

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

(19) World Intellectual Property
Organization

International Bureau

(43) International Publication Date
09 June 2022 (09.06.2022)



(10) International Publication Number
WO 2022/116877 A1

(51) International Patent Classification:

A61K 39/00 (2006.01) *C07K 16/28* (2006.01)
A61K 39/395 (2006.01) *C12N 15/117* (2010.01)
A61K 39/39 (2006.01) *A61P 35/00* (2006.01)

(21) International Application Number:

PCT/CN2021/132753

(22) International Filing Date:

24 November 2021 (24.11.2021)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

PCT/CN2020/133398
02 December 2020 (02.12.2020) CN

(71) Applicant: SHANGHAI HENLIUS BIOTECH, INC.

[CN/CN]; Room 330, Complex Building, No.222 Kangnan Road, China (Shanghai) Pilot Free Trade Zone, Shanghai 200131 (CN).

(72) Inventors: WANG, Jiin-Tarn;

Room 330, Complex Building, No.222 Kangnan Road, China (Shanghai) Pilot Free Trade Zone, Shanghai 200131 (CN). TSENG, Chi-Ling; Room 330, Complex Building, No.222 Kangnan Road, China (Shanghai) Pilot Free Trade Zone, Shanghai 200131 (CN). JIANG, Wei-Dong; Room 330, Complex Building, No.222 Kangnan Road, China (Shanghai) Pilot Free Trade Zone, Shanghai 200131 (CN). CHEN, Bin; Room 330, Complex Building, No.222 Kangnan Road, China (Shanghai) Pilot Free Trade Zone, Shanghai 200131 (CN). XU, Yao; Room 330, Complex Building, No.222 Kangnan Road, China (Shanghai) Pilot Free Trade Zone, Shanghai 200131 (CN). GAO, Jie; Room 330, Complex Building, No.222 Kangnan Road, China (Shanghai) Pilot Free Trade Zone, Shanghai 200131 (CN).

(74) Agent: LECOME INTELLECTUAL PROPERTY

AGENT LTD.; 3rd Floor, Office Building, Taifu Hotel, No.1 Building, No.1 Xitucheng Road, Haidian District, Beijing 100081 (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, 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).

Published:

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

(54) Title: ANTI-GARP/TGF β ANTIBODIES AND METHODS OF USE

(57) Abstract: Provided are antibodies and antibody derivatives that bind to GARP (also known as LRRC32 and CPRDD) and/or GARP/TGF β complex and methods of using the same. In certain embodiments, an anti-GARP/TGF β antibody or antibody derivative provided herein can inhibit a TGF β signal pathway in a target cell.

WO 2022/116877 A1