



(51) International Patent Classification:

A61K 35/57 (2015.01)

A61P 37/06 (2006.01)

A61P 1/16 (2006.01)

TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

(21) International Application Number:

PCT/US2022/024946

Published:

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

— with sequence listing part of description (Rule 5.2(a))

(22) International Filing Date:

15 April 2022 (15.04.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/175,603

16 April 2021 (16.04.2021)

US

(71) Applicant: **PRODIGY BIOTECH** [US/US]; 719 Bradford Terrace, West Chester, PA 19382 (US).

(72) Inventors: **IYER, Subramanian, V.**; 1122 Whitcombe Drive, Royal Palm Beach, FL 33411 (US), **PATEL, Sunny**; 10 Cedar Hollow Drive, Stirling, NJ 07980 (US).

(74) Agent: **AUITO, Derek A.**; Dentons US LLP, 1900 K Street, N.W., Washington, D.C. 20006 (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, JM, 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,

(54) Title: HYPERIMMUNIZED EGG PRODUCT FOR TREATING OR PREVENTING ALCOHOLIC LIVER DISEASE AND GRAFT-VERSUS-HOST DISEASE

(57) Abstract: In one aspect, the present disclosure is directed to a method for preventing or treating alcoholic liver disease or graft-versus-host disease in a subject in need thereof, comprising administering to the subject a therapeutically effective amount of a hyper-immunized egg product obtained from an egg-producing animal, thereby preventing or treating the alcoholic liver disease or the graft-versus-host disease in the subject, wherein the hyperimmunized egg product comprises a therapeutically effective amount of one or more antibodies to an antigen selected from the group consisting of Enterococcus faecalis, Enterococcus faecalis cytolytic toxin, and Enterococcus faecium. The present disclosure is also directed to hyperimmunized eggs and egg products produced by an animal that has been hyperimmunized with an antigen selected from the group consisting of Enterococcus faecalis, isolated Enterococcus faecalis cytolytic toxin, and Enterococcus faecium. Methods of preparing the hyperimmunized eggs and egg products are also disclosed.

