

(51) International Patent Classification:
C12Q 1/68 (2006.01)(21) International Application Number:
PCT/GB2012/052305(22) International Filing Date:
19 September 2012 (19.09.2012)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
1116131.2 19 September 2011 (19.09.2011) GB(71) Applicant (for all designated States except US): **EPI-STEM LIMITED** [GB/GB]; 48 Grafton Street, Manchester M13 9XX (GB).

(72) Inventor; and

(71) Applicant (for US only): **COBB, Ben** [GB/GB]; c/o Epi-stem Limited, 48 Grafton Street, Manchester M13 9XX (GB).(74) Agent: **MARKS & CLERK LLP**; 62-68 Hills Road, Cambridge, Cambridgeshire CB2 1LA (GB).

(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, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, 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, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, 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, 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, ML, MR, NE, SN, TD, TG).

Published:

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

(54) Title: PROBE WITH MULTIPLE TARGET REGION SPECIFICITY AND OF TRIPARTITE CHARACTER

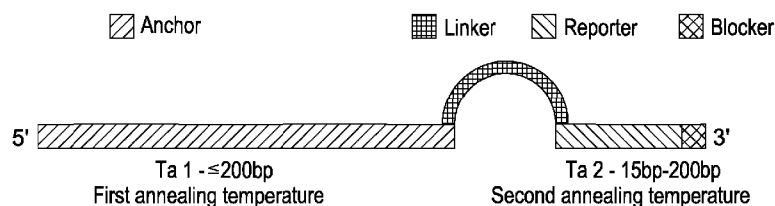


Fig.1

(57) Abstract: Probes and methods are described for detecting polymorphisms, including short tandem repeats, in a target nucleotide sequence. The probes include first and second regions separated by a linker sequence, with the first and second regions having discrete melting temperatures with their respective target sequences. In a first embodiment, the first and second regions are both reporter sequences; in a second embodiment, one region is an anchor sequence while the other is a reporter sequence.