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(71) Applicant: HANGZHOU DAC BIOTECH CO., LTD.
[CN/CN]; 1st, Building 12, No. 260 Sixth Street, Zheng-
taizhongzi Sci &Tech Park, HEDA, Hangzhou, Zhejiang
310018 (CN).

(72) Inventors: ZHAO, Robert; 1st, 7 Loring Road, Lexing-
ton, Massachusetts 02421 (US). YANG, Qingliang; 4th
Floor, Building 12, 260 Sixth Street, Hangzhou, Zhejiang
310018 (CN). LIU, Xiaolei; 3rd Floor, Building 12, 260
Sixth Street, Hangzhou, Zhejiang 310018 (CN). ZHANG,
Lingli; 2nd Floor, Building 12, 260 Sixth Street, Hangzhou,
Zhejiang 310018 (CN). HUANG, Yuanyuan; 4th Floor,
Building 12, 260 Sixth Street, Hangzhou, Zhejiang 310018
(CN). LI, Wenjun; 2nd Floor, Building 12, 260 Sixth
Street, Hangzhou, Zhejiang 310018 (CN). YE, Hangbo; 4th
Floor, Building 12, 260 Sixth Street, Hangzhou, Zhejiang
310018 (CN). WANG, Juan; 1st Floor, Building 12, 260
Sixth Street, Hangzhou, Zhejiang 310018 (CN). GUO, Hui-
hui; 2nd Floor, Building 12, 260 Sixth Street, Hangzhou,
Zhejiang 310018 (CN). ZHOU, You; 2nd Floor, Building
12, 260 Sixth Street, Hangzhou, Zhejiang 310018 (CN).

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(54) Title: SPECIFIC CONJUGATION OF AN ANTIBODY

(57) Abstract: Provided herein is a process for preparing a homogeneous conjugate of an antibody or antibody-like protein via linkage of cysteine sites between heavy-light chains in the IgG antibody or antibody-like protein. It also relates to methods of making the conjugates in a specific manner comprising either generation of specific thiols of an antibody or antibody-like protein agent, followed by reaction with drug/linker complexes, or generation of specific thiols of an antibody or antibody-like protein agent and conjugation of a synthetic linker-drug assembly with the thiols simultaneously in one pot reaction, to provide conjugates with over 75%, in most cases more than 80% of payloads linked at the specific cysteine sites between heavy-light chains of the IgG antibody or antibody-like protein. It also relates to methods of using the homogeneous conjugate in targeted prophylaxis or treatment of cancer, infection and immunological disorders.



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