

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
14 February 2008 (14.02.2008)

PCT

(10) International Publication Number
WO 2008/019357 A2

(51) International Patent Classification:

A61K 31/4439 (2006.01)

(21) International Application Number:

PCT/US2007/075332

(22) International Filing Date: 7 August 2007 (07.08.2007)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/836,108	7 August 2006 (07.08.2006)	US
60/875,792	18 December 2006 (18.12.2006)	US
60/945,306	20 June 2007 (20.06.2007)	US

(71) Applicant (for all designated States except US): MICRO-BIA, INC. [US/US]; 320 Bent Street, Cambridge, MA 02141 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): TALLEY, John Jeffrey [US/US]; 96 North Street, Somerville, MA 02144 (US). SPROTT, Kevin [US/US]; 67 Monument Ave., Apt 2, Boston, MA 02129 (US). PEARSON, James Philip [US/US]; 14 Gray Street, Cambridge, MA 02138 (US). MILNE, G. Todd [US/US]; 169 Mason Terrace, Brookline, MA 02446 (US). SCHAIRER, Wayne [US/US];

135 Milk Street, Westboro, MA 01581 (US). YANG, Jing Jing [CN/US]; 104 Burroughs Road, Boxborough, MA 01719 (US). KIM, Charles [US/US]; 199 Prospect Street, Apt. 1, Cambridge, MA 02139 (US). BARDEN, Timothy [US/US]; 19 Intervale Road, Salem, MA 01970 (US). LUNDIGRAN, Regina [US/US]; 14 Salem St. Ave., Charlestown, MA 02129 (US). MERMERIAN, Ara [US/US]; 51 Hillside Road, Watertown, MA 02472-1444 (US). CURRIE, Mark G. [US/US]; 18 Hall Avenue, Sterling, MA 01564 (US).

(74) Agent: MEIKLEJOHN, Anita