

(19) World Intellectual Property
Organization
International Bureau



WIPO | PCT



(10) International Publication Number
WO 2020/160291 A9

(43) International Publication Date
06 August 2020 (06.08.2020)

(51) International Patent Classification:

C07K 16/22 (2006.01) A61P 43/00 (2006.01)
C07K 16/28 (2006.01)

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).

(21) International Application Number:

PCT/US2020/015915

(22) International Filing Date:

30 January 2020 (30.01.2020)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/798,927 30 January 2019 (30.01.2019) US

(71) Applicant: **SCHOLAR ROCK, INC.** [US/US]; 620
Memorial Drive, 2nd Floor, Cambridge, Massachusetts
02139 (US).

(72) Inventors: **SCHURPF, Thomas**; 18 Cottage Park Av-
enue, Cambridge, MA 02140 (US). **JACKSON, Justin W.**;
395 Broadway L3F, Cambridge, MA 02139 (US). **CORI-
COR, George**; 273 Concord Ave, Cambridge, MA 02138
(US). **DATTA, Abhishek**; 48 Hemman Street, Boston,
MA 02131 (US). **WAWERSIK, Stefan**; 3 Brickyard Lane,
Westborough, MA 01581 (US). **LITTLEFIELD, Christo-
pher**; 66 Lafayette Street, Marblehead, MA 01945 (US).
FOGEL, Adam; 49 Fitchburg Street, Watertown, MA
02472 (US).

(74) Agent: **CLARKE, Marcie B.** et al.; McCarter & English,
LLP, 265 Franklin Street, Boston, MA 02110 (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, 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,

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))

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

10 September 2020 (10.09.2020)

Date of publication of the revised international search report:

15 October 2020 (15.10.2020)

(15) Information about Correction:

see Notice of 15 October 2020 (15.10.2020)

(54) Title: LTBP COMPLEX-SPECIFIC INHIBITORS OF TGF β AND USES THEREOF

(57) Abstract: Disclosed herein are inhibitors, such as antibodies, and antigen-binding portions thereof, that selectively bind complexes of LTBP1-TGF β and/or LTBP3-TGF β . The application also provides methods of use of these inhibitors for, for example, inhibiting TGF β activation, and treating subjects suffering from TGF β -related disorders, such as fibrotic conditions. Methods of selecting a context-dependent or context-independent isoform-specific TGF β inhibitor for a subject in need thereof are also provided.