Patent Claims

1. A polypeptide comprising an Fc variant of a wild-type human IgG1 Fc region, said Fc variant comprising amino acid substitutions P329G, L234A and L235A within the human IgG1 Fc region, wherein the residues are numbered according to the EU index of Kabat.

2. The polypeptide according to claim 1, wherein the wild-type human IgG1 polypeptide induces an antibody-dependent cell-mediated cytotoxicity (ADCC) and wherein the ADCC induced by the IgG1 Fc variant polypeptide is reduced to 0-20% of the ADCC induced by the polypeptide comprising the wild-type human IgG1 Fc region.

3. The polypeptide according to claim 1 or claim 2, wherein the polypeptide comprising an Fc variant is an antibody or an Fc fusion protein.

4. The polypeptide according to any one of claims 1-3, wherein the wild-type human IgG1 polypeptide induces thrombocyte aggregation and wherein the thrombocyte aggregation induced by the IgG1 Fc variant polypeptide is reduced compared to the thrombocyte aggregation induced by a polypeptide comprising a wild-type human IgG1 Fc region.

5. The polypeptide according to any one of claims 1-4, wherein the wild-type human IgG1 polypeptide induces complement-dependent cytotoxicity (CDC) and wherein the CDC induced by the IgG1 Fc variant polypeptide is strongly reduced compared to the CDC induced by a polypeptide comprising a wild-type human IgG1 Fc region.

6. The polypeptide according to any one of claims 1-5 for use as a medicament.

7. The polypeptide according to any of claims 1-6 for use in the treatment of a disease selected from the group consisting of cancer, inflammatory diseases, diabetes and neuronal diseases.

8. The polypeptide according to claim 6 for use in the treatment of a disease, wherein it is favourable to down-regulate the FcγRIIIA, FcγRIIA and FcγRI receptors.

9. The polypeptide for use according to claim 6, for use in the treatment of a disease wherein it is favorable that an effector function of the polypeptide is strongly reduced compared to

the effector function induced by a polypeptide comprising a wild-type human IgG1 Fc region, wherein the effector function is ADCC.

10. A pharmaceutical formulation comprising the polypeptide according to claims 1-9 and a pharmaceutically acceptable carrier.

11. Use of the polypeptide according to any one of claims 1-9 in the manufacture of a medicament for the treatment of a disease selected from the group consisting of cancer, inflammatory diseases, diabetes and neuronal diseases.