

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
10 May 2024 (10.05.2024)



(10) International Publication Number
WO 2024/094850 A1

(51) International Patent Classification:

A61K 38/08 (2019.01) C07K 7/00 (2006.01)
A61K 38/18 (2006.01) C07K 14/495 (2006.01)

(21) International Application Number:

PCT/EP2023/080669

(22) International Filing Date:

03 November 2023 (03.11.2023)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2216449.5 04 November 2022 (04.11.2022) GB

(71) Applicant: **IO BIOTECH APS** [DK/DK]; Ole Maaloes
Vej 3, 2200 Copenhagen N (DK).

(72) Inventor: **ANDERSEN, Mads Hald**; Hegnsvej 54, 2850
Naerum (DK).

(74) Agent: **J A KEMP LLP**; 80 Turnmill Street, London
Greater London EC1M 5QU (GB).

(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).

(54) Title: TGF-BETA-1 VACCINE

(57) Abstract: The present invention relates to novel polypeptides, which are derived from transforming growth factor beta 1 (TGFβ1; TGFb-1) as well as polynucleotides encoding such polypeptides and compositions comprising such peptides. The present invention is further concerned with ways to increase the selectivity of the immune response to TGFb-1. The invention also concerns uses, and methods of using, said polypeptides, polynucleotides, and compositions.



WO 2024/094850 A1