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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
26 July 2007 (26.07.2007)

PCT

(10) International Publication Number
WO 2007/084684 A3

(51) International Patent Classification:
A61K 31/70 (2006.01)

(21) International Application Number:
PCT/US2007/001468

(22) International Filing Date: 18 January 2007 (18.01.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/760,586	20 January 2006 (20.01.2006)	US
60/796,901	1 May 2006 (01.05.2006)	US
60/851,000	10 October 2006 (10.10.2006)	US

(71) Applicants *(for all designated States except US)*: **QUARK PHARMACEUTICALS, INC.** [US/US]; 6501 Dumbarton Circle, Fremont, CA 94555 (US). **ATUGEN AG** [DE/DE]; Robert-Rössle-Str. 10, D-13125 Berlin (DE).

(72) Inventors: **FEINSTEIN, Elena**; 12/29 Hahagana Street, Rehovot (IL). **SKALITER, Rami**; 117/11 Habanim, 74037 Nes Zionna (IL).

(74) Agent: **WHITE, John, P.**; COOPER & DUNHAM LLP, 1185 Avenue Of The Americas, New York, NY 10036 (US).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: 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, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, 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, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*
— *with sequence listing part of description published separately in electronic form and available upon request from the International Bureau*

(88) Date of publication of the international search report:
20 March 2008

WO 2007/084684 A3

(54) Title: THERAPEUTIC USES OF INHIBITORS OF RTP801

(57) Abstract: The present invention provides novel molecules, compositions, methods and uses for treating microvascular disorders, eye diseases respiratory conditions and hearing disorders based upon inhibition of the RTP801 gene and/or protein.