

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
21 April 2022 (21.04.2022)



(10) International Publication Number
WO 2022/078524 A3

(51) International Patent Classification:

C07K 16/00 (2006.01) A61K 47/68 (2017.01)
C07K 16/28 (2006.01) A61P 35/00 (2006.01)
A61K 39/395 (2006.01)

(21) International Application Number:

PCT/CN2021/128453

(22) International Filing Date:

03 November 2021 (03.11.2021)

(25) Filing Language: English

(26) Publication Language: English

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(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ,
CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO,
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,
HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN,
KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD,
ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO,
NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW,
SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ,
UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ,
TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV,
MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
KM, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to the identity of the inventor (Rule 4.17(i))
- as to applicant's entitlement to apply for and be granted a
patent (Rule 4.17(ii))

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments (Rule 48.2(h))
- upon request of the applicant, before the expiration of the
time limit referred to in Article 21(2)(a)

(88) Date of publication of the international search report:

25 August 2022 (25.08.2022)

(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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