

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

(19) World Intellectual Property  
Organization

International Bureau

(43) International Publication Date  
02 June 2022 (02.06.2022)



(10) International Publication Number  
**WO 2022/112942 A2**

(51) International Patent Classification:

A61K 47/00 (2006.01) C07K 16/28 (2006.01)

A61P 35/00 (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/IB2021/060871

(22) International Filing Date:

23 November 2021 (23.11.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/117,817 24 November 2020 (24.11.2020) US

(71) Applicant: **NOVARTIS AG** [CH/CH]; Lichtstrasse 35, 4056 Basel (CH).

(72) Inventors: **D'ALESSIO, Joseph Anthony**; c/o Novartis Institutes for BioMedical Research, Inc., 250 Massachusetts Avenue, Cambridge, Massachusetts 02139 (US). **KLIN-TER, Claudia Judith**; c/o Novartis Pharma AG, Postfach, 4002 Basel (CH). **MUNDT, Cornelia Anne**; c/o Novartis Pharma AG, Postfach, 4002 Basel (CH). **NEW-COMBE, Richard Vaughan**; c/o Novartis Institutes for BioMedical Research, Inc., 250 Massachusetts Avenue, Cambridge, Massachusetts 02139 (US). **SCHWEIGHOFER, Tamás**; Dinkelbergstrasse 40, 4125 Riehen (CH). **WINKELBACH, Katharina**; c/o Novartis Pharma AG, Postfach, 4002 Basel (CH).

(74) Agent: **NOVARTIS AG**; Lichtstrasse 35, 4056 Basel (CH).

(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,

**Declarations under Rule 4.17:**

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

**Published:**

- without international search report and to be republished upon receipt of that report (Rule 48.2(g))
- with sequence listing part of description (Rule 5.2(a))

WO 2022/112942 A2

(54) Title: ANTI-CD48 ANTIBODIES, ANTIBODY DRUG CONJUGATES, AND USES THEREOF

(57) Abstract: Disclosed herein are antibodies, antigen binding fragments thereof, and antibody drug conjugates thereof that bind human CD48. Also disclosed are pharmaceutical compositions comprising the antibodies, antigen binding fragments thereof, and antibody drug conjugates thereof; and methods of making and using such pharmaceutical compositions for treating cancer in a patient in need of treatment.