

CLAIMS

What is claimed is:

1. ~~A method of treating a fetal and neonatal alloimmune and/or autoimmune disorder comprising administering an antibody to a pregnant subject, wherein the antibody comprises: (1) a light chain variable region comprising a CDR L1, a CDR L2, and a CDR L3 and (2) a heavy chain variable region comprising a CDR H1, a CDR H2, and a CDR H3, wherein~~
 - ~~the CDR L1 comprises a sequence having no more than two amino acid substitutions relative to the sequence of TGTGSDVGSYNLVS (SEQ ID NO: 1),~~
 - ~~the CDR L2 comprises a sequence having no more than one amino acid substitutions relative to the sequence of GDSERPS (SEQ ID NO: 2),~~
 - ~~the CDR L3 comprises a sequence having no more than one amino acid substitutions relative to the sequence of SSYAGSGIYV (SEQ ID NO: 3),~~
 - ~~the CDR H1 comprises a sequence having no more than one amino acid substitutions relative to the sequence of TYAMG (SEQ ID NO: 4), DYAMG (SEQ ID NO: 5), or NYAMG (SEQ ID NO: 6),~~
 - ~~the CDR H2 comprises a sequence having no more than two amino acid substitutions relative to the sequence of SIGSSGAQTRYADS (SEQ ID NO: 7), SIGASGSQTRYADS (SEQ ID NO: 8), SIGASGAQTRYADS (SEQ ID NO: 9), or SIGASGGQTRYADS (SEQ ID NO: 10), and~~
 - ~~the CDR H3 comprises a sequence having no more than one amino acid substitutions relative to the sequence of LAIGDSY (SEQ ID NO: 11).~~
2. ~~The method of claim 1, wherein the antibody binds human FcRn with a K_D of less than or equal to that of antibody N026.~~
3. ~~The method of claim 1, wherein~~
 - ~~the CDR L1 comprises the sequence TGTGSDVGSYNLVS (SEQ ID NO: 1),~~
 - ~~the CDR L2 comprises the sequence GDSERPS (SEQ ID NO: 2),~~
 - ~~the CDR L3 comprises the sequence SSYAGSGIYV (SEQ ID NO: 3),~~
 - ~~the CDR H1 comprises the sequence TYAMG (SEQ ID NO: 4),~~
 - ~~the CDR H2 comprises the sequence SIGSSGAQTRYADS (SEQ ID NO: 7), and~~
 - ~~the CDR H3 comprises the sequence LAIGDSY (SEQ ID NO: 11).~~
4. ~~The method of claim 1, wherein~~
 - ~~the CDR L1 comprises the sequence TGTGSDVGSYNLVS (SEQ ID NO: 1),~~
 - ~~the CDR L2 comprises the sequence GDSERPS (SEQ ID NO: 2),~~
 - ~~the CDR L3 comprises the sequence SSYAGSGIYV (SEQ ID NO: 3),~~
 - ~~the CDR H1 comprises the sequence DYAMG (SEQ ID NO: 5),~~
 - ~~the CDR H2 comprises the sequence SIGASGSQTRYADS (SEQ ID NO: 8), and~~
 - ~~the CDR H3 comprises the sequence LAIGDSY (SEQ ID NO: 11).~~
5. ~~The method of claim 1, wherein~~
 - ~~the CDR L1 comprises the sequence TGTGSDVGSYNLVS (SEQ ID NO: 1),~~
 - ~~the CDR L2 comprises the sequence GDSERPS (SEQ ID NO: 2),~~

- the CDR L3 comprises the sequence SSYAGSGIYV (SEQ ID NO: 3),
the CDR H1 comprises the sequence NYAMG (SEQ ID NO: 6),
the CDR H2 comprises the sequence SIGASGAQTRYADS (SEQ ID NO: 9), and
the CDR H3 comprises the sequence LAIGDSY (SEQ ID NO: 11).
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6. The method of claim 1, wherein
the CDR L1 comprises the sequence TGTGSDVGSYNLVS (SEQ ID NO: 1),
the CDR L2 comprises the sequence GDSERPS (SEQ ID NO: 2),
the CDR L3 comprises the sequence SSYAGSGIYV (SEQ ID NO: 3),
10 the CDR H1 comprises the sequence TYAMG (SEQ ID NO: 4),
the CDR H2 comprises the sequence SIGASGGQTRYADS (SEQ ID NO: 10), and
the CDR H3 comprises the sequence LAIGDSY (SEQ ID NO: 11).
7. The method of claim 1, wherein
15 the CDR L1 comprises the sequence TGTGSDVGSYNLVS (SEQ ID NO: 1),
the CDR L2 comprises the sequence GDSERPS (SEQ ID NO: 2),
the CDR L3 comprises the sequence SSYAGSGIYV (SEQ ID NO: 3),
the CDR H1 comprises the sequence TYAMG (SEQ ID NO: 4),
the CDR H2 comprises the sequence SIGASGSQTRYADS (SEQ ID NO: 8), and
20 the CDR H3 comprises the sequence LAIGDSY (SEQ ID NO: 11).
8. The method of any one of claims 1-7, wherein the subject has a history of having had a previous fetal and
neonatal alloimmune and/or autoimmune disorder.
- 25 9. The method of any one of claims 1-8, wherein the subject is at risk of having a fetal and neonatal
alloimmune and/or autoimmune disorder.
10. The method of any one of claims 1-9, wherein the fetal and neonatal alloimmune and/or autoimmune
disorder is selected from the group consisting of fetal and neonatal alloimmune thrombocytopenia,
30 hemolytic disease of the fetus and newborn, alloimmune pan-thrombocytopenia, congenital heart
block, fetal arthrogryposis, neonatal myasthenia gravis, neonatal autoimmune hemolytic anemia,
neonatal anti-phospholipid syndrome, neonatal polymyositis, dermatomyositis, neonatal lupus,
neonatal scleroderma, Behcet's disease, neonatal Graves' disease, neonatal Kawasaki disease,
neonatal autoimmune thyroid disease, and neonatal type I diabetes mellitus.
- 35 11. The method of claim 10, wherein the fetal and neonatal autoimmune and/or autoimmune disorder is
hemolytic disease of the fetus and newborn.
12. The method of claim 10, wherein the fetal and neonatal autoimmune and/or autoimmune disorder is fetal
40 and neonatal alloimmune thrombocytopenia.

13. The method of claim 10, wherein the fetal and neonatal autoimmune and/or autoimmune disorder is congenital heart block.

14. The method any one of claims 1-13, wherein treatment reduces the risk of a miscarriage.

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15. A method of treating a fetal and neonatal alloimmune and/or autoimmune disorder comprising administering an antibody to a pregnant subject, wherein the antibody comprises: (1) a light chain variable region comprising a CDR L1, a CDR L2, and a CDR L3 and (2) a heavy chain variable region comprising a CDR H1, a CDR H2, and a CDR H3, wherein

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the CDR L1 comprises a sequence X_1 GTGSDVGSYN X_2 VS (SEQ ID NO: 12),

the CDR L2 comprises a sequence GDX X_3 X_4 RPS (SEQ ID NO: 13),

the CDR L3 comprises a sequence X_5 SY X_6 GSGIYV (SEQ ID NO: 14),

the CDR H1 comprises a sequence Z $_1$ YAMG (SEQ ID NO: 15),

the CDR H2 comprises a sequence SIGZ $_2$ SGZ $_3$ QTZ $_4$ YADS (SEQ ID NO: 16),

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the CDR H3 comprises a sequence LAZ $_5$ Z $_6$ DSY (SEQ ID NO: 17), wherein

X_1 is a polar or hydrophobic amino acid,

X_2 is a hydrophobic amino acid,

X_3 is a polar amino acid,

X_4 is a polar or acidic amino acid,

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X_5 is a polar or hydrophobic amino acid,

X_6 is a hydrophobic amino acid,

Z $_1$ is a polar or acidic amino acid,

Z $_2$ is a polar or hydrophobic amino acid,

Z $_3$ is G, S, or A,

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Z $_4$ is a basic amino acid,

Z $_5$ is a hydrophobic or basic amino acid, and

Z $_6$ is G, S, D, Q, or H, and

wherein the antibody binds human FcRn with a K_D of less than 200, 150, 100, 50, or 40 pM.

