

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
04 May 2023 (04.05.2023)



(10) International Publication Number
WO 2023/072182 A1

(51) International Patent Classification:

C07K 16/28 (2006.01) A61K 39/395 (2006.01)
C07K 19/00 (2006.01) A61K 35/17 (2015.01)
C12N 5/10 (2006.01) G01N 33/68 (2006.01)

(21) International Application Number:

PCT/CN2022/127898

(22) International Filing Date:

27 October 2022 (27.10.2022)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

PCT/CN2021/127544
29 October 2021 (29.10.2021) CN
PCT/CN2022/118446
13 September 2022 (13.09.2022) CN

(71) Applicant (for CN only): **INMAGENE BIOPHARMACEUTICALS (HANGZHOU) CO., LTD.** [CN/CN]; 2F, Building 9, Hexiang Science And Technology Center, Xiasha Road, Qiantang New District, Hangzhou, Zhejiang 310018 (CN).

(71) Applicant (for all designated States except CN): **INMAGENE PTE. LTD.** [SG/SG]; 20 Emerald Hill Road, 229302 (SG).

(72) Inventors: **FAN, Pengcheng**; 2F, Building 9, Hexiang Science And Technology Center, Xiasha Road, Qiantang New District, Hangzhou, Zhejiang 310018 (CN). **LEI, Run**; Room 487, Zone A, 2nd Floor, 420 Fenglin Road, Xuhui District, Shanghai 200032 (CN). **GUO, Chongtian**; Room 487, Zone A, 2nd Floor, 420 Fenglin Road, Xuhui District, Shanghai 200032 (CN). **FAN, Lihua**; 2F, Building 9, Hexiang Science And Technology Center, Xiasha Road, Qiantang New District, Hangzhou, Zhejiang 310018 (CN). **SUN, Qiang**; 2F, Building 9, Hexiang Science And Technology Center, Xiasha Road, Qiantang New District, Hangzhou, Zhejiang 310018 (CN). **XU, Zhihao**; 2F, Building 9, Hexiang Science And Technology Center, Xiasha Road, Qiantang New District, Hangzhou, Zhejiang 310018 (CN).

(74) Agent: **JUN HE LAW OFFICES**; 20/F, China Resources Building 8 Jianguomenbei Avenue, Beijing 100005 (CN).

(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, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU,

LY, MA, MD, 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, CV, 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, ME, 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).

Published:

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

WO 2023/072182 A1

(54) Title: NOVEL ANTI-IL-36R ANTIBODIES

(57) Abstract: Provided are anti-IL-36R antibodies or antigen-binding fragments thereof, isolated polynucleotides encoding the same, pharmaceutical compositions comprising the same and the uses thereof.