

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
16 December 2021 (16.12.2021)



(10) International Publication Number
WO 2021/252555 A1

(51) International Patent Classification:

C07D 417/00 (2006.01) C07D 487/00 (2006.01)
C07D 263/30 (2006.01) C07D 471/00 (2006.01)
C07D 277/44 (2006.01) A61K 31/42 (2006.01)

(21) International Application Number:

PCT/US2021/036505

(22) International Filing Date:

09 June 2021 (09.06.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/036,458 09 June 2020 (09.06.2020) US

(71) Applicant: ANIMA BIOTECH INC. [US/US]; 75 Claremont Road, Suite 102, Bernardsville, New Jersey 07924 (US).

(72) Inventors: SHEPPARD, David, William; c/o Anima Biotech, 10 Hanchoshet St., 6971072 Tel Aviv (IL). TIERNEY, Jason, Paul; c/o Anima Biotech, 10 Hanchoshet St., 6971072 Tel Aviv (IL). MANDABI, Aviad; c/o Anima Biotech, 10 Hanchoshet St., 6971072 Tel Aviv (IL). SCHMIDT, Wolfgang; Charles River, Chesterford Research Park, Saffron Walden, Essex CB10 1XL (GB). LEVANTO, Stefano; Charles River, Chesterford Research Park, Saffron Walden, Essex CB10 1XL (GB). HAMBLIN, Julie, Nicole; Charles River, Chesterford Research Park, Saffron Walden, Essex CB10 1XL (GB). BULL, Richard,

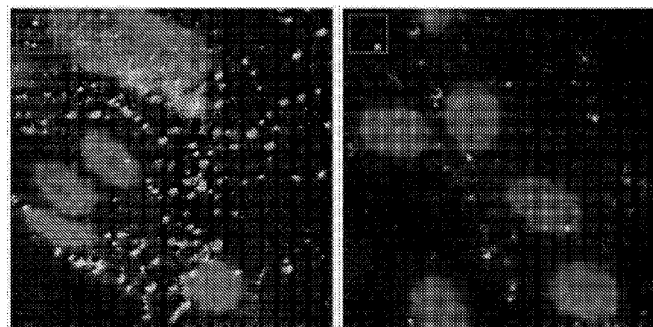
James; Charles River, 7-9 Spire Green Centre Flex Meadow, Harlow, Essex CM19 5TR (GB). ALROY, Iris; c/o Anima Biotech, 10 Hanchoshet St., 6971072 Tel Aviv (IL). MANSOUR, Wissam; c/o Anima Biotech, 10 Hanchoshet St., 6971072 Tel Aviv (IL). KLEPFISH, Moty; c/o Anima Biotech, 10 Hanchoshet St., 6971072 Tel Aviv (IL). WANG, Yaode; Room 1304, Unit 1, Building No. 221, Zhujiaqiao Residential Quater, No. 1 Street Jingsheng North, Majuqiao Town, Tongzhou, Beijing 101102 (CN). LI, Haitang; Room 302, Unit 3, Building No. 1, Yuxingyuan Residential Quarter, No. 30 Yuzhen Street, Caiyu Town, Daxing District, Beijing 102606 (CN).

(74) Agent: COHEN, Mark, S. et al.; Pearl Cohen Zedek Latzer Baratz LLP, 7 Times Square, 19th Floor, New York, New York 10036 (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,

(54) Title: COLLAGEN 1 TRANSLATION INHIBITORS AND METHODS OF USE THEREOF



Control siRNA

COL1A1 siRNA1

FIGURE 1

(57) Abstract: The present invention relates to novel Collagen I translation inhibitors, composition and methods of preparation thereof, and uses thereof for treating Fibrosis including lung, liver, kidney, cardiac and dermal fibrosis, IPF, wound healing, scarring and Gingival fibromatosis, Systemic Sclerosis, and alcoholic and non-alcoholic steatohepatitis (NASH).

[Continued on next page]

WO 2021/252555 A1

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).

Published:

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