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16. The method of claim 15, wherein

the CDR L1 comprises a sequence X_1 GTGSDVGSYN X_2 VS (SEQ ID NO: 12),

the CDR L2 comprises a sequence GDX X_3 X_4 RPS (SEQ ID NO: 13),

the CDR L3 comprises a sequence X_5 SY X_6 GSGIYV (SEQ ID NO: 14),

the CDR H1 comprises a sequence Z $_1$ YAMG (SEQ ID NO: 15),

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the CDR H2 comprises a sequence SIGZ $_2$ SGZ $_3$ QTZ $_4$ YADS (SEQ ID NO: 16),

the CDR H3 comprises a sequence LAZ $_5$ Z $_6$ DSY (SEQ ID NO: 17), wherein

X_1 is T, A, S, or I,

X_2 is L or I,

X_3 is S, N, or T,

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X_4 is Q, E, or N,

X_5 is C, S, I, or Y,

X_6 is A or V,

- ~~Z₁ is E, T, D, or N,
 Z₂ is S or A,
 Z₃ is G, S, or A,
 Z₄ is K or R,
 Z₅ is I, L, or H, and
 Z₆ is G, S, D, Q, or H.~~
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- ~~17. The method of claims 15 or 16, wherein
 the CDR L1 comprises a sequence having no more than two amino acid substitutions relative to the
 sequence of TGTGSDVGSYNLVS (SEQ ID NO: 1),
 the CDR L2 comprises a sequence having no more than one amino acid substitutions relative to the
 sequence of GDSEKPS (SEQ ID NO: 2),
 the CDR L3 comprises a sequence having no more than one amino acid substitutions relative to the
 sequence of SSYAGSGIYV (SEQ ID NO: 3),
 the CDR H1 comprises a sequence having no more than one amino acid substitutions relative to the
 sequence of TYAMG (SEQ ID NO: 4), DYAMG (SEQ ID NO: 5), or NYAMG (SEQ ID NO: 6),
 the CDR H2 comprises a sequence having no more than two amino acid substitutions relative to the
 sequence of SIGSSGAQTRYADS (SEQ ID NO: 7), SIGASGSQTRYADS (SEQ ID NO: 8),
 SIGASGAQTRYADS (SEQ ID NO: 9), or SIGASGGQTRYADS (SEQ ID NO: 10), and
 the CDR H3 comprises a sequence having no more than one amino acid substitutions relative to the
 sequence of LAIGDSY (SEQ ID NO: 11).~~
- ~~18. The method of any one of claims 15-17, wherein the subject has a history of having had a previous fetal
 and neonatal alloimmune and/or autoimmune disorder.~~
- ~~19. The method of any one of claims 15-18, wherein the subject is at risk of having a fetal and neonatal
 alloimmune and/or autoimmune disorder.~~
- ~~20. The method of any one of claims 15-19, wherein the fetal and neonatal alloimmune and/or autoimmune
 disorder is selected from the group consisting of fetal and neonatal alloimmune thrombocytopenia,
 hemolytic disease of the fetus and newborn, alloimmune pan-thrombocytopenia, congenital heart
 block, fetal arthrogryposis, neonatal myasthenia gravis, neonatal autoimmune hemolytic anemia,
 neonatal anti-phospholipid syndrome, neonatal polymyositis, dermatomyositis, neonatal lupus,
 neonatal scleroderma, Behcet's disease, neonatal Graves' disease, neonatal Kawasaki disease,
 neonatal autoimmune thyroid disease, and neonatal type I diabetes mellitus.~~
- ~~21. The method of claim 20, wherein the fetal and neonatal autoimmune and/or autoimmune disorder is
 hemolytic disease of the fetus and newborn.~~
- ~~22. The method of claim 20, wherein the fetal and neonatal autoimmune and/or autoimmune disorder is fetal
 and neonatal alloimmune thrombocytopenia.~~

23. The method of claim 20, wherein the fetal and neonatal autoimmune and/or autoimmune disorder is congenital heart block.
24. The method any one of claims 15-23, wherein treatment reduces the risk of a miscarriage.
25. A method of treating a fetal and neonatal alloimmune and/or autoimmune disorder comprising administering an antibody to a pregnant subject, wherein the antibody comprises a light chain variable region comprising a CDR L1 having the sequence TGTGSDVGSYNLVS (SEQ ID NO: 1), a CDR L2 having the sequence GDSERPS (SEQ ID NO: 2), and a CDR L3 having the sequence SSYAGSGIYV (SEQ ID NO: 3), and a heavy chain variable region comprising a CDR H1, a CDR H2, and a CDR H3, wherein the CDR H1 comprises a sequence Z₁YAMG (SEQ ID NO: 15), the CDR H2 comprises a sequence SIGZ₂SGZ₃QTRYADS (SEQ ID NO: 18), and the CDR H3 comprises the sequence LAIGDSY (SEQ ID NO: 11), and wherein Z₁ is T, D, or N, Z₂ is S or A, and Z₃ is G, S or A.
26. The method of any one of claims 1-25, wherein the light chain comprises a sequence having at least 90% identity to the sequence of
- QSALTQPASVSGSPGQSITISCTGTGSDVGSYNLVSWYQQHPGKAPKLMYGDSERPSSVSNRFSGSKSGN
TASLTISGLQAEDEADYYCSSYAGSGIYVFGTGTKVTVLGQPKAAPSVTLFPPSSEELQANKATLVCLISDFYP
GAVTVAWKADSSPVKAGVETTTPSKQSNKNKYAASSYLSTPEQWKSHKSYSCQVTHEGSTVEKTVAPTEC
S (SEQ ID NO: 19).
27. The method of any one of claims 1-26, wherein the heavy chain comprises a sequence having at least 90% identity to the sequence of
- EVQLLESQGGLVQPGGSLRLSCAASGFTFSTYAMGWVRQAPGKGLEWVSSIGSSGAQTRYADSVKGRFTI
SRDNSKNTLYLQMNSLRAEDTAVYYCARLAIGDSYWGQGTMTVTVSSASTKGPSVFPLAPSSKSTSGGTAAL
GCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKK
VEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH
NAKTKPREEQYASTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDE
LTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVVFSCSVM
HEALHNHYTQKSLSLSPG (SEQ ID NO: 20).
28. The method of any one of claims 1-26, wherein the heavy chain comprises a sequence having at least 90% identity to the sequence of
- EVQLLESQGGLVQPGGSLRLSCAASGFTFSDYAMGWVRQAPGKGLEWVSSIGASGSQTRYADSVKGRFTI
SRDNSKNTLYLQMNSLRAEDTAVYYCARLAIGDSYWGQGTMTVTVSSASTKGPSVFPLAPSSKSTSGGTAAL
GCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKK
VEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH
NAKTKPREEQYASTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDE

LTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVM
HEALHNHYTQKSLSLSPG (SEQ ID NO: 21).

29. The method of any one of claims 1-26, wherein the heavy chain comprises a sequence having at least
90% identity to the sequence of

EVQLLESGGGLVQPGGSLRLSCAASGFTFSNYAMGWVRQAPGKGLEWVSSIGASGAQTRYADSVKGRFTI
SRDNSKNTLYLQMNSLRAEDTAVYYCARLAIGDSYWGGTMTVTSSASTKGPSVFPLAPSSKSTSGGTAAL
GCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKK
VEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH
NAKTKPREEQYASTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE
MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV
MHEALHNHYTQKSLSLSPG (SEQ ID NO: 22).

30. The method of any one of claims 1-26, wherein the heavy chain comprises a sequence having at least
90% identity to the sequence of

EVQLLESGGGLVQPGGSLRLSCAASGFTFSTYAMGWVRQAPGKGLEWVSSIGASGGQTRYADSVKGRFTI
SRDNSKNTLYLQMNSLRAEDTAVYYCARLAIGDSYWGGTMTVTSSASTKGPSVFPLAPSSKSTSGGTAAL
GCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKK
VEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH
NAKTKPREEQYASTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE
MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV
MHEALHNHYTQKSLSLSPG (SEQ ID NO: 23).

31. The method of any one of claims 1-26, wherein the heavy chain comprises a sequence having at least
90% identity to the sequence of

EVQLLESGGGLVQPGGSLRLSCAASGFTFSTYAMGWVRQAPGKGLEWVSSIGASGSQTRYADSVKGRFTI
SRDNSKNTLYLQMNSLRAEDTAVYYCARLAIGDSYWGGTMTVTSSASTKGPSVFPLAPSSKSTSGGTAAL
GCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKK
VEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH
NAKTKPREEQYASTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE
MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV
MHEALHNHYTQKSLSLSPG (SEQ ID NO: 24).

32. A method of treating a fetal and neonatal alloimmune and/or autoimmune disorder comprising
administering an antibody to a pregnant subject, wherein the antibody comprises a light chain and a heavy
chain, wherein

the light chain comprises a sequence having at least 90% identity to the sequence of

QSALTQPASVSGSPGQSITISCTGTGSDVGSYNLVSQYQHPGKAPKLMYGDSEPPSGVSNRFSGSKSGN
TASLTISGLQAEDADYYCSSYAGSGIYVFGTGKTVTLGQPKAAPSVTLFPPSSEELQANKATLVCLISDFYP
GAVTVAWKADSSPVKAGVETTTPSKQSNINKYAASSYLSLTPEQWKSHKSYSCQVTHEGSTVEKTVAPTEC
S (SEQ ID NO: 19); and

the heavy chain comprises a sequence having at least 90% identity to the sequence of

EVQLLESGGGLVQPGGSLRLSCAASGFTFSTYAMGWVRQAPGKGLEWVSSIGSSGAQTRYADSVKGRFTI
SRDNSKNTLYLQMNSLRAEDTAVYYCARLAIGDSYWGQGTMTVSSASTKGPSVFPLAPSSKSTSGGTAAL
GCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSLGTQTYICNVNHKPSNTKVDKK
VEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH
5 NAKTKPREEQYASTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDE
LTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVM
HEALHNHYTQKSLSLSPG (SEQ ID NO: 20).

