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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
3 March 2016 (03.03.2016)

WIPO | PCT

(10) International Publication Number
WO 2016/033041 A1

(51) International Patent Classification:
A61K 38/39 (2006.01)

(21) International Application Number:
PCT/US2015/046690

(22) International Filing Date:
25 August 2015 (25.08.2015)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
62/041,468 25 August 2014 (25.08.2014) US

(71) Applicant: **ANTHROGENESIS CORPORATION** [US/US]; 7 Powder Horn Drive, Warren, NJ 07059 (US).

(72) Inventors: **BHATIA, Mohit, B.**; 4 Stayman Court, Manalapan, NJ 07726 (US). **HERZBERG, Uri**; 148 Maple Street, Bridgewater, NJ 08807 (US). **KAPLUNOVSKY, Aleksandr**; 30 Cleancence Avenue, Budd Lake, NJ 07828 (US). **ZAKA, Raihana**; 2 Nuko Terrace, Randolph, NJ 07869 (US). **YE, Qian**; 10 Mounthaven Drive, Livingston, NJ 07039 (US).

(74) Agents: **GEORGE, Nikolaos, C.** et al.; Jones Day, 222 East 41st Street, New York, NY 10017-6702 (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, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, 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, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

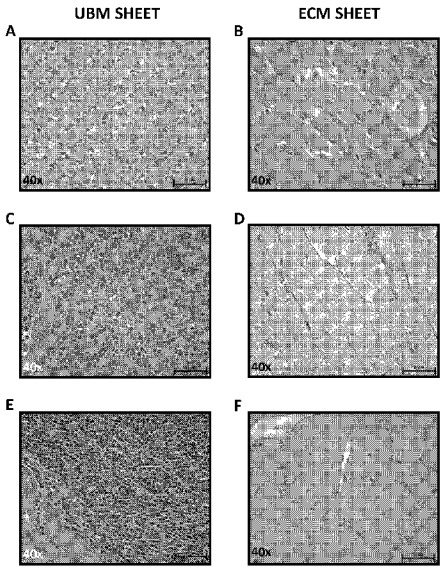
(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, 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).

Published:

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

(54) **Title**: EXTRACELLULAR MATRIX COMPOSITIONS

FIGURE 1



(57) **Abstract**: Provided herein are placental extracellular matrix (ECM) compositions and methods of making the same. Also provided herein are uses of the placental ECM compositions provided herein. In one aspect, provided herein are extracellular matrix (ECM) compositions prepared using placental tissue, e.g., human placental tissue. In certain embodiments, the ECM compositions provided herein comprise about 30% to about 60% collagen and about 10% to about 35% elastin. In addition, such ECM compositions comprise (i) very low amounts of fibronectin (e.g., less than 0.1% fibronectin), e.g., as measured by ELISA; (ii) no or an undetectable amount of laminin, e.g., as measured by ELISA; and/or no or an undetectable amount of glycosaminoglycans, e.g., as measured by ELISA.

WO 2016/033041 A1