

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
13 March 2025 (13.03.2025)



(10) International Publication Number
WO 2025/054572 A1

(51) International Patent Classification:

C12Q 1/6811 (2018.01) C12Q 1/6855 (2018.01)
C12Q 1/6853 (2018.01) C12Q 1/6869 (2018.01)

(21) International Application Number:

PCT/US2024/045753

(22) International Filing Date:

08 September 2024 (08.09.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/581,624 08 September 2023 (08.09.2023) US
63/593,807 27 October 2023 (27.10.2023) US

(71) Applicant: **EXACT SCIENCES CORPORATION**

[US/US]; 5505 Endeavor Lane, Madison, WI 53719 (US).

(72) Inventors: **ALLAWI, Hatim, T.**; c/o Exact Sciences

Corporation, 5505 Endeavor Lane, Madison, WI 53719

(US). **DUELLMAN, Tyler**; c/o Exact Sciences Corpora-

tion, 5505 Endeavor Lane, Madison, WI 53719 (US).

KATEROV, Vlatcheslav, E.; c/o Exact Sciences Corpora-

tion, 5505 Endeavor Lane, Madison, WI 53719 (US).

(74) Agent: **BROW, Mary, Ann, D.**; Casimir Jones, S.C., 2275

Deming Way, Suite 310, Middleton, WI 53562 (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, 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).

Published:

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

(54) Title: CHARACTERIZING MARKER-SPECIFIC IDENTIFIERS FROM HIGHLY MULTIPLEXED FLAP CLEAVAGE ASSAYS

(57) Abstract: Technology, including but not limited to methods, compositions, kits, systems, reagents, and reaction mixtures, for characterization of samples, e.g., nucleic acid samples from subjects, in particular by characterizing marker-specific identifiers produced in multiplexed flap cleavage assays of the nucleic acid samples.

WO 2025/054572 A1