33. A method of treating a fetal and neonatal alloimmune and/or autoimmune disorder comprising
10 administering an antibody to a pregnant subject, wherein the antibody comprises a light chain and a heavy
chain, wherein
the light chain comprises a sequence having at least 90% identity to the sequence of
QSALTQPASVSGSPGQSITISCTGTGSDVGSYNLVSWYQQHPGKAPKLMYGDSEPPSGVSNRFSGSKSGN
TASLTISGLQAEDEADYYCSSLYAGSGIYVFGTGKTVTLGQPKAAPSVTLFPPSSEELQANKATLVCLISDFYP
15 GAVTVAWKADSSPVKAGVETTTTPSKQSNKYAASSYLSLTPEQWKSHKSYSCQVTHEGSTVEKTVAPTEC
S (SEQ ID NO: 19); and
the heavy chain comprises a sequence having at least 90% identity to the sequence of
EVQLLESGGGLVQPGGSLRLSCAASGFTFSDYAMGWVRQAPGKGLEWVSSIGASGSQTRYADSVKGRFTI
SRDNSKNTLYLQMNSLRAEDTAVYYCARLAIGDSYWGQGTMTVSSASTKGPSVFPLAPSSKSTSGGTAAL
20 GCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSLGTQTYICNVNHKPSNTKVDKK
VEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH
NAKTKPREEQYASTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDE
LTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVM
HEALHNHYTQKSLSLSPG (SEQ ID NO: 21).

34. A method of treating a fetal and neonatal alloimmune and/or autoimmune disorder comprising
administering an antibody to a pregnant subject, wherein the antibody comprises a light chain and a heavy
chain, wherein
the light chain comprises a sequence having at least 90% identity to the sequence of
30 QSALTQPASVSGSPGQSITISCTGTGSDVGSYNLVSWYQQHPGKAPKLMYGDSEPPSGVSNRFSGSKSGN
TASLTISGLQAEDEADYYCSSLYAGSGIYVFGTGKTVTLGQPKAAPSVTLFPPSSEELQANKATLVCLISDFYP
GAVTVAWKADSSPVKAGVETTTTPSKQSNKYAASSYLSLTPEQWKSHKSYSCQVTHEGSTVEKTVAPTEC
S (SEQ ID NO: 19); and
the heavy chain comprises a sequence having at least 90% identity to the sequence of
35 EVQLLESGGGLVQPGGSLRLSCAASGFTFSNYAMGWVRQAPGKGLEWVSSIGASGAQTRYADSVKGRFTI
SRDNSKNTLYLQMNSLRAEDTAVYYCARLAIGDSYWGQGTMTVSSASTKGPSVFPLAPSSKSTSGGTAAL
GCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSLGTQTYICNVNHKPSNTKVDKK
VEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH
NAKTKPREEQYASTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE
40 MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV
MHEALHNHYTQKSLSLSPG (SEQ ID NO: 22).

35. A method of treating a fetal and neonatal alloimmune and/or autoimmune disorder comprising administering an antibody to a pregnant subject, wherein the antibody comprises a light chain and a heavy chain, wherein
the light chain comprises a sequence having at least 90% identity to the sequence of
5 QSALTQPASVSGSPGQSITISCTGTGSDVGSYNLVSQYQQHPGKAPKLMYGDSEKPSGVSNRFSKSGN
TASLTISGLQAEDEADYYCSSLYAGSGIYVFGTGKTVLGGPKAAPSVTLFPPSSEELQANKATLVCLISDFYP
GAVTVAWKADSSPVKAGVETTTTPSKQSNKYAASSYLSLTPEQWKSHKSYSCQVTHEGSTVEKTVAPTEG
S (SEQ ID NO: 19); and
the heavy chain comprises a sequence having at least 90% identity to the sequence of
10 EVQLLESGGGLVQPGGSLRLSCAASGFTFTSYAMGWVRQAPGKLEWVSSIGASGGQTRYADSVKGRFTI
SRDNSKNTLYLQMNSLRAEDTAVYYCARLAIGDSYWGQGTMTVSSASTKGPSVFPLAPSSKSTSGGTAAL
GCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKK
VEPKSCDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH
NAKTKPREEQYASTYRVVSVLTVHLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE
15 MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSSV
MHEALHNHYTQKSLSLSPG (SEQ ID NO: 23).
36. A method of treating a fetal and neonatal alloimmune and/or autoimmune disorder comprising administering an antibody to a pregnant subject, wherein the antibody comprises a light chain and a heavy
20 chain, wherein
the light chain comprises a sequence having at least 90% identity to the sequence of
QSALTQPASVSGSPGQSITISCTGTGSDVGSYNLVSQYQQHPGKAPKLMYGDSEKPSGVSNRFSKSGN
TASLTISGLQAEDEADYYCSSLYAGSGIYVFGTGKTVLGGPKAAPSVTLFPPSSEELQANKATLVCLISDFYP
GAVTVAWKADSSPVKAGVETTTTPSKQSNKYAASSYLSLTPEQWKSHKSYSCQVTHEGSTVEKTVAPTEG
25 S (SEQ ID NO: 19); and
the heavy chain comprises a sequence having at least 90% identity to the sequence of
EVQLLESGGGLVQPGGSLRLSCAASGFTFTSYAMGWVRQAPGKLEWVSSIGASGSQTRYADSVKGRFTI
SRDNSKNTLYLQMNSLRAEDTAVYYCARLAIGDSYWGQGTMTVSSASTKGPSVFPLAPSSKSTSGGTAAL
GCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKK
30 VEPKSCDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH
NAKTKPREEQYASTYRVVSVLTVHLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE
MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSSV
MHEALHNHYTQKSLSLSPG (SEQ ID NO: 24).
37. The method of any one of claims 27-36, wherein the heavy chain comprises a sequence having at least
35 95%, 97%, 99%, or 100% identity to the sequence of any one of SEQ ID NOs: 20-24.
38. The method of claim 27-37, wherein the light chain comprises a sequence having at least 95%, 97%,
99%, or 100% identity to the sequence of SEQ ID NO: 19.
39. The isolated antibody of any one of claims 1-38, wherein the antibody further comprises amino acid
40 substitution N297A, relative to the sequence of any one of SEQ ID NOs: 20-24.

40. The isolated antibody of any one of claims 1-38, wherein the antibody further comprises amino acid substitutions D355E and L357M, relative to the sequence of any one of SEQ ID NOs: 20-24.

5 41. The isolated antibody of any one of claims 1-40, wherein the antibody further comprises any one or more of the following amino acid substitutions: A23V, S30R, L80V, A84T, E85D, A93V, relative to the sequence of any one of SEQ ID NOs: 20-24 and Q38H, V58I, and G99D, relative to the sequence of SEQ ID NO: 19.

10 42. The isolated antibody of any one of claims 1-41, wherein the antibody does not contain a C-terminal lysine at residue 446, relative to the sequence of any one of SEQ ID NOs: 20-24.

43. A method of treating a fetal and neonatal alloimmune and/or autoimmune disorder comprising administering an antibody to a pregnant subject, wherein the antibody comprises a light chain and a heavy chain, wherein
15 the light chain comprises the sequence of
QSALTQPASVSGSPGQSITISCTGTGSDVGSYNLVSWEYQQHPGKAPKLMYGDSEPPSGVSNRFGSGKSGN
TASLTISGLQAEDEADYYCSSYAGSGIYVFGTGTKVTVLGQPKAAPSVTLFPPSSEELQANKATLVCLISDFYP
GAVTVAWKADSSPVKAGVETTTTPSKQSNKNKYAASSYLSLTPEQWVKSHKSYSCQVTHEGSTVEKTVAPTEG
20 S (SEQ ID NO: 19); and
the heavy chain comprises the sequence of
EVQLLESGGGLVQPGGSLRLSCAASGFTFSTYAMGWVRQAPGKGLEWVSSIGSSGAQTRYADSVKGRFTI
SRDNSKNTLYLQMNSLRAEDTAVYYCARLAIGDSYWGQGTMTVSSASTKGPSVFPLAPSSKSTSGGTAAAL
GCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKK
25 VEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH
NAKTKPREEQYASTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPVYTLPPSRDE
LTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVM
HEALHNHYTQKSLSLSPG (SEQ ID NO: 20).

