-073 fused to IgG4 Fc S228P/R409K	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTTCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG

		<p>GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA</p>
613	IL2-077 fused to IgG4 Fc S228P/R409K	<p>GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATACGTAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCTCGGCGGTCCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAAGAT CCGAGAGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA</p>
614	IL2-043 fused to IgG4 Fc S228P/R409K	<p>GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCCTGATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCTCGGCGGTCCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT</p>

		GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
615	IL2-036 fused to IgG4 Fc S228P/R409K	GCCCCACGTCCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAGCATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA

616	IL2-068 fused to IgG4 Fc S228P/R409K	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTCTTGGGAAA
617	IL2-106 fused to IgG4 Fc S228P/R409K	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT

		GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
618	IL2-107 fused to IgG4 Fc S228P/R409K	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
619	IL2-119 fused to IgG4 Fc S228P/R409K	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG

		GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
620	K35E/D84V mutein fused to IgG4 Fc S228P/R409K	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTGCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCCTTCAGTGTTTTTGTTC CCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGAGAGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
621	IL2-115 fused to IgG4 Fc S228P/R409K	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCCTTCAGTGTTTTTGTTC CCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT

		GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
622	IL2-109 fused to IgG4 Fc S228P/R409K	GCCCCACGTCCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTCAGATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA

623	IL2-113 fused to IgG4 Fc S228P/R409K	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTCAGATG CTCACGTTTAAAGTTTATATGCCCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTCTTGGGAAA
624	IL2-120 fused to IgG4 Fc S228P/R409K	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTCAGATG CTCACGTTTAAAGTTTATATGCCCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT

		GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
625	R38Q/D84V mutein fused to IgG4 Fc S228P/R409K	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTCAGATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTGCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
626	IL2-116 fused to IgG4 Fc S228P/R409K	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTCAGATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG

		GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA
627	IL2-088 fused to IgG4 Fc S228P/R409K	GCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAACATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCTCGGCGGTCCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA
628	IL2-097 fused to IgG4 Fc S228P/R409K	GCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAACATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCTCGGCGGTCCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT

		GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
629	R38N/H16L mutein fused to IgG4 Fc S228P/R409K	CCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGTTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAACATG CTCACGTTTAAAGTTTATATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGCGGTCTTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA

630	IL2-098 fused to IgG4 Fc S228P/R409K	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAACATG CTCACGTTTAAAGTTTATATGCCCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTCCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTCTTGGGAAA
631	IL2-100 fused to IgG4 Fc S228P/R409K	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAACATG CTCACGTTTAAAGTTTATATGCCCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT

		GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
632	IL2-090 fused to IgG4 Fc S228P/R409K	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
633	IL2-092 fused to IgG4 Fc S228P/R409K	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGAAGAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG

		GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA
634	IL2-110 fused to IgG4 Fc S228P/R409K	GCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGCAGAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA
635	IL2-Inactive fused to IgG4 Fc S228P/R409K	GCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGGCAAAGTTTGCTATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATGGTGTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCGATATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT

		GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA
636	IL2-99 fused to IgG4 Fc S228P/R409K	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAACATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGGAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA

637	IL2-101 fused to IgG4 Fc S228P/R409K	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTCTTGGGAAA
638	IL2-102 fused to IgG4 Fc S228P/R409K	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTCCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT

		GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
639	IL2-103 fused to IgG4 Fc S228P/R409K	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTGAAATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGGAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
640	IL2-104 fused to IgG4 Fc S228P/R409K	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTGAAATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG

		GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
641	IL2-114 fused to IgG4 Fc S228P/R409K	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCCTTCTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGCAGAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCCTTCAGTGTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGAGAGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
642	IL2-117 fused to IgG4 Fc S228P/R409K	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGCAGAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCCTTCAGTGTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT

		GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA
643	IL2-108 fused to IgG4 Fc S228P/R409K	CCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACCTTACTAACATG CTCACGTTTAAAGTTTATATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGCGGTCCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTACAGTCTTG CACCAAGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGCTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA
Exemplary IL-2-Fc Fusion Proteins (IgG4 Fc S228P Mut215)		

644	IL2 C125S fused to IgG4 Fc S228P Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGTATTGAATCTTGCTCAGTCCAAAAACCTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA
645	Stabilized IL-2 fused to IgG4 Fc S228P Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACCTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT

		GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
646	IL2-037 fused to IgG4 Fc S228P Mut215	GCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGGATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCCTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
647	IL2-062 fused to IgG4 Fc S228P Mut215	GCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCCTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG

		GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA
648	IL2-118 fused to IgG4 Fc S228P Mut215	GCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA
649	IL2-035 fused to IgG4 Fc S228P Mut215	GCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAACCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT

		GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
650	IL2-073 fused to IgG4 Fc S228P Mut215	GCCCCACGTCCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTTCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA

651	IL2-077 fused to IgG4 Fc S228P Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATACGTAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
652	IL2-043 fused to IgG4 Fc S228P Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCCTGATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT

		GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
653	IL2-036 fused to IgG4 Fc S228P Mut215	GCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAGCATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCCTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
654	IL2-068 fused to IgG4 Fc S228P Mut215	GCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCCTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG

		GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCCTTGGGAAA
655	IL2-106 fused to IgG4 Fc S228P Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGAGAGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCCTTGGGAAA
656	IL2-107 fused to IgG4 Fc S228P Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT

		GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA
657	IL2-119 fused to IgG4 Fc S228P Mut215	GCCCCACGTCCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACCTACTAGAATG CTCACGTTTAAAGTTTATATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCCCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA

658	K35E/D84V mutein fused to IgG4 Fc S228P Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTGCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
659	IL2-115 fused to IgG4 Fc S228P Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT

		GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
660	IL2-109 fused to IgG4 Fc S228P Mut215	GCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTCAGATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCCTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
661	IL2-113 fused to IgG4 Fc S228P Mut215	GCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTCAGATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCCTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG

		GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
662	IL2-120 fused to IgG4 Fc S228P Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTCAGATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGAGAGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
663	R38Q/D84V mutein fused to IgG4 Fc S228P Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTCAGATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTGTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT

		GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA
664	IL2-116 fused to IgG4 Fc S228P Mut215	GCCCCACGTCCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTCAGATG CTCACGTTTAAAGTTTATATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA

665	IL2-088 fused to IgG4 Fc S228P Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAACATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
666	IL2-097 fused to IgG4 Fc S228P Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAACATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT

		GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
667	R38N/H16L mutein fused to IgG4 Fc S228P Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGTTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAACATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCCTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
668	IL2-098 fused to IgG4 Fc S228P Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAACATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCCTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG

		<p>GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA</p>
669	IL2-100 fused to IgG4 Fc S228P Mut215	<p>GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAACATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACCTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAATG CCGAGAGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA</p>
670	IL2-090 fused to IgG4 Fc S228P Mut215	<p>GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACCTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT</p>

		GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
671	IL2-092 fused to IgG4 Fc S228P Mut215	CCCCCTACGTCCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGAAGAAGTTTATATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA

672	IL2-110 fused to IgG4 Fc S228P Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGCAGAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
673	IL2-Inactive fused to IgG4 Fc S228P Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAAATG CTCACGCAGAAGTTTGTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATGGTGTCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCGATATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT

		GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
674	IL2-99 fused to IgG4 Fc S228P Mut215	GCCCCACGTCTCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAACATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGGAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCCTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
675	IL2-101 fused to IgG4 Fc S228P Mut215	GCCCCACGTCTCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCCTTCTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTGAAATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCCTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG

		GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCCTTGGGAAA
676	IL2-102 fused to IgG4 Fc S228P Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGAGAGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCCTTGGGAAA
677	IL2-103 fused to IgG4 Fc S228P Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTGAAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGGAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT

		GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
678	IL2-104 fused to IgG4 Fc S228P Mut215	GCCCTACGTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTGAAATG CTCACGTTTAAAGTTTATATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA

679	IL2-114 fused to IgG4 Fc S228P Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAAATG CTCACGCAGAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
680	IL2-117 fused to IgG4 Fc S228P Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAAATG CTCACGCAGAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT

		GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
681	IL2-108 fused to IgG4 Fc S228P Mut215	GCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAACATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCCTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAGATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
Exemplary IL-2-Fc Fusion Proteins (IgG4 Fc S228P/R409K Mut215)		
682	IL2 C125S fused to IgG4 Fc S228P/R409K Mut215	GCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGTATTGAATCTTGCTCAGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCCTG

		CACGTGGATTGGCTTAACGGAAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
683	Stabilized IL-2 fused to IgG4 Fc S228P/R409K Mut215	GCCCCACGTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
684	IL2-037 fused to IgG4 Fc S228P/R409K Mut215	GCCCCACGTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGGATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA

		CCAAACCTAAAGACACCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCCTTGGGAAA
685	IL2-062 fused to IgG4 Fc S228P/R409K Mut215	GCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCAAACCTAAAGACACCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCCTTGGGAAA

686	IL2-118 fused to IgG4 Fc S228P/R409K Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA
687	IL2-035 fused to IgG4 Fc S228P/R409K Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAACCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT

		GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
688	IL2-073 fused to IgG4 Fc S228P/R409K Mut215	GCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTTCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCCTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
689	IL2-077 fused to IgG4 Fc S228P/R409K Mut215	GCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATACGTAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCCTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG

		GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCCTTGGGAAA
690	IL2-043 fused to IgG4 Fc S228P/R409K Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCCTGATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAAGAT CCGAGAGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCCTTGGGAAA
691	IL2-036 fused to IgG4 Fc S228P/R409K Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAGCATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT

		GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
692	IL2-068 fused to IgG4 Fc S228P/R409K Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGTTTAAAGTTTATATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA

693	IL2-106 fused to IgG4 Fc S228P/R409K Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCCTCTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
694	IL2-107 fused to IgG4 Fc S228P/R409K Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCCTCTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT

		GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
695	IL2-119 fused to IgG4 Fc S228P/R409K Mut215	GCCCCACGTCTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAAATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCCTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
696	K35E/D84V mutein fused to IgG4 Fc S228P/R409K Mut215	GCCCCACGTCTCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAAATG CTCACGTTTAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTGCTGATAAGCAACATCAACGTG ATCGTCTTGAACTGAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCCTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG

		GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
697	IL2-115 fused to IgG4 Fc S228P/R409K Mut215	GCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAGAATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
698	IL2-109 fused to IgG4 Fc S228P/R409K Mut215	GCCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTCAGATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT

		GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
699	IL2-113 fused to IgG4 Fc S228P/R409K Mut215	CCCCCTACGTCCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTCAGATG CTCACGTTTAAAGTTTATATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA

700	IL2-120 fused to IgG4 Fc S228P/R409K Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTCAGATG CTCACGTTTAAAGTTTATATGCCCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTCTTGGGAAA
701	R38Q/D84V mutein fused to IgG4 Fc S228P/R409K Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTCAGATG CTCACGTTTAAAGTTTATATGCCCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTGCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT

		GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
702	IL2-116 fused to IgG4 Fc S228P/R409K Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTCAGATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTC CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCCTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
703	IL2-088 fused to IgG4 Fc S228P/R409K Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAACATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTC CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCCTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG

		GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCCTTGGGAAA
704	IL2-097 fused to IgG4 Fc S228P/R409K Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCCTTCTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAACATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCCTTCAGTGTTTTTGTTC CCCAAACCTAAAGACACCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGAGAGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCCTTGGGAAA
705	R38N/H16L mutein fused to IgG4 Fc S228P/R409K Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGTTGCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAACATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCCTTCAGTGTTTTTGTTC CCCAAACCTAAAGACACCCTTATGATCTCTCGAACACCT

		GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA
706	IL2-098 fused to IgG4 Fc S228P/R409K Mut215	GCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAACATG CTCACGTTTAAAGTTTATATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTCCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGCTCTTGGGAAA

707	IL2-100 fused to IgG4 Fc S228P/R409K Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAACATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
708	IL2-090 fused to IgG4 Fc S228P/R409K Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTGAAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT

		GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
709	IL2-092 fused to IgG4 Fc S228P/R409K Mut215	GCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGAAGAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTC CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCCTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
710	IL2-110 fused to IgG4 Fc S228P/R409K Mut215	GCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGCAGAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTC CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCCTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG

		GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCCTTGGGAAA
711	IL2-Inactive fused to IgG4 Fc S228P/R409K Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAGAATG CTCACGGCAAAGTTTGCTATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATGGTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCGATATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGAGAGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCCTTGGGAAA
712	IL2-99 fused to IgG4 Fc S228P/R409K Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTAACATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGGAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT

		GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
713	IL2-101 fused to IgG4 Fc S228P/R409K Mut215	GCCCCACGTCCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTGAAATG CTCACGTTTAAAGTTTATATATGCCAAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCCCTTATGATCTCTCGAACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA

