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(54) Title: POLYPEPTIDE COMPLEX FOR CONJUGATION AND USE THEREOF

(57) Abstract: The disclosure generally relates to the fields of immunology, cell biology, molecular biology and medicine. More particularly, it concerns polypeptide complex for conjugation and use thereof. A polypeptide complex comprising, from N-terminus to C-terminus, a Fab domain operably linked to a hinge region is provided, wherein the Fab domain and the hinge region are derived from different IgG isotypes, or part thereof. The polypeptide complex further comprises a Fc polypeptide which is operably linked to the hinge region. The present disclosure provides an antibody drug conjugate comprising a polypeptide complex of the present disclosure. A pharmaceutical composition comprising an antibody drug conjugate of the present disclosure and a pharmaceutically acceptable carrier or excipient, a method of preparing the antibody drug conjugate, the use of the polypeptide complex in the manufacture of the antibody drug conjugate, a method of treating a condition in a subject in need thereof with a therapeutically effective amount of the antibody drug conjugate are also provided. The subject inventions according to the present disclosure provide improved payload-antibody ratio of antibody bio-conjugation, in particular for therapeutic applications.



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