44. A method of treating a fetal and neonatal alloimmune and/or autoimmune disorder comprising administering an antibody to a pregnant subject, wherein the antibody comprises a light chain and a heavy chain, wherein
the light chain comprises the sequence of
35 QSALTQPASVSGSPGQSITISCTGTGSDVGSYNLVSWEYQQHPGKAPKLMYGDSEPPSGVSNRFGSGKSGN
TASLTISGLQAEDEADYYCSSYAGSGIYVFGTGTKVTVLGQPKAAPSVTLFPPSSEELQANKATLVCLISDFYP
GAVTVAWKADSSPVKAGVETTTTPSKQSNKNKYAASSYLSLTPEQWVKSHKSYSCQVTHEGSTVEKTVAPTEG
S (SEQ ID NO: 19); and
the heavy chain comprises the sequence of
EVQLLESGGGLVQPGGSLRLSCAASGFTFSDYAMGWVRQAPGKGLEWVSSIGASGSQTRYADSVKGRFTI
40 SRDNSKNTLYLQMNSLRAEDTAVYYCARLAIGDSYWGQGTMTVSSASTKGPSVFPLAPSSKSTSGGTAAAL
GCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKK
VEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH

NAKTKPREEQYASTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDE
LTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCGSVM
HEALHNHYTQKSLSLSPG (SEQ ID NO: 21).

- 5 45. A method of treating a fetal and neonatal alloimmune and/or autoimmune disorder comprising administering an antibody to a pregnant subject, wherein the antibody comprises a light chain and a heavy chain, wherein the light chain comprises the sequence of
- 10 QSALTQPASVSGSPGQSITISCTGTGSDVGSYNLVSQYQQHPGKAPKLMYGDSEPSGVSNRFSGSKSGN
TASLTISGLQAEDEADYYCSSYAGSGIYVFGTGKVTVLGQPKAAPSVTLFPPSSEELQANKATLVCLISDFYP
GAVTVAWKADSSPVKAGVETTTPSKQSNNKYAASSYLSLTPEQWKSHKSYSCQVTHEGSTVEKTVAPTEG
S (SEQ ID NO: 19); and the heavy chain comprises the sequence of
- 15 EVQLLESQGGGLVQPGGSLRLSCAASGFTFSNYAMGWVRQAPGKGLEWVSSIGASGAQTRYADSVKGRFTI
SRDNSKNTLYLQMNSLRAEDTAVYYCARLAIGDSYWGQGTMTVSSASTKGPSVFPLAPSSKSTSGGTAAL
GCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKK
VEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH
NAKTKPREEQYASTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE
MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCGSV
20 MHEALHNHYTQKSLSLSPG (SEQ ID NO: 22).

46. A method of treating a fetal and neonatal alloimmune and/or autoimmune disorder comprising administering an antibody to a pregnant subject, wherein the antibody comprises a light chain and a heavy chain, wherein
- 25 the light chain comprises the sequence of
- QSALTQPASVSGSPGQSITISCTGTGSDVGSYNLVSQYQQHPGKAPKLMYGDSEPSGVSNRFSGSKSGN
TASLTISGLQAEDEADYYCSSYAGSGIYVFGTGKVTVLGQPKAAPSVTLFPPSSEELQANKATLVCLISDFYP
GAVTVAWKADSSPVKAGVETTTPSKQSNNKYAASSYLSLTPEQWKSHKSYSCQVTHEGSTVEKTVAPTEG
S (SEQ ID NO: 19); and
- 30 the heavy chain comprises the sequence of
- EVQLLESQGGGLVQPGGSLRLSCAASGFTFSNYAMGWVRQAPGKGLEWVSSIGASGGQTRYADSVKGRFTI
SRDNSKNTLYLQMNSLRAEDTAVYYCARLAIGDSYWGQGTMTVSSASTKGPSVFPLAPSSKSTSGGTAAL
GCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKK
VEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH
35 NAKTKPREEQYASTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE
MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCGSV
MHEALHNHYTQKSLSLSPG (SEQ ID NO: 23).

47. A method of treating a fetal and neonatal alloimmune and/or autoimmune disorder comprising
- 40 administering an antibody to a pregnant subject, wherein the antibody comprises a light chain and a heavy chain, wherein the light chain comprises the sequence of

QSALTQPASVSGSPGQSITISCTGTGSDVGSYNLVSQYQHPGKAPKLMYGDSEPSGVSNRFSGSKSGN
TASLTISGLQAEDADYCYSSYAGSGIYVFGTGTQKTVLGLQPKAAPSVTLFPPSSSEELQANKATLVCLISDFYP
GAVTVAWKADSSPVKAGVETTTPSKQSNINKYAASSYLSLTPEQWKSHKSYSCQVTHEGSTVEKTVAPTEG
S (SEQ ID NO: 19); and

5 the heavy chain comprises the sequence of

EVQLLESQGGGLVQPGGSLRLSCAASGFTFSTYAMGWVRQAPGKGLEWVSSIGASGSQTRYADSVKGRFTI
SRDNSKNTLYLQMNSLRAEDTAVYYCARLAIGDSYWGQGTMTVSSASTKGPSVFPLAPSSKSTSGGTAAL
GCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKK
VEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH
10 NAKTKPREEQYASTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE
MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFVS
MHEALHNHYTQKSLSLSPG (SEQ ID NO: 24).

48. A method of treating fetal anemia associated with hemolytic disease of the fetus and newborn,
15 comprising administering an antibody to a pregnant subject, wherein the antibody comprises: (1) a light chain
variable region comprising a CDR L1, a CDR L2, and a CDR L3 and (2) a heavy chain variable region
comprising a CDR H1, a CDR H2, and a CDR H3, wherein

the CDR L1 comprises a sequence X_1 GTGSDVGSYN X_2 VS (SEQ ID NO: 12),
the CDR L2 comprises a sequence GDX X_3 X_4 RPS (SEQ ID NO: 13),
20 the CDR L3 comprises a sequence X_5 SY X_6 GSGIYV (SEQ ID NO: 14),
the CDR H1 comprises a sequence Z $_1$ YAMG (SEQ ID NO: 15),
the CDR H2 comprises a sequence SIGZ $_2$ SGZ $_3$ QTZ $_4$ YADS (SEQ ID NO: 16),
the CDR H3 comprises a sequence LAZ $_5$ Z $_6$ DSY (SEQ ID NO: 17), wherein
 X_1 is T, A, S, or I,
25 X_2 is L or I,
 X_3 is S, N, or T,
 X_4 is Q, E, or N,
 X_5 is C, S, I, or Y,
 X_6 is A or V,
30 Z $_1$ is E, T, D, or N,
Z $_2$ is S or A,
Z $_3$ is G, S, or A,
Z $_4$ is K or R,
Z $_5$ is I, L, or H, and
35 Z $_6$ is G, S, D, Q, or H.

49. A method of treating fetal anemia associated with hemolytic disease of the fetus and newborn,
comprising administering an antibody to a pregnant subject, wherein the antibody comprises: a light chain
and a heavy chain, wherein the light chain comprises a sequence having at least 90% identity to the
40 sequence of SEQ ID NO: 19; and the heavy chain comprises a sequence having at least 90% identity to the
sequence selected from the group consisting of SEQ ID NO: 20, SEQ ID NO: 21, SEQ ID NO: 22, SEQ ID
NO: 23, and SEQ ID NO: 24.

50. A method of treating fetal anemia associated with hemolytic disease of the fetus and newborn, comprising administering an antibody to a pregnant subject, wherein the antibody comprises: a light chain and a heavy chain, wherein the light chain comprises the sequence of SEQ ID NO: 19; and the heavy chain comprises the sequence selected from the group consisting of SEQ ID NO: 20, SEQ ID NO: 21, SEQ ID NO: 22, SEQ ID NO: 23, and SEQ ID NO: 24.

51. The method of any one of claims 48-50, wherein the method treats the pregnant subject, a fetus of the pregnant subject, and/or a combination thereof.

52. A method of treating an autoimmune disorder, comprising administering an antibody to a pregnant subject, wherein the antibody comprises: (1) a light chain variable region comprising a CDR L1, a CDR L2, and a CDR L3 and (2) a heavy chain variable region comprising a CDR H1, a CDR H2, and a CDR H3, wherein

the CDR L1 comprises a sequence X_1 GTGSDVGSYN X_2 VS (SEQ ID NO: 12),
the CDR L2 comprises a sequence GDX X_3 X X_4 RPS (SEQ ID NO: 13),
the CDR L3 comprises a sequence X_5 SYX X_6 GSGIYV (SEQ ID NO: 14),
the CDR H1 comprises a sequence Z X_1 YAMG (SEQ ID NO: 15),
the CDR H2 comprises a sequence SIGZ Z_2 SGZ Z_3 QTZ Z_4 YADS (SEQ ID NO: 16),
the CDR H3 comprises a sequence LAZ Z_5 Z Z_6 DSY (SEQ ID NO: 17), wherein

X_1 is T, A, S, or I,
 X_2 is L or I,
 X_3 is S, N, or T,
 X_4 is Q, E, or N,
 X_5 is C, S, I, or Y,
 X_6 is A or V,
 Z_1 is E, T, D, or N,
 Z_2 is S or A,
 Z_3 is G, S, or A,
 Z_4 is K or R,
 Z_5 is I, L, or H, and
 Z_6 is G, S, D, Q, or H.

