

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
09 February 2023 (09.02.2023)



(10) International Publication Number
WO 2023/014303 A2

- (51) **International Patent Classification:**
Not classified
- (21) **International Application Number:**
PCT/SG2022/050560
- (22) **International Filing Date:**
05 August 2022 (05.08.2022)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
10202108592Y 05 August 2021 (05.08.2021) SG
- (71) **Applicant:** **AGENCY FOR SCIENCE, TECHNOLOGY AND RESEARCH** [SG/SG]; 1 Fusionopolis Way, #20-10 Connexis North Tower, Singapore 138632 (SG).
- (72) **Inventors:** **KOH, Lian Chye Winston**; c/o Institute of Molecular and Cell Biology, 61 Biopolis Drive, Proteos, Singapore 138673 (SG). **KONG, Kiat Whye**; c/o Institute of Molecular and Cell Biology, 61 Biopolis Drive, Proteos, Singapore 138673 (SG).
- (74) **Agent:** **DONALDSON & BURKINSHAW LLP**; 24 Raffles Place, #15-00 Clifford Centre, Singapore 048621 (SG).
- (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, 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,

(54) **Title:** A METHOD OF AMPLIFICATION OF A NUCLEIC ACID

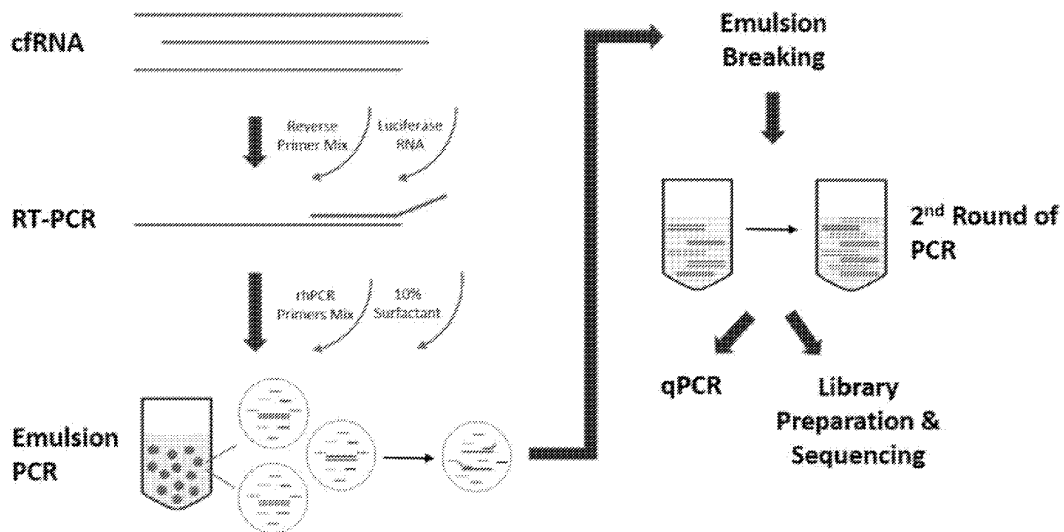


Fig. 1

(57) **Abstract:** There is provided a method of amplification of a target nucleic acid, the method comprising annealing the target nucleic acid in the presence of a control nucleic acid, and subjecting the target nucleic acid to one or more amplification step in the presence of a mixture comprising a surfactant and an oligonucleotide primer and/or probe capable of hybridizing with the target nucleic acid, wherein the oligonucleotide primer and/or probe comprises a cleavage site and a cleavable 3' end. Also disclosed are nucleic acid amplification mixtures, kits for amplifications, and methods of detecting and/or determining the presence and/or the amount of a target nucleic acid.

[Continued on next page]

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).

Declarations under Rule 4.17:

— *of inventorship (Rule 4.17(iv))*

Published:

— *without international search report and to be republished upon receipt of that report (Rule 48.2(g))*