

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
15 February 2024 (15.02.2024)



(10) International Publication Number
WO 2024/031131 A1

(51) International Patent Classification:

A61K 38/18 (2006.01) *C07K 14/475* (2006.01)
A61P 25/00 (2006.01) *C12N 15/113* (2010.01)
A61P 29/00 (2006.01) *C12N 15/19* (2006.01)
A61P 35/00 (2006.01) *C12N 15/88* (2006.01)
A61P 37/00 (2006.01)

Published:

- with international search report (Art. 21(3))
- 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

(21) International Application Number:

PCT/AU2023/050739

(22) International Filing Date:

08 August 2023 (08.08.2023)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2022902231 09 August 2022 (09.08.2022) AU
2023901841 09 June 2023 (09.06.2023) AU

(71) Applicant: **LYRAMID PTY LTD** [AU/AU]; Suite 4,
246-250 Railway Parade, West Leederville, Western Aus-
tralia 6007 (AU).

(72) Inventor: **ROBERTSON, Graham**; c/o Lynamid Pty Ltd,
Suite 4, 246-250 Railway Parade, West Leederville, West-
ern Australia 6007 (AU).

(74) Agent: **FB RICE**; Level 23, 44 Market Street, Sydney, New
South Wales 2000 (AU).

(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: COMPOSITIONS AND METHODS FOR DELIVERY OF TRUNCATED MIDKINE PROTEINS

(57) Abstract: The present disclosure relates generally to novel compositions and methods for delivery of truncated midkine proteins in which the amino acid sequence encoded by exon 4 of human midkine is absent or partially absent and/or polynucleotides encoding said truncated human midkine proteins.

WO 2024/031131 A1