53. A method of treating an autoimmune disorder, comprising administering an antibody to a pregnant subject, wherein the antibody comprises: a light chain and a heavy chain, wherein the light chain comprises a sequence having at least 90% identity to the sequence of SEQ ID NO: 19; and the heavy chain comprises a sequence having at least 90% identity to the sequence selected from the group consisting of SEQ ID NO: 20, SEQ ID NO: 21, SEQ ID NO: 22, SEQ ID NO: 23, and SEQ ID NO: 24.

54. A method of treating an autoimmune disorder, comprising administering an antibody to a pregnant subject, wherein the antibody comprises: a light chain and a heavy chain, wherein the light chain comprises

the sequence of SEQ ID NO: 19; and the heavy chain comprises the sequence selected from the group consisting of SEQ ID NO: 20, SEQ ID NO: 21, SEQ ID NO: 22, SEQ ID NO: 23, and SEQ ID NO: 24.

55. The method of any one of claims 52-54, wherein the autoimmune disorder is selected from the group consisting of alopecia areata, ankylosing spondylitis, antiphospholipid syndrome, Addison's disease, hemolytic anemia, autoimmune hepatitis, hepatitis, Behcet's disease, bullous pemphigoid, cardiomyopathy, celiac sprue dermatitis, chronic fatigue immune dysfunction syndrome, chronic inflammatory demyelinating polyneuropathy, Churg-Strauss syndrome, cicatricial pemphigoid, limited scleroderma (CREST syndrome), cold agglutinin disease, Crohn's disease, dermatomyositis, discoid lupus, essential mixed cryoglobulinemia, fibromyalgia, fibromyositis, Graves' disease, Hashimoto's thyroiditis, hypothyroidism, inflammatory bowel disease, autoimmune lymphoproliferative syndrome, idiopathic pulmonary fibrosis, IgA nephropathy, insulin dependent diabetes, juvenile arthritis, lichen planus, lupus, Ménière's Disease, mixed connective tissue disease, multiple sclerosis, pernicious anemia, polyarteritis nodosa, polychondritis, polyglandular syndromes, polymyalgia rheumatica, polymyositis, primary agammaglobulinemia, primary biliary cirrhosis, psoriasis, Raynaud's phenomenon, Reiter's syndrome, rheumatic fever, rheumatoid arthritis, sarcoidosis, scleroderma, Sjögren's syndrome, stiff man syndrome, Takayasu arteritis, temporal arteritis, ulcerative colitis, uveitis, vitiligo, or Wegener's granulomatosis.

56. The method of any one of claims 52-55, wherein the treatment reduces the risk of miscarriage/loss of fetus.

57. A method of reducing the risk of or reducing the risk of developing an autoimmune or alloimmune disorder, comprising administering an FeRn antibody to a pregnant subject, wherein the antibody comprises: (1) a light chain variable region comprising a CDR L1, a CDR L2, and a CDR L3 and (2) a heavy chain variable region comprising a CDR H1, a CDR H2, and a CDR H3, wherein

the CDR L1 comprises a sequence X_1 GTGSDVGSYN X_2 VS (SEQ ID NO: 12),

the CDR L2 comprises a sequence GDX X_3 X_4 RPS (SEQ ID NO: 13),

the CDR L3 comprises a sequence X_5 SY X_6 GSGIYV (SEQ ID NO: 14),

the CDR H1 comprises a sequence Z $_1$ YAMG (SEQ ID NO: 15),

the CDR H2 comprises a sequence SIGZ Z_2 SGZ Z_3 QTZ Z_4 YADS (SEQ ID NO: 16),

the CDR H3 comprises a sequence LAZ Z_5 Z Z_6 DSY (SEQ ID NO: 17), wherein

X_1 is T, A, S, or I,

X_2 is L or I,

X_3 is S, N, or T,

X_4 is Q, E, or N,

X_5 is C, S, I, or Y,

X_6 is A or V,

Z $_1$ is E, T, D, or N,

Z $_2$ is S or A,

Z $_3$ is G, S, or A,

Z $_4$ is K or R,

Z $_5$ is I, L, or H, and

Z₆ is G, S, D, Q, or H.

58. A method of reducing the risk of or reducing the risk of developing an autoimmune or alloimmune disorder, comprising administering an FcRn antibody to a pregnant subject, wherein the antibody comprises:
5 a light chain and a heavy chain, wherein the light chain comprises a sequence having at least 90% identity to the sequence of SEQ ID NO: 19; and the heavy chain comprises a sequence having at least 90% identity to the sequence selected from the group consisting of SEQ ID NO: 20, SEQ ID NO: 21, SEQ ID NO: 22, SEQ ID NO: 23, and SEQ ID NO: 24.

59. A method of reducing the risk of or reducing the risk of developing an autoimmune or alloimmune disorder, comprising administering an FcRn antibody to a pregnant subject, wherein the antibody comprises:
10 a light chain and a heavy chain, wherein the light chain comprises the sequence of SEQ ID NO: 19; and the heavy chain comprises the sequence selected from the group consisting of SEQ ID NO: 20, SEQ ID NO: 21, SEQ ID NO: 22, SEQ ID NO: 23, and SEQ ID NO: 24.

60. The method of any one of claims 57-59, wherein the autoimmune disorder is selected from the group consisting of alopecia areata, ankylosing spondylitis, antiphospholipid syndrome, Addison's disease, hemolytic anemia, autoimmune hepatitis, hepatitis, Behcet's disease, bullous pemphigoid, cardiomyopathy, celiac sprue dermatitis, chronic fatigue immune dysfunction syndrome, chronic inflammatory demyelinating
20 polyneuropathy, Churg-Strauss syndrome, cicatricial pemphigoid, limited scleroderma (CREST syndrome), cold agglutinin disease, Crohn's disease, dermatomyositis, discoid lupus, essential mixed cryoglobulinemia, fibromyalgia, fibromyositis, Graves' disease, Hashimoto's thyroiditis, hypothyroidism, inflammatory bowel disease, autoimmune lymphoproliferative syndrome, idiopathic pulmonary fibrosis, IgA nephropathy, insulin dependent diabetes, juvenile arthritis, lichen planus, lupus, Ménière's Disease, mixed connective tissue
25 disease, multiple sclerosis, pernicious anemia, polyarteritis nodosa, polychondritis, polyglandular syndromes, polymyalgia rheumatica, polymyositis, primary agammaglobulinemia, primary biliary cirrhosis, psoriasis, Raynaud's phenomenon, Reiter's syndrome, rheumatic fever, rheumatoid arthritis, sarcoidosis, scleroderma, Sjögren's syndrome, stiff man syndrome, Takayasu arteritis, temporal arteritis, ulcerative colitis, uveitis, vitiligo, or Wegener's granulomatosis.

61. The method of any one of claims 57-60, wherein the treatment reduces the risk of miscarriage/loss of fetus.

62. A method of increasing antibody catabolism in a subject, the method comprising administering an
35 antibody to a pregnant subject, wherein the administered antibody comprises: (1) a light chain variable region comprising a CDR L1, a CDR L2, and a CDR L3 and (2) a heavy chain variable region comprising a CDR H1, a CDR H2, and a CDR H3, wherein

the CDR L1 comprises a sequence X₁GTGSDVGSYNX₂VS (SEQ ID NO: 12),

the CDR L2 comprises a sequence GDX₃X₄RPS (SEQ ID NO: 13),

40 the CDR L3 comprises a sequence X₅SYX₆GSGIYV (SEQ ID NO: 14),

the CDR H1 comprises a sequence Z₁YAMG (SEQ ID NO: 15),

the CDR H2 comprises a sequence SIGZ₂SGZ₃QTZ₄YADS (SEQ ID NO: 16),

- the CDR H3 comprises a sequence LAZ₁Z₆DSY (SEQ ID NO: 17), wherein
- X₁ is T, A, S, or I,
- X₂ is L or I,
- X₃ is S, N, or T,
- X₄ is Q, E, or N,
- X₅ is C, S, I, or Y,
- X₆ is A or V,
- Z₁ is E, T, D, or N,
- Z₂ is S or A,
- Z₃ is G, S, or A,
- Z₄ is K or R,
- Z₅ is I, L, or H, and
- Z₆ is G, S, D, Q, or H.
63. A method of increasing antibody catabolism in a subject, the method comprising administering an antibody to a pregnant subject, wherein the administered antibody comprises: a light chain and a heavy chain, wherein the light chain comprises a sequence having at least 90% identity to the sequence of SEQ ID NO: 19; and the heavy chain comprises a sequence having at least 90% identity to the sequence selected from the group consisting of SEQ ID NO: 20, SEQ ID NO: 21, SEQ ID NO: 22, SEQ ID NO: 23, and SEQ ID NO: 24.
64. A method of increasing antibody catabolism in a subject, the method comprising administering an antibody to a pregnant subject, wherein the administered antibody comprises: a light chain and a heavy chain, wherein the light chain comprises the sequence of SEQ ID NO: 19; and the heavy chain comprises the sequence selected from the group consisting of SEQ ID NO: 20, SEQ ID NO: 21, SEQ ID NO: 22, SEQ ID NO: 23, and SEQ ID NO: 24.
65. The method of any one of claims 62-64, wherein increasing antibody catabolism comprises increasing pathogenic antibody catabolism.
66. The method of claim 65, wherein the pathogenic antibody is pathogenic to the mother, the fetus, or both the mother and the fetus.
67. The method of claim 65 or 66, wherein the pathogenic antibody is an IgG antibody.
68. The method of any one of claims 62-67, wherein the antibody causes a fetal and neonatal alloimmune and/or autoimmune disorder in a fetus in the pregnant subject.
69. The method of claim 68, wherein the fetal and neonatal alloimmune and/or autoimmune disorder is selected from the group consisting of fetal and neonatal alloimmune thrombocytopenia hemolytic disease of the fetus and newborn, alloimmune pan thrombocytopenia, congenital heart block, fetal arthrogryposis, neonatal myasthenia gravis, neonatal autoimmune hemolytic anemia, neonatal anti-phospholipid syndrome,

neonatal polymyositis, dermatomyositis, neonatal lupus, neonatal scleroderma, Behcet's disease, neonatal Graves' disease, neonatal Kawasaki disease, neonatal autoimmune thyroid disease, and neonatal type I diabetes mellitus.