714	IL2-102 fused to IgG4 Fc S228P/R409K Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTGAAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGTCCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
715	IL2-103 fused to IgG4 Fc S228P/R409K Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAACTTACTGAAATG CTCACGTTTAAAGTTTATATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGGAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAACC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT

		GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
716	IL2-104 fused to IgG4 Fc S228P/R409K Mut215	GCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTGAAATG CTCACGTTTAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCCTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTGCAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
717	IL2-114 fused to IgG4 Fc S228P/R409K Mut215	GCCCTACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGCAGAAGTTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACTTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTAAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCTCGCGGTCTTTCAGTGTTTTTGTTCCTCA CCCAAACCTAAAGACACCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCCTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG

		GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCCTTGGGAAA
718	IL2-117 fused to IgG4 Fc S228P/R409K Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGCATCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTAAACTTACTAGAATG CTCACGCAGAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG AGCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCCTTCAGTGTTTTTGTTC CCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGAGAGTTCAATTTAATTGGTACGTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTCCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCCTTGGGAAA
719	IL2-108 fused to IgG4 Fc S228P/R409K Mut215	GCCCCACGTCCTCCTCAACTAAAAAGACGCAACTTCAG CTTGAGAACCTTCTTCTCGACCTTCAGATGATTTTGAAC GGAATCAATAATTACAAAAATCCTGAACTTACTAACATG CTCACGTTTAAAGTTTATATGCCAAAAAGGCCACTGAG TTGAAACACCTTCAATGCTTGGAGGAGGAACCTAAACCA CTTGAGGAAGCCTTGAATCTTGCTCCGTCCAAAACTTT CATTTGCGGCCACGAGATCTGATAAGCAACATCAACGTG ATCGTCCTGGAAGTGAAGGAAGCGAAACGACGTTTATG TGCGAATATGCAGACGAAACTGCGACAATCGTTGAATTT CTCAATCGATGGATCACTTTTAGCCAATCTATCATCAGC ACGTTGACTGGTGGTGGAGGATCGGGAGGTGGAGGATCT GGAGGAGGAGGATCGGGTGGAGGAGGATCC GAAAGTAAGTATGGCCCTCCTTGCCCTCCGTGCCCTGCA CCTGAGTTCCCTCGGCGGTCCTTCAGTGTTTTTGTTC CCAAACCTAAAGACACCCCTTATGATCTCTCGAACACCT

		GAAGTAACCTGTGTAGTTGTTGATGTCTCACAGGAAGAT CCGGAGGTTCAATTTAATTGGTACGTTCGATGGTGTGAA GTGCATAATGCGAAGACTAAGCCGAGAGAGGAACAGTTC AATTCCACTTATCGCGTGGTTTCAGTCCTTCAGGTCTTG CACGTGGATTGGCTTAACGGAAAGGAATATAAGTGCAAG GTAAGTAATAAAGGGCTTCCATCAAGCATTGAAAAAAC ATAAGTAAAGCAAAAGGACAACCGAGGGAGCCCCAAGTC TACACGCTTCCTCCTTCTCAGGAGGAGATGACCAAAAAC CAGGTAAGTTTGACGTGTTTGGTAAAGGGGTTTTATCCC TCAGATATTGTTGTCGAATGGGAGTCTAATGGTCAGCCT GAGAACAATTACAAGACTACGCCACCCGTTCTGGATTCA GACGGATCTTTCTTCTCTACAGCAAATTGACGGTAGAC AAAAGCCGCTGGCAAGAGGGCAATGTCTTCAGTTGTTCT GTAATGCACGAAGCCCTCCATAATCACTACACGCAGAAA TCTCTGAGCTTGTCTCTTGGGAAA
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CLAIMS

1. An IL-2 agent described herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein, for use in a method of treating a transplant rejection or a symptom thereof in
5 a subject.
2. An IL-2 agent described herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein, for use in a method of preventing the transplant rejection or the symptom thereof in a subject.
10
3. An IL-2 agent described herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein, for use in a method of modulating (e.g., increasing or inducing) immunosuppression for a transplant in a subject.
- 15 4. The IL-2 agent for use of any of claims 1-3, wherein the subject has received, is receiving, or will receive a transplant, when the IL-2 agent is administered to the subject.
5. An IL-2 agent described herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein, for use in a method of conditioning the subject prior to a transplant.
20
6. An IL-2 agent described herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein, for use in a method of selectively increasing Tregs in a subject, wherein the subject has received, is receiving, or will receive a transplant.
- 25 7. The IL-2 agent for use of any of claims 1-6, wherein the transplant is a heart transplant.
8. An IL-2 agent described herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein, in combination with a heart transplant, for use in a method of treating a heart disease or a symptom thereof in a subject.
30
9. The IL-2 agent for use of claim 8, wherein the heart transplant is provided to the subject prior to, concurrent with, or after administration of the IL-2 fusion protein.
10. The IL-2 agent for use of any of claims 1-9, wherein the level of Tregs in the subject is
35 increased by about 2, 3, 4, 5, 6, 7, 8, 9, 10-fold or more, compared to the level of Tregs in the subject prior to administration of the IL-2 fusion protein.

