

(19) World Intellectual Property
Organization
International Bureau



(10) International Publication Number

WO 2022/036024 A9

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

WIPO | PCT

(51) International Patent Classification:

A61K 35/17 (2015.01) C07K 14/735 (2006.01)
C12N 5/0783 (2010.01)

(21) International Application Number:

PCT/US2021/045643

(22) International Filing Date:

12 August 2021 (12.08.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/064,832 12 August 2020 (12.08.2020) US

(71) Applicant: UNIVERSITY OF CENTRAL FLORIDA
RESEARCH FOUNDATION, INC. [US/US]; 12201 Re-
search Parkway, Ste. 501, Orlando, Florida 32826 (US).

(72) Inventors: COPIK, Alicja; 4365 Andromeda Loop N., Or-
lando, Florida 32816 (US). OYER, Jeremiah; 4365 An-
dromeda Loop N., Orlando, Florida 32816 (US). DIER-
FENTHALER, Thomas; 4365 Andromeda Loop N., Or-

lando, Florida 32816 (US). PARKS, Griff; 4365 Androm-
eda Loop N., Orlando, Florida 32816 (US).

(74) Agent: LANIER, J. Gibson et al.; Meunier Carlin & Curf-
man LLC, 999 Peachtree Street, NE, Suite 1300, Atlanta,
Georgia 30309 (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, 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,

(54) Title: METHODS AND COMPOSITIONS FOR STIMULATING GAMMA DELTA T CELLS

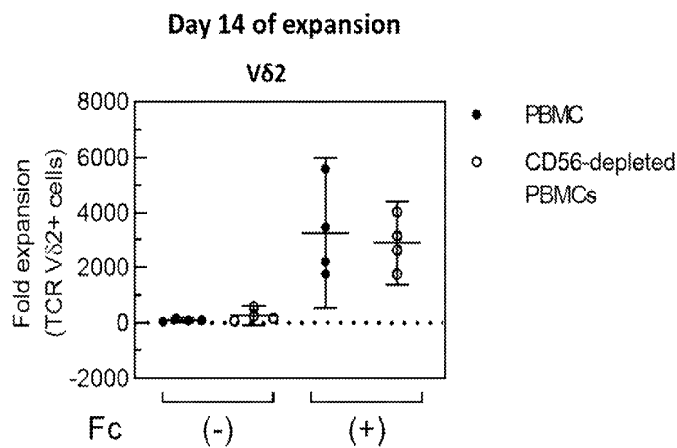


FIG. 5

(57) Abstract: Compositions and methods for stimulating $\gamma\delta$ T cell expansion and cytotoxicity are described. Therapeutic compositions and methods using expanded and stimulated $\gamma\delta$ T cells are described.

[Continued on next page]

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).

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))*

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

10 March 2022 (10.03.2022)

(48) Date of publication of this corrected version:

07 April 2022 (07.04.2022)

(15) Information about Correction:

see Notice of 07 April 2022 (07.04.2022)