



(51) International Patent Classification:

A01N 37/08 (2006.01) *A61K 31/15* (2006.01)
A61K 31/19 (2006.01)

(21) International Application Number:

PCT/US2013/050664

(22) International Filing Date:

16 July 2013 (16.07.2013)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/672,232 16 July 2012 (16.07.2012) US

(71) Applicant: **CHDI FOUNDATION, INC.** [US/US]; 350 Seventh Avenue, Suite 601, New York, NY 10001 (US).

(72) Inventors; and

(71) Applicants : **DOMINGUEZ, Celia** [US/US]; 8606 Allenwood Road, Los Angeles, CA 90046 (US). **LUCK-HURST, Christopher, A.** [GB/GB]; 109 Scholars Walk, Cambridge CB4 1DW (GB). **BURLI, Roland, W.** [CH/GB]; 76 Newton Road, Bishop's Stortford, Hertfordshire CM23 3SD (GB). **STOTT, Andrew, J.** [GB/GB]; 4 Wycliffe Road, Cambridge CB1 3JD (GB). **BRECCIA, Perta** [IT/GB]; 2 Fernlea Close, Cambridge CB1 9LW (GB).

(74) Agent: **STEVENS, Lauren, L.**; Global Patent Group LLC, 1005 N. Warson, Suite 404, St. Louis, MO 63132 (US).

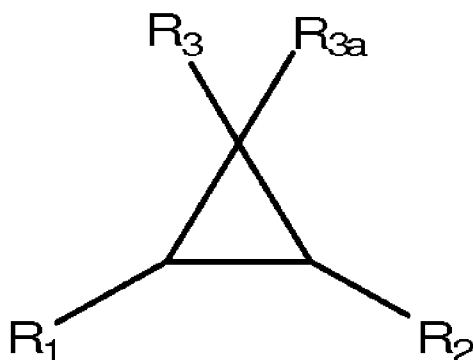
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, 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, KM, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(54) Title: HISTONE DEACETYLASE INHIBITORS AND COMPOSITIONS AND METHODS OF USE THEREOF

**Formula (I)**

(57) Abstract: Provided are certain histone deacetylase (HDAC) inhibitors, compositions thereof, and methods of their use.