

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
17 February 2022 (17.02.2022)



(10) International Publication Number
WO 2022/034524 A3

(51) International Patent Classification:

A61P 35/00 (2006.01) A61K 39/00 (2006.01)
C07K 16/28 (2006.01)

(21) International Application Number:

PCT/IB2021/057414

(22) International Filing Date:

11 August 2021 (11.08.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

PCT/IL2020/050889

12 August 2020 (12.08.2020) IL
63/145,604 04 February 2021 (04.02.2021) US
63/149,371 15 February 2021 (15.02.2021) US

(71) Applicant: **BIOND BIOLOGICS LTD.** [IL/IL]; Yarok Street, P.O. Box 4, 2017400 Misgav Industrial Park (IL).

(72) Inventors: **MANDEL, Ilana**; c/o Biond Biologics Ltd., Yarok Street, P.O. Box 4, 2017400 Misgav Industrial Park (IL). **PERETZ, Tsur**; c/o Biond Biologics Ltd., Yarok Street, P.O. Box 4, 2017400 Misgav Industrial Park (IL). **HAVES ZIV, Dana**; c/o Biond Biologics Ltd., Yarok Street, P.O. Box 4, 2017400 Misgav Industrial Park (IL). **GOLDSHEIN, Ilana**; c/o Biond Biologics Ltd., Yarok Street, P.O. Box 4, 2017400 Misgav Industrial Park (IL). **ALISHEKEVITZ, Dror**; c/o Biond Biologics Ltd., Yarok Street, P.O. Box 4, 2017400 Misgav Industrial Park (IL). **FRIDMAN-DROR, Anna**; c/o Biond Biologics Ltd., Yarok Street, P.O. Box 4, 2017400 Misgav Industrial Park (IL). **HAKIM, Motti**; c/o Biond Biologics Ltd., Yarok Street, P.O. Box 4, 2017400 Misgav Industrial Park (IL). **SHULMAN, Avidor**; c/o Biond Biologics Ltd., Yarok Street, P.O. Box 4, 2017400 Misgav Industrial Park (IL). **SAPIR, Yair**; c/o Biond Biologics Ltd., Yarok Street, P.O. Box 4, 2017400 Misgav Industrial Park (IL). **BEN-MOSHE, Tehila**; c/o Biond Biologics Ltd., Yarok Street, P.O. Box 4, 2017400 Misgav Industrial Park (IL).

(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).

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:

- 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))
- in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE

(88) Date of publication of the international search report:

28 April 2022 (28.04.2022)

(54) Title: ANTIBODIES AGAINST ILT2 AND USE THEREOF

(57) Abstract: The present disclosure provides monoclonal anti-ILT2 antibodies or antigen-binding fragments thereof, as well as pharmaceutical compositions comprising the same and methods of producing the same. Also provided are methods of treating cancer using the antibodies or compositions of the present disclosure. Methods of patient selection are also provided.

WO 2022/034524 A3