

(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 2022/079031 A1

(51) International Patent Classification:
A61K 47/68 (2017.01) *C07K 16/00* (2006.01)

TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
KM, ML, MR, NE, SN, TD, TG).

(21) International Application Number:
PCT/EP2021/078181

Published:

- with international search report (Art. 21(3))
- with sequence listing part of description (Rule 5.2(a))

(22) International Filing Date:
12 October 2021 (12.10.2021)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PCT/EP2020/078571
12 October 2020 (12.10.2020) EP

(71) Applicant: **DEBIOPHARM RESEARCH & MANUFACTURING S.A.** [CH/CH]; Rue du Levant 146, 1920 Martigny (CH).

(72) Inventors: **MARX, Léo**; Av. De la Fusion 98, 1920 Martigny (CH). **POSTUPALENKO, Viktoriia**; Route de Rawyl 64, 1950 Sion (CH). **NYANGUILE, Origène Franz**; Chemin des Pins 24, 1971 Grimisuat (CH). **SEGURA, Jean-Manuel**; Rue du Midi 6B, 1800 Vevey (CH). **PANTIN, Mathilde Lucile Colette**; 9 impasse Letroz sud, 74200 Thonon-les-bains (FR). **GARROUSTE, Patrick**; Rue de l'autoroute 54 A, 1907 Saxon (CH). **LEVY, Fred-eric**; Av. Eglantine 5, 1006 Lausanne (CH).

(74) Agent: **HOFFMANN EITLE PATENT- UND RECHTSANWÄLTE PARTMBB, ASSOCIATION NO. 151**; Arabellastraße 30, 81925 Munich (DE).

(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,

(54) Title: REACTIVE CONJUGATES

(57) Abstract: The present invention relates to compounds (reactive conjugates) for the chemical modification of therapeutic antibodies or proteins. The compounds enable the regioselective attachment of payloads to an antibody or antibody fragment in one single step, thereby producing a modified antibody or modified antibody fragment, which can be used for diagnosing, monitoring, imaging or treating disease.