5 70. A method of reducing autoantibodies in a subject, the method comprising administering an antibody to a pregnant subject, wherein the antibody comprises: (1) a light chain variable region comprising a CDR L1, a CDR L2, and a CDR L3 and (2) a heavy chain variable region comprising a CDR H1, a CDR H2, and a CDR H3, wherein

10 the CDR L1 comprises a sequence X_1 GTGSDVGSYN X_2 VS (SEQ ID NO: 12),
the CDR L2 comprises a sequence GDX X_3 X X_4 RPS (SEQ ID NO: 13),
the CDR L3 comprises a sequence X_5 SY X_6 GSGIYV (SEQ ID NO: 14),
the CDR H1 comprises a sequence Z X_1 YAMG (SEQ ID NO: 15),
the CDR H2 comprises a sequence SIGZ Z_2 SGZ Z_3 QTZ Z_4 YADS (SEQ ID NO: 16),
the CDR H3 comprises a sequence LAZ Z_5 Z Z_6 DSY (SEQ ID NO: 17), wherein
15 X_1 is T, A, S, or I,
 X_2 is L or I,
 X_3 is S, N, or T,
 X_4 is Q, E, or N,
 X_5 is C, S, I, or Y,
20 X_6 is A or V,
 Z_1 is E, T, D, or N,
 Z_2 is S or A,
 Z_3 is G, S, or A,
 Z_4 is K or R,
25 Z_5 is I, L, or H, and
 Z_6 is G, S, D, Q, or H.

30 71. A method of reducing autoantibodies in a subject, the method comprising administering an antibody to a pregnant subject, wherein the antibody comprises: a light chain and a heavy chain, wherein the light chain comprises a sequence having at least 90% identity to the sequence of SEQ ID NO: 19; and the heavy chain comprises a sequence having at least 90% identity to the sequence selected from the group consisting of SEQ ID NO: 20, SEQ ID NO: 21, SEQ ID NO: 22, SEQ ID NO: 23, and SEQ ID NO: 24.

35 72. A method of reducing autoantibodies in a subject, the method comprising administering an antibody to a pregnant subject, wherein the antibody comprises: a light chain and a heavy chain, wherein the light chain comprises the sequence of SEQ ID NO: 19; and the heavy chain comprises the sequence selected from the group consisting of SEQ ID NO: 20, SEQ ID NO: 21, SEQ ID NO: 22, SEQ ID NO: 23, and SEQ ID NO: 24.

40 73. A method of reducing an immune complex-based activation of an immune response in a subject, the method comprising administering an antibody to a pregnant subject, wherein the antibody comprises: (1) a light chain variable region comprising a CDR L1, a CDR L2, and a CDR L3 and (2) a heavy chain variable region comprising a CDR H1, a CDR H2, and a CDR H3, wherein

the CDR L1 comprises a sequence X_1 GTGSDVGSYN X_2 VS (SEQ ID NO: 12),
 the CDR L2 comprises a sequence GDX X_3 X_4 RPS (SEQ ID NO: 13),
 the CDR L3 comprises a sequence X_5 SYX X_6 GSGIYV (SEQ ID NO: 14),
 the CDR H1 comprises a sequence Z $_1$ YAMG (SEQ ID NO: 15),
 the CDR H2 comprises a sequence SIGZ $_2$ SGZ $_3$ QTZ $_4$ YADS (SEQ ID NO: 16),
 the CDR H3 comprises a sequence LAZ $_5$ Z $_6$ DSY (SEQ ID NO: 17), wherein
 X_1 is T, A, S, or I,
 X_2 is L or I,
 X_3 is S, N, or T,
 X_4 is Q, E, or N,
 X_5 is C, S, I, or Y,
 X_6 is A or V,
 Z_1 is E, T, D, or N,
 Z_2 is S or A,
 Z_3 is G, S, or A,
 Z_4 is K or R,
 Z_5 is I, L, or H, and
 Z_6 is G, S, D, Q, or H.

74. A method of reducing an immune complex-based activation of an immune response in a subject, the method comprising administering an antibody to a pregnant subject, wherein the antibody comprises: a light chain and a heavy chain, wherein the light chain comprises a sequence having at least 90% identity to the sequence of SEQ ID NO: 19; and the heavy chain comprises a sequence having at least 90% identity to the sequence selected from the group consisting of SEQ ID NO: 20, SEQ ID NO: 21, SEQ ID NO: 22, SEQ ID NO: 23, and SEQ ID NO: 24.

75. A method of reducing an immune complex-based activation of an immune response in a subject, the method comprising administering an antibody to a pregnant subject, wherein the antibody comprises: a light chain and a heavy chain, wherein the light chain comprises the sequence of SEQ ID NO: 19; and the heavy chain comprises the sequence selected from the group consisting of SEQ ID NO: 20, SEQ ID NO: 21, SEQ ID NO: 22, SEQ ID NO: 23, and SEQ ID NO: 24.

76. The method of any one of claims 73-75, wherein the immune response is an acute or chronic immune response in the subject.

77. The method of claim 76, wherein the acute immune response is activated by a medical condition selected from the group consisting of pemphigus vulgaris, lupus nephritis, myasthenia gravis, Guillain-Barré syndrome, antibody-mediated rejection, catastrophic anti-phospholipid antibody syndrome, immune complex-mediated vasculitis, glomerulitis, a channelopathy, neuromyelitis optica, autoimmune hearing loss, idiopathic thrombocytopenia purpura, autoimmune haemolytic anaemia, immune neutropenia, dilated cardiomyopathy, and serum sickness.

78. The method of claim 77, wherein the acute immune response is activated by idiopathic thrombocytopenia purpura.
79. The method of claim 77, wherein the acute immune response is activated by pemphigus vulgaris.
80. The method of claim 77, wherein the acute immune response is activated by catastrophic anti-phospholipid antibody syndrome.
81. The method of claim 77, wherein the acute immune response is activated by neuromyelitis optica.
82. The method of claim 77, wherein the acute immune response is activated by antibody-mediated rejection.
83. The method of claim 77, wherein the acute immune response is activated by myasthenia gravis.
84. The method of claim 76, wherein the chronic immune response is activated by a medical condition selected from the group consisting of chronic inflammatory demyelinating polyneuropathy (CIDP), systemic lupus, reactive arthropathies, primary biliary cirrhosis, ulcerative colitis, and antineutrophil cytoplasmic antibody-associated vasculitis.
85. The method of claim 84, wherein the chronic immune response is activated by chronic inflammatory demyelinating polyneuropathy.
86. The method of claim 76, wherein the subject has an autoimmune disease.
87. The method of claim 86, wherein the autoimmune disease is selected from the group consisting of alopecia areata, ankylosing spondylitis, antiphospholipid syndrome, Addison's disease, hemolytic anemia, warm autoimmune hemolytic anemia, anti-factor antibodies, heparin-induced thrombocytopenia (, sensitized transplant, autoimmune hepatitis, hepatitis, Behcets disease, bullous pemphigoid, cardiomyopathy, celiac sprue dermatitis, chronic fatigue immune dysfunction syndrome, chronic inflammatory demyelinating polyneuropathy, Churg-Strauss syndrome, cicatricial pemphigoid, limited scleroderma (CREST syndrome), cold agglutinin disease, Crohn's disease, dermatomyositis, discoid lupus, essential mixed cryoglobulinemia, fibromyalgia, fibromyositis, Graves' disease, Hashimoto's thyroiditis, hypothyroidism, inflammatory bowel disease, autoimmune lymphoproliferative syndrome, idiopathic pulmonary fibrosis, IgA nephropathy, insulin dependent diabetes, juvenile arthritis, lichen planus, lupus, Ménière's Disease, mixed connective tissue disease, multiple sclerosis, pernicious anemia, polyarteritis nodosa, polychondritis, polyglandular syndromes, polymyalgia rheumatica, polymyositis, primary agammaglobulinemia, primary biliary cirrhosis, psoriasis, Raynaud's phenomenon, Reiter's syndrome, rheumatic fever, rheumatoid arthritis, sarcoidosis, scleroderma, Sjögren's syndrome, stiff-man syndrome, Takayasu arteritis, temporal arteritis, ulcerative colitis, uveitis, vitiligo, and Wegener's granulomatosis.
88. The method of claim 87, wherein the autoimmune disease is warm autoimmune hemolytic anemia.

