

(19) World Intellectual Property
Organization
International Bureau



(10) International Publication Number
WO 2025/128263 A9

(43) International Publication Date
19 June 2025 (19.06.2025)

(51) International Patent Classification:

C07K 16/28 (2006.01) *C07K 14/705* (2006.01)
A61K 39/395 (2006.01) *C12N 15/64* (2006.01)
A61P 35/00 (2006.01) *C12N 5/0783* (2010.01)

(21) International Application Number:

PCT/IB2024/000811

(22) International Filing Date:

13 November 2024 (13.11.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/610,577 15 December 2023 (15.12.2023) US

(71) Applicant: **PHARMAESSENTIA CORPORATION;**

13F, No. 3 Park Street, Nangang District, Taipei, 115 (TW).

(72) Inventor; and

(71) Applicant: **LIN, Ko-Chung** [US/US]; 253 Lincoln Street,
Lexington, MA 02421 (US).

(72) Inventors: **YO, Yi-Te**; 2F-5, No. 3, Park Street, Nangang
District, Taipei 115603 (TW). **YAN, Shih-Long**; 2F-5, No.
3, Park Street, Nangang District, Taipei 115603 (TW). **XU,**
Xu; Apt# 1403, Unit 1, Building 16, West Coast Garden,
Zhejiang Province, Hang Zhou City 310000 (CN). **CHEN,**
Ming-Tang; 36 Crosby Drive, Suite 202, Bedford, MA
01730 (US).

(74) Agent: **SINGLETON, Chainey, P.**; Singleton IP, PLLC,
18383 Preston Road, Suite 202, Dallas, TX 75252 (US).

(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,

(54) Title: ANTI-PD-1 MONOCLONAL ANTIBODY AND METHODS OF PREPARATION THEREOF

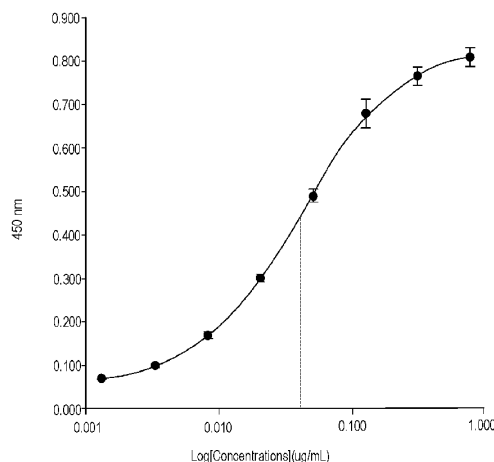


FIG. 9

(57) Abstract: An anti-human PD-1 monoclonal antibody, and preparation methods therefor are disclosed herein. The anti-human PD-1 monoclonal antibody can bind with an extracellular region of a human PD-1 protein receptor, and can seal PD-1 protein at protein level and cellular level and block the binding of the PD-1 protein, thereby enhancing immunity. The monoclonal antibody can be administrated independently, jointly with other drugs as a combination, and/or administrated independently or in combination in any given order to treat a subject in need.

[Continued on next page]

KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY,
MA, MD, MG, MK, MN, MU, 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, SC, 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:

- *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))*

(48) Date of publication of this corrected version:

22 January 2026 (22.01.2026)

(15) Information about Correction:

see Notice of 22 January 2026 (22.01.2026)