

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
28 August 2025 (28.08.2025)



(10) International Publication Number
WO 2025/178568 A1

(51) International Patent Classification:

C12N 1/16 (2006.01) C12P 7/64 (2022.01)
C12N 15/54 (2006.01) C12R 1/645 (2006.01)
C12N 15/81 (2006.01)

(21) International Application Number:

PCT/SG2025/050121

(22) International Filing Date:

21 February 2025 (21.02.2025)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

10202400461Q 21 February 2024 (21.02.2024) SG

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(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, UY, 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:

— of inventorship (Rule 4.17(iv))

(54) Title: **RHODOTORULA TORULOIDES AS AN INDUSTRIAL PLATFORM FOR FOOD AND CHEMICAL PRODUCTION USING ALTERNATIVE FEEDSTOCKS**

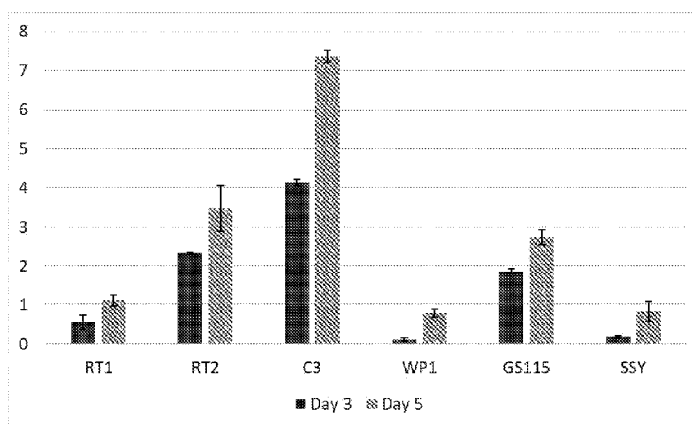


Figure 1

(57) Abstract: The present invention relates to a Rhodotorula toruloides strain that is enhanced through metabolic engineering and laboratory directed evolution for use in producing food and chemical production using alternative feedstocks. More particularly, the engineered strain which overexpresses Carnitine acetyltransferase (CAT) and/or transcription factor HAA1 genes, and the evolved strain have enhanced acetate utilization and/or fatty acid and/or lipid and/or biomass production compared to wildtype R. toruloides.

[Continued on next page]

Published:

- *with international search report (Art. 21(3))*
- *with (an) indication(s) in relation to deposited biological material furnished under Rule 13bis separately from the description (Rules 13bis.4(d)(i) and 48.2(a)(viii))*
- *with sequence listing part of description (Rule 5.2(a))*