89. The method of claim 87, wherein the autoimmune disease is anti-factor antibodies,

90. The method of claim 87, wherein the autoimmune disease heparin induced thrombocytopenia.

91. The method of claim 87, wherein the autoimmune disease is sensitized transplant.

92. A method of decreasing antibody transport across the placenta of a pregnant subject, the method comprising administering an antibody to a pregnant subject, wherein the antibody comprises: (1) a light chain variable region comprising a CDR L1, a CDR L2, and a CDR L3 and (2) a heavy chain variable region comprising a CDR H1, a CDR H2, and a CDR H3, wherein

the CDR L1 comprises a sequence X_1 GTGSDVGSYN X_2 VS (SEQ ID NO: 12),

the CDR L2 comprises a sequence GDX X_3 X_4 RPS (SEQ ID NO: 13),

the CDR L3 comprises a sequence X_5 SY X_6 GSGIYV (SEQ ID NO: 14),

the CDR H1 comprises a sequence Z $_1$ YAMG (SEQ ID NO: 15),

the CDR H2 comprises a sequence SIGZ $_2$ SGZ $_3$ QTZ $_4$ YADS (SEQ ID NO: 16),

the CDR H3 comprises a sequence LAZ $_5$ Z $_6$ DSY (SEQ ID NO: 17), wherein

X_1 is T, A, S, or I,

X_2 is L or I,

X_3 is S, N, or T,

X_4 is Q, E, or N,

X_5 is C, S, I, or Y,

X_6 is A or V,

Z $_1$ is E, T, D, or N,

Z $_2$ is S or A,

Z $_3$ is G, S, or A,

Z $_4$ is K or R,

Z $_5$ is I, L, or H, and

Z $_6$ is G, S, D, Q, or H.

93. A method of decreasing antibody transport across the placenta of a pregnant subject, the method comprising administering an antibody to a pregnant subject, wherein the antibody comprises: a light chain and a heavy chain, wherein the light chain comprises a sequence having at least 90% identity to the sequence of SEQ ID NO: 19; and the heavy chain comprises a sequence having at least 90% identity to the sequence selected from the group consisting of SEQ ID NO: 20, SEQ ID NO: 21, SEQ ID NO: 22, SEQ ID NO: 23, and SEQ ID NO: 24.

94. A method of decreasing antibody transport across the placenta of a pregnant subject, the method comprising administering an antibody to a pregnant subject, wherein the antibody comprises: a light chain and a heavy chain, wherein the light chain comprises the sequence of SEQ ID NO: 19; and the heavy chain comprises the sequence selected from the group consisting of SEQ ID NO: 20, SEQ ID NO: 21, SEQ ID NO: 22, SEQ ID NO: 23, and SEQ ID NO: 24.

95. A method of treating an antibody-mediated enhancement of viral disease in a fetus or a neonate, the method comprising administering an antibody to a pregnant subject, wherein the antibody comprises: (1) a light chain variable region comprising a CDR L1, a CDR L2, and a CDR L3 and (2) a heavy chain variable region comprising a CDR H1, a CDR H2, and a CDR H3, wherein
- the CDR L1 comprises a sequence X_1 GTGSDVGSYN X_2 VS (SEQ ID NO: 12),
the CDR L2 comprises a sequence GDX X_3 X_4 RPS (SEQ ID NO: 13),
the CDR L3 comprises a sequence X_5 SY X_6 GSGIYV (SEQ ID NO: 14),
the CDR H1 comprises a sequence Z X_1 YAMG (SEQ ID NO: 15),
the CDR H2 comprises a sequence SIGZ Z_2 SGZ Z_3 QTZ Z_4 YADS (SEQ ID NO: 16),
the CDR H3 comprises a sequence LAZ Z_5 Z Z_6 DSY (SEQ ID NO: 17), wherein
- X_1 is T, A, S, or I,
 X_2 is L or I,
 X_3 is S, N, or T,
 X_4 is Q, E, or N,
 X_5 is C, S, I, or Y,
 X_6 is A or V,
 Z_1 is E, T, D, or N,
 Z_2 is S or A,
 Z_3 is G, S, or A,
 Z_4 is K or R,
 Z_5 is I, L, or H, and
 Z_6 is G, S, D, Q, or H.
96. A method of treating an antibody-mediated enhancement of viral disease in a fetus or a neonate, the method comprising administering an antibody to a pregnant subject, wherein the antibody comprises: a light chain and a heavy chain, wherein the light chain comprises a sequence having at least 90% identity to the sequence of SEQ ID NO: 19; and the heavy chain comprises a sequence having at least 90% identity to the sequence selected from the group consisting of SEQ ID NO: 20, SEQ ID NO: 21, SEQ ID NO: 22, SEQ ID NO: 23, and SEQ ID NO: 24.
97. A method of treating an antibody-mediated enhancement of viral disease in a fetus or a neonate, the method comprising administering an antibody to a pregnant subject, wherein the antibody comprises: a light chain and a heavy chain, wherein the light chain comprises the sequence of SEQ ID NO: 19; and the heavy chain comprises the sequence selected from the group consisting of SEQ ID NO: 20, SEQ ID NO: 21, SEQ ID NO: 22, SEQ ID NO: 23, and SEQ ID NO: 24.
98. The method of any one of claims 95-97, wherein the viral disease is caused by a virus selected from the group consisting of an alpha virus infection, flavivirus infection, Zika virus infection, Chikungunya virus infection, Ross River virus infection, severe acute respiratory syndrome coronavirus infection, Middle East respiratory syndrome, avian influenza infection, influenza virus infection, human respiratory syncytial virus infection, Ebola virus infection, yellow fever virus infection, dengue virus infection, human immunodeficiency

- virus infection, respiratory syncytial virus infection, Hantavirus infection, Getah virus infection, Sindbis virus infection, Bunyamwera virus infection, West Nile virus infection, Japanese encephalitis virus B infection, rabbitpox virus infection, lactate dehydrogenase elevating virus infection, reovirus infection, rabies virus infection, foot and mouth disease virus infection, porcine reproductive and respiratory syndrome virus infection, simian hemorrhagic fever virus infection, equine infectious anemia virus infection, caprine arthritis virus infection, African swine fever virus infection, lentivirus infection, BK papovavirus infection, Murray Valley encephalitis virus infection, enterovirus infection, cytomegalovirus infection, pneumovirus infection, morbillivirus infection, and measles virus infection.
- 5 99. The method of any one of claims 1-98, wherein the pregnant subject has or is at risk of having a medical condition that activates an immune response in the pregnant subject.
- 10 100. The method of claim 99, wherein the medical condition is pemphigus vulgaris, lupus nephritis, myasthenia gravis, Guillain-Barré syndrome, antibody-mediated rejection, catastrophic anti-phospholipid antibody syndrome, immune complex-mediated vasculitis, glomerulitis, a channelopathy, neuromyelitis
- 15 optica, autoimmune hearing loss, idiopathic thrombocytopenia purpura, autoimmune haemolytic anaemia, immune neutropenia, dilated cardiomyopathy, serum sickness, chronic inflammatory demyelinating polyneuropathy, systemic lupus, reactive arthropathies, primary biliary cirrhosis, ulcerative colitis, antineutrophil cytoplasmic antibody (ANCA)-associated vasculitis, alopecia areata, ankylosing spondylitis,
- 20 antiphospholipid syndrome, Addison's disease, hemolytic anemia, autoimmune hepatitis, hepatitis, Behcet's disease, bullous pemphigoid, cardiomyopathy, celiac sprue-dermatitis, chronic fatigue immune dysfunction syndrome, chronic inflammatory demyelinating polyneuropathy, Churg-Strauss syndrome, cicatricial pemphigoid, limited scleroderma (CREST syndrome), cold agglutinin disease, Crohn's disease, dermatomyositis, discoid lupus, essential mixed cryoglobulinemia, fibromyalgia, fibromyositis, Graves'
- 25 disease, Hashimoto's thyroiditis, hypothyroidism, inflammatory bowel disease, autoimmune lymphoproliferative syndrome, idiopathic pulmonary fibrosis, IgA nephropathy, insulin dependent diabetes, juvenile arthritis, lichen planus, lupus, Ménière's Disease, mixed connective tissue disease, multiple sclerosis, pernicious anemia, polyarteritis nodosa, polychondritis, polyglandular syndromes, polymyalgia rheumatica, polymyositis, primary agammaglobulinemia, primary biliary cirrhosis, psoriasis, Raynaud's
- 30 phenomenon, Reiter's syndrome, rheumatic fever, rheumatoid arthritis, sarcoidosis, scleroderma, Sjögren's syndrome, stiff-man syndrome, Takayasu arteritis, temporal arteritis, ulcerative colitis, uveitis, vitiligo, and Wegener's granulomatosis.
- 35 101. The method of any one of claims 1-100, wherein the pregnant subject has a history of having had a previous fetus or neonate that had a fetal and neonatal alloimmune and/or autoimmune disorder.
102. The method of any one of claims 1-101, wherein an antibody associated with an immune disease is detected in a biological sample obtained from the pregnant subject.
- 40 103. The method of claim 102, wherein the biological sample is a blood or urine sample.
104. The method of claim 103, wherein the biological sample is a blood sample.

