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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
3 June 2004 (03.06.2004)

PCT

(10) International Publication Number
WO 2004/045522 A2

(51) International Patent Classification[7]: A61K

(21) International Application Number:
PCT/US2003/036522

(22) International Filing Date:
14 November 2003 (14.11.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/294,781 14 November 2002 (14.11.2002) US

(71) Applicant *(for all designated States except US)*: **BIOGEN IDEC MA INC.** [US/US]; 14 Cambridge Center, Cambridge, MA 02155 (US).

(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: **ALLAIRE,, Normand E.,** [US/US]; 284 North Main Street, Sharon, MA 02067 (US).

(74) Agent: **CREASON,, Gary L.,**; BIOGEN IDEC MA INC., 14 Cambridge Center, Cambridge, MA 02142 (US).

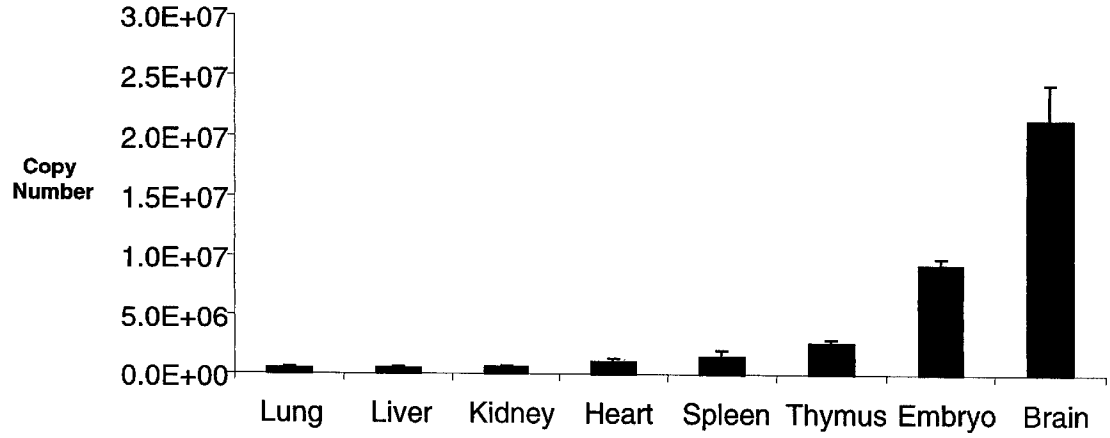
(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(regional)*: ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *without international search report and to be republished upon receipt of that report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ABSOLUTE QUANTITATION OF NUCLEIC ACIDS BY RT-PCR



(57) Abstract: A method for obtaining a cRNA for use in generating calibration data, e.g., a standard curve, for absolute quantitation of RNA by RT-PCR is disclosed. The method includes the steps of: providing a synthetic oligonucleotide comprising an amplicon, a promoter sequence located 3' relative to the amplicon; synthesizing complementary RNA (cRNA) by in vitro transcription of the synthetic oligonucleotide; quantitatively assaying the cRNA by an independent method; and generating calibration data using a known quantity of the cRNA.

WO 2004/045522 A2