~~1. A modified IgG4 Fc fragment comprising a modified hinge region, wherein part of the hinge region represented by the following amino acid sequence was deleted to include only one cysteine residue:~~

~~Glu-Ser-Lys-Tyr-Gly-Pro-Pro-Cys-Pro-Ser-Cys-Pro.~~

~~2. The modified IgG4 Fc fragment of claim 1, wherein *in vivo* chain exchange and monomer formation do not occur.~~

~~3~~ 1. A modified IgG4 Fc fragment comprising a modified hinge region, wherein part of the hinge region represented by the following amino acid sequence was deleted to include only one cysteine residue:

Glu-Ser-Lys-Tyr-Gly-Pro-Pro-Cys-Pro-Ser-Cys-Pro,

~~The modified IgG4 Fc fragment of claim 1,~~ wherein the hinge region was mutated by the deletion of 1 to 8 continuous or discontinuous amino acid(s) comprising a Cys residue at the 8th position, and *in vivo* chain exchange and monomer formation do not occur in the modified IgG4 Fc fragment.

~~4~~ 2. A modified IgG4 Fc fragment comprising a modified hinge region, wherein part of the hinge region represented by the following amino acid sequence was deleted to include only one cysteine residue:

Glu-Ser-Lys-Tyr-Gly-Pro-Pro-Cys-Pro-Ser-Cys-Pro,

~~The modified IgG4 Fc fragment of claim 1,~~ wherein the hinge region was mutated by the deletion of 1 to 8 continuous or discontinuous amino acid(s) comprising a Cys residue at the 11th position, and *in vivo* chain exchange and monomer formation do not occur in the modified IgG4 Fc fragment.

~~5~~ 3. The modified IgG4 Fc fragment of claim 1, wherein the hinge region was mutated by the deletion of 1 to 5 continuous or discontinuous amino acid(s) comprising a Cys residue at the 8th position.

~~6~~ 4. The modified IgG4 Fc fragment of claim ~~1~~ 2, wherein the hinge region was mutated by the deletion of 1 to 5 continuous or discontinuous amino acid(s) comprising a Cys residue at the 11th position.

~~7~~ 5. The modified IgG4 Fc fragment of claim 1, wherein the hinge region was mutated by the deletion of 1 to 3 continuous or discontinuous amino acid(s) comprising a Cys residue at the 8th position.

~~8~~ 6. The modified IgG4 Fc fragment of claim ~~1~~ 2, wherein the hinge region was modified by the deletion of 1 to 3 continuous or discontinuous amino acid(s) comprising a Cys residue at the 11th position.

~~9~~ 7. The modified IgG4 Fc fragment of claim 1 or 2, which is aglycosylated.

~~10~~ 8. The modified IgG4 Fc fragment of claim 1 or 2, which is modified by a nonpeptidyl polymer.

~~11~~ 9. A nucleic acid encoding the IgG4 Fc fragment of claim 1 or 2.

~~12~~ 10. A vector comprising the nucleic acid of claim ~~11~~ 9.

~~13~~ 11. A microorganism introduced with the vector of claim ~~12~~ 10.

~~14~~ 12. A method of preparing the IgG4 Fc fragment according to any one of claims 1 to ~~10~~ 8 comprising culturing the microorganism of claim ~~13~~ 11.

~~15~~ 13. A drug conjugate, wherein the IgG4 Fc fragment according to any one of claims 1 to ~~10~~ 8 is conjugated thereto by a linker.

~~16~~ 14. The drug conjugate of claim ~~15~~ 13, wherein the drug is selected from the group consisting of human growth hormone, growth hormone-releasing hormone, growth hormone-releasing peptide, interferons and interferon receptors, colony-stimulating factor, interleukins

and interleukin receptors, enzymes, interleukin- and cytokine-binding proteins, macrophage-activating factor, macrophage peptide, B cell factor, T cell factor, protein A, allergy inhibiting factor, necrosis glycoprotein, immunotoxin, lymphotoxin, tumor necrosis factor, tumor suppressor, transforming growth factor, α-1 antitrypsin, albumin, α-lactalbumin, apolipoprotein-E, erythropoietin, high-glycosylated erythropoietin, angiopoietin, hemoglobin, thrombin, thrombin receptor–activating peptide, thrombomodulin, blood coagulation factor VII, blood coagulation factor VIIα, blood coagulation factor VIII, coagulation factor IX, blood coagulation factor XIII, plasminogen activator, fibrin-binding peptide, urokinase, streptokinase, hirudin, protein C, C-reactive protein, renin inhibitor, collagenase inhibitor, superoxide dismutase, leptin, platelet-derived growth factor, epithelial growth factor, epidermal growth factor, angiostatin, angiotensin, bone morphogenetic growth factor, bone morphogenetic protein, calcitonin, insulin and insulin derivative, atriopeptin, cartilage-inducing factor, elcatonin, connective tissue-activating factor, tissue factor pathway inhibitor, follicle-stimulating hormone, luteinizing hormone, luteinizing hormone-releasing hormone, nerve growth factors (including nerve growth factor, ciliary neurotrophic factor, axogenesis factor-1, brain-natriuretic peptide, glial cell-derived neurotrophic factor, netrin, neutrophil inhibitor factor, neurotrophic factor, and neutrin), parathyroid hormone, relaxin, secretin, somatomedin, insulin-like growth factor, adrenocorticahormone, glucagon, insulinotropic peptides including glucagon-like peptide-1 and exendin-4, incretins secreted in the intestines, adipocytes including leptons and neuro-cytokines effective for metabolic syndrome, cholecystokinin, pancreatic polypeptides, gastrin-releasing peptides, corticotropin-releasing factor, thyroid stimulating hormone, autotaxin, lactoferrin, myostatin, receptor, receptor antagonist, cell surface antigen, monoclonal antibody, polyclonal antibody, antibody fragments, and virus-derived vaccine antigen.

~~17~~ 15. The drug conjugate of claim ~~15~~ 13, wherein the drug is a granulocyte colony-stimulating factor.

~~18~~ 16. The drug conjugate of claim ~~15~~ 13, wherein the linker is a nonpeptidyl polymer.

~~19~~ 17. The drug conjugate of claim ~~18~~ 16, wherein the nonpeptidyl polymer has two or three reactive ends.

~~20~~ 18. A pharmaceutical composition comprising the conjugate of claim ~~15~~ 13.

~~21~~ 19. A drug carrier comprising a modified IgG4 Fc fragment comprising a modified hinge region, wherein part of the hinge region represented by the following amino acid sequence is deleted to include only one cysteine residue:

Glu-Ser-Lys-Tyr-Gly-Pro-Pro-Cys-Pro-Ser-Cys-Pro,

wherein the hinge region was mutated by the deletion of 1 to 8 continuous or discontinuous amino acid(s) comprising a Cys residue at the 8^{th} position, and *in vivo* chain exchange and monomer formation do not occur in the modified IgG4 Fc fragment ~~and~~

~~wherein *in vivo* chain exchange and monomer formation do not occur.~~

20. A drug carrier comprising a modified IgG4 Fc fragment comprising a modified hinge region, wherein part of the hinge region represented by the following amino acid sequence was deleted to include only one cysteine residue:

Glu-Ser-Lys-Tyr-Gly-Pro-Pro-Cys-Pro-Ser-Cys-Pro,

wherein the hinge region was mutated by the deletion of 1 to 8 continuous or discontinuous amino acid(s) comprising a Cys residue at the 11^{th} position, and *in vivo* chain exchange and monomer formation do not occur in the modified IgG4 Fc fragment.