

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
28 November 2024 (28.11.2024)



(10) International Publication Number
WO 2024/240923 A1

(51) International Patent Classification:

A61K 31/702 (2006.01) *A23L 33/21* (2016.01)
A61K 31/122 (2006.01) *A23L 33/125* (2016.01)
A61K 35/745 (2015.01) *A23L 33/135* (2016.01)
A61K 35/747 (2015.01) *A61P 19/08* (2006.01)

(21) International Application Number:

PCT/EP2024/064337

(22) International Filing Date:

24 May 2024 (24.05.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

23175289.0 25 May 2023 (25.05.2023) EP

(71) Applicant: **SOCIÉTÉ DES PRODUITS NESTLÉ S.A.**

[CH/CH]; Avenue Nestlé 55, 1800 VEVEY (CH).

(72) Inventors: **BOULANGE, Claire Laurence Lucie Marie;**

Chemin des Chênes 3, 1610 Oron la Ville (CH). **DUBOUX, Stéphane;** 90, Chemin de la Damaz, 1162 St-Prex (CH). **CAMPOS GIMENEZ, Esther;** Chemin de la Bioleyre 29, 1681 Billens (CH). **HORCAJADA, Marie Noëlle;** 168, Rue de la Pierre, 01170 Echenevex (FR). **BONNET, Nicolas;** 385 rue Beaupré, 74160 Beaumont (FR).

(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, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, 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, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, 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, ME, 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).

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))
- in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE

(54) Title: PREBIOTICS FOR TREATING AND/OR PREVENTING VITAMIN K2 DEFICIENCY

(57) Abstract: The present invention relates to a prebiotic agent for use in treating and/or preventing vitamin K2 deficiency in a subject. The present invention relates to the use of a prebiotic agent to promote vitamin K2 production in the gut of a subject.

WO 2024/240923 A1