11. The IL-2 agent for use of claim 10, wherein the level of Tregs is determined in a sample from the subject.
12. The IL-2 agent for use of any of claims 1-11, wherein the IL-2 fusion protein comprises an IL-2 variant comprising:
- 5 (i) (a) the amino acid substitution H16L or H16N, (b) the amino acid substitution I92S, or (c) both (a) and (b); and
- (ii) the amino acid substitutions V69A, Q74P, and C125S, corresponding to human IL-2 (SEQ ID NO: 1031),
- 10
13. The IL-2 agent for use of claim 12, wherein the IL-2 variant further comprises the amino acid substitution T3A.
14. The IL-2 agent for use of any of claims 1-13, wherein the IL-2 variant comprises the amino acid sequence of any of SEQ ID NOs: 4, 5, 11, 1000, 1001, or 1002, an amino acid sequence that is at least 95% identical thereto or differs by no more than 1, 2, 3, 4, or 5 amino acids therefrom, or a functional fragment thereof.
- 15
15. The IL-2 agent for use of any of claims 1-14, wherein the IL-2 fusion protein further comprises an Fc region.
- 20
16. The IL-2 agent for use of claim 15, wherein the Fc region comprises an Fc region of IgG1 allotype m3 comprising an N297G substitution according to EU numbering.
- 25
17. The IL-2 agent for use of claim 15 or 16, wherein the Fc region comprises the amino acid sequence of SEQ ID NO: 1003, or an amino acid sequence that is at least 95% identical thereto or differs by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 amino acids therefrom, or a functional fragment thereof.
- 30
18. The IL-2 agent for use of any of claims 15-17, wherein the Fc region is fused to the C-terminus of the IL-2 variant.
19. The IL-2 agent for use of any of claims 1-18, wherein the IL-2 fusion protein further comprises a linker.
- 35
20. The IL-2 agent for use of claim 19, wherein the linker comprises (G₄S)₄ (SEQ ID NO: 48).

21. The IL-2 agent for use of any of claims 1-20, wherein the fusion protein comprises an amino acid sequence of any of SEQ ID NOs: 1004, 1005, 1006, 1007, 1008, or 1009, an amino acid sequence that is at least 95% identical thereto or differs by no more than 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 amino acids therefrom, or a functional fragment thereof.
- 5
22. The IL-2 agent for use of any of claims 1-21, wherein the fusion protein forms a dimer.
23. The IL-2 agent for use of any of claims 1-22, further comprising administering an immunosuppressive agent to the subject.
- 10
24. The IL-2 agent for use of claim 23, wherein the immunosuppressive agent comprises rapamycin.
25. The IL-2 agent for use of any of claims 1-24, wherein the subject is a human or a non-human
- 15
- primate.
26. The IL-2 agent for use of any of claims 1-24, wherein the subject is a mouse.
27. A combination comprising an IL-2 agent described herein, e.g., an IL-2 variant described herein, or an IL-2 fusion protein described herein, and a transplant.
28. The combination of claim 27, wherein the transplant is a heart transplant.
29. The combination of claim 27 or 28, further comprising one or more additional immunosuppressive agents, e.g., rapamycin.
30. The combination of any of claim 27-29 for use in treating or preventing a transplant rejection in a subject.
31. The combination for use of claim 30, wherein the transplant rejection is a heart transplant rejection.
32. The combination for use of claim 30 or 31, wherein the IL-2 agent is administered to the subject prior to, during, and/or after the transplant.

33. The combination of any of claims 27-29 for use in modulating (e.g., increasing or inducing), immunosuppression in a subject.
34. The combination of any of claims 27-29 for use in selectively increasing T regulatory cells in a subject.
35. The combination of any of claims 30-34, wherein the subject is a human or a non-human primate.
36. The combination of any of claims 30-34, wherein the subject is a mouse.