

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
03 April 2025 (03.04.2025)



(10) International Publication Number
WO 2025/072406 A1

(51) International Patent Classification:

C07K 16/40 (2006.01) A61P 35/00 (2006.01)
A61K 47/68 (2017.01) A61K 39/00 (2006.01)

(21) International Application Number:

PCT/US2024/048516

(22) International Filing Date:

26 September 2024 (26.09.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

PCT/CN2023/121540

26 September 2023 (26.09.2023) CN

PCT/CN2024/104820

10 July 2024 (10.07.2024) CN

(71) Applicant: **PROFOUND BIO US CO.** [US/US]; 14241
NE Woodinville-Duvall Rd., #228, Woodinville, WA 98072
(US).

(72) Inventors: **XIAO, Yang**; c/o ProfoundBio (Suzhou) Co.,
Ltd., Suite 101 & 102, Bldg 1, Phase 3, Area A, 1 Xinze
Street, SIP, Suzhou, Jiangsu, 215125 (CN). **WANG, Lei**; c/
o ProfoundBio (Suzhou) Co., Ltd., Suite 101 & 102, Bldg
1, Phase 3, Area A, 1 Xinze Street, SIP, Suzhou, Jiangsu,
215125 (CN). **HAN, Tae**; c/o ProfoundBio US Co., 14241
NE Woodinville-Duvall Rd., #228, Woodinville, WA 98072
(US). **ZHAO, Baiteng**; c/o ProfoundBio US Co., 14241
NE Woodinville-Duvall Rd., #228, Woodinville, WA 98072
(US).

(74) Agent: **REMILLARD, Jane, E.** et al.; Nelson Mullins Ri-
ley & Scarborough LLP, One Financial Center, Suite 3500,
Boston, MA 02111 (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,
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:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments (Rule 48.2(h))
- with sequence listing part of description (Rule 5.2(a))

WO 2025/072406 A1

(54) Title: PTK7 BINDING AGENTS, CONJUGATES THEREOF AND METHODS OF USING THE SAME

(57) Abstract: The present invention provides PTK7 antibodies, antigen binding portions thereof, other binding agents and PTK7
conjugates thereof, as well as methods and uses of such antibodies and conjugates the treatment of cancer and autoimmune disease.