

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
05 August 2021 (05.08.2021)



(10) International Publication Number
WO 2021/154476 A1

(51) International Patent Classification:

A61K 38/02 (2006.01) A61K 47/68 (2017.01)
A61K 39/395 (2006.01)

(21) International Application Number:

PCT/US2021/012666

(22) International Filing Date:

08 January 2021 (08.01.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/968,252 31 January 2020 (31.01.2020) US
63/055,405 23 July 2020 (23.07.2020) US

(71) Applicant: **DYNE THERAPEUTICS, INC.** [US/US];
830 Winter Street, Waltham, MA 02451 (US).

(72) Inventors: **SUBRAMANIAN, Romesh, R.**; 830 Winter Street, Waltham, MA 02451 (US). **QATANANI, Mohammed, T.**; 830 Winter Street, Waltham, MA 02451 (US). **WEEDEN, Timothy**; 830 Winter Street, Waltham, MA 02451 (US). **DESJARDINS, Cody, A.**; 830 Winter Street, Waltham, MA 02451 (US). **QUINN, Brendan**; 830 Winter Street, Waltham, MA 02451 (US).

(74) Agent: **GE, Zhiyun** et al.; Wolf, Greenfield & Sacks, P.C.,
600 Atlantic Avenue, Boston, MA 02210-2206 (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, 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).

(54) Title: ANTI-TRANSFERRIN RECEPTOR (TFR) ANTIBODY AND USES THEREOF

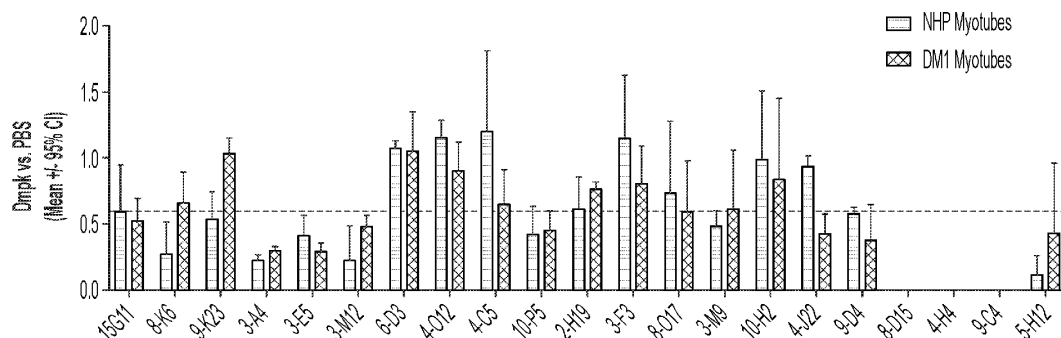


FIG. 3

(57) Abstract: Aspects of the disclosure relate to antibodies that bind to transferrin receptor (e.g., transferrin receptor 1) and complexes comprising the antibody covalently linked to a molecular payload. Methods of making and using the antibodies are also provided.

[Continued on next page]

WO 2021/154476 A1

Published:

- with international search report (Art. 21(3))
- with sequence listing part of description (Rule 5.2(a))