105. The method of any one of claims 1-104, wherein the administered antibody is a monoclonal antibody.
106. The method of any one of claims 1-105, wherein the administered antibody is IgG1.
107. The method of any one of claims 1-106, wherein the administered antibody comprises a λ light chain.
108. The method of any one of claims 1-106, wherein the administered antibody is an aglycosylated antibody.
109. The method of any of claims 1-9 and 12-47 wherein the fetus or neonate is at risk of developing anemia.
110. The method of any of the forgoing claims wherein the administered antibody comprising SEQ ID NO: 19 and SEQ ID NO:24 (NO27).
111. A method for treating or reducing the risk of developing a fetal and neonatal alloimmune and/or autoimmune disorder comprising administering to a pregnant women a composition comprising an antibody comprising a light chain having the amino acid sequence of SEQ ID NO:19 and a heavy chain having the amino acid sequence of SEQ ID NO:24 (NO27), wherein the composition is administered to the pregnant woman from about gestational week 13 to about gestational week 35.
112. The method of claim 111 wherein the antibody is administered at 30 mg/kg based on the weight of the pregnant women.
113. The method of claim 111 wherein the antibody is administered at 15 mg/kg based on the weight of the pregnant women.
114. The method of claim 112 or 113, wherein the ~~dose is~~ antibody is administered at a dose per administration and is based on the weight of the pregnant women at first dosing and is not adjusted upward based on weight gain by the pregnant women.
115. The method of claim 112 or 113, wherein the ~~dose is~~ antibody is administered at a dose per administration and is based on the weight of the pregnant women at first dosing and is adjusted upward based on weight gain by the pregnant women.
116. The method of ~~any of claims 111-115~~ claim 1, wherein the composition is administered at least every other week.
117. The method of claim 116, wherein the composition is administered every other week.

	~~1186.~~ The method of ~~any of claims 111-115~~ <u>claim 1</u> , wherein the composition is administered at least every week.
5	~~119.~~ The method of claim 118 wherein the composition is administered every week.
	~~120.~~ The method of any of claims 111-119 wherein administration is begun during the first trimester of pregnancy.
10	~~121.~~ The method of any of claims 111-119 wherein administration is begun during the second trimester of pregnancy.
	~~122.~~ The method of any of claims 111-119 wherein administration is begun during the third trimester of pregnancy.
15	~~123.~~ The method of any of claim 111-122 wherein the route of administration is intravenous.
	~~124.~~ The method of any of claims 111-123 wherein the pregnant women has an obstetrical history of severe fetal anemia.
20	~~125.~~ The method of any of claims 111-124 wherein the pregnant women has an elevated anti-RhD, anti-Rhc or anti-Kell immunoglobulin alloantibody titer.
	~~126.~~ The method of claim 125 wherein the pregnant women has an elevated anti-Rhc or anti-Kell immunoglobulin alloantibody titer.
25	~~127.~~ The method of any of claims 111-125 wherein the pregnant women has an elevated immunoglobulin alloantibody titer for one or more antibodies selected from the group consisting of anti-Lu ^a , Lu ^b , Bg, Kn ^a , Yt ^a , E, c, K, C ^w , Fy ^a , cE, ce, D, Ce, cE, K, Kp ^a , Kp ^b , Fy ^a , M, N, S, Le ^a , Le ^b , Fy, Jk ^a , Diego, P and Mi ^a /Mur
30	~~128.~~ The method of any of claim 111-127 wherein the pregnant women has an obstetrical history of severe fetal anemia or stillbirth at ≤24 weeks gestation and elevated anti-D or anti-Kell IgG alloantibody titers and is pregnant with an antigen-positive fetus.
	~~129.~~ The method of any of claims 111-119 and 123-128 wherein the first dosing is weeks 12 to 16 of pregnancy.
35	~~130.~~ The method of claim 129 wherein the first dosing is during week 14 of pregnancy.
	~~131.~~ A method for treating or reducing the risk of developing a fetal and neonatal alloimmune and/or autoimmune disorder comprising administering to a pregnant woman a composition comprising an antibody comprising a light chain having the amino acid sequence of SEQ ID NO:19 and a heavy chain having the
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amino acid sequence of SEQ ID NO:24 (M281), wherein the administration of M281 ceases after week 34 gestational age.

5 ~~1327.~~ The method of claim ~~131~~1, wherein IVIG is administered to the pregnant women after cessation of administration of ~~M281~~the antibody and prior to birth.

~~1338.~~ The method of claim ~~131~~7, wherein IVIG is administered to the pregnant women 40 – 100 hrs prior to birth.

10 ~~134.~~ The method of claim 131, wherein administration of M281 ceases after gestational week 35.

~~135.~~ The method of claim 131, wherein administration of M281 ceases prior to gestational week 36, 37 or 38.

15 ~~1369.~~ The method of claim ~~131~~7, wherein the IVIG is administered at a dose of 200 mg/kg – 1000 mg/kg based on the weight of the pregnant women.

~~137.~~ The method of claim 131 wherein the antibody is administered at 30 mg/kg based on the weight of the pregnant women.

20 ~~138.~~ The method of claim 131 wherein the antibody is administered at 15 mg/kg based on the weight of the pregnant women.

~~139.~~ The method of claim 137 or 138 wherein the dose is dose per administration and is based on the weight of the pregnant women at first dosing and is not adjusted upward based on weight gain by the pregnant women.

~~140.~~ The method of claim 137 or 138 wherein the dose is dose per administration and is based on the weight of the pregnant women at first dosing and is adjusted upward based on weight gain by the pregnant women.

30 ~~141.~~ The method of any of claims 131-140 wherein the composition is administered at least every other week.

~~142.~~ The method of claim 141 wherein the composition is administered every other week.

35 ~~143.~~ The method of claim 141 wherein the composition is administered at least every week.

~~144.~~ The method of claim 118 wherein the composition is administered every week.

40 ~~145.~~ The method of any of claims 131-144 wherein administration is begun during the first trimester of pregnancy.

146. The method of any of claims 131-144 wherein administration is begun during the second trimester of pregnancy.
- 5 147. The method of any of claims 131-144 wherein administration is begun during the third trimester of pregnancy.
148. The method of any of claim 131-147 wherein the route of administration is intravenous.
- 10 149. The method of any of claims 131-148 wherein the pregnant women has an obstetrical history of severe fetal anemia.
150. The method of any of claims 131-148 wherein the pregnant women has an elevated anti-RhD, anti-Rhe or anti-Kell immunoglobulin alloantibody titer.
- 15 151. The method of claim 150 wherein the pregnant women has an elevated anti-Rhe or anti-Kell immunoglobulin alloantibody titer.
152. The method of any of claims 131-148 wherein the pregnant women has an elevated immunoglobulin alloantibody titer for one or more antibodies selected from the group consisting of anti-Lu^a, Lu^b, Bg, Kn^a, Yt^a, E, c, K, C^w, Fy^a, cE, ce, D, Ce, cE, K, Kp^a, Kp^b, Fy^a, M, N, S, Le^a, Le^b, Fy, Jk^a, Diego, P and Mi^a/Mur
- 20 153. The method of any of claim 131-148 wherein the pregnant women has an obstetrical history of severe fetal anemia or stillbirth at ≤24 weeks gestation and elevated anti-D or anti-Kell IgG alloantibody titers and is pregnant with an antigen-positive fetus.
- 25 154. The method of any of claims 131-144 and 149-153 wherein the first dosing is weeks 12 to 16 of pregnancy.
155. The method of claim 154 wherein the first dosing is during week 14 of pregnancy.
- 30 156. The method of any of claims 131-144 wherein administration is begun during the first trimester of pregnancy.
157. A method for treating or reducing the risk of developing a fetal and neonatal alloimmune and/or autoimmune disorder comprising administering to a pregnant woman a composition comprising an antibody comprising a light chain having the amino acid sequence of SEQ ID NO:19 and a heavy chain having the amino acid sequence of SEQ ID NO:24 (M281), wherein the administration of M281 ceases at least one week prior to birth.
- 35 158. The method of claim 132 wherein the IVIg is administered starting 1-15 days after cessation of administration of M281.
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10. The method of claim 1, wherein the composition is administered from gestational week 13 to gestational week 35.

11. The method of claim 1, wherein the composition is administered from gestational week 14 to gestational week 35.

12. The method of claim 1, wherein the composition is administered from gestational week 15 to gestational week 35.

13. The method of claim 1, wherein the composition is administered from gestational week 16 to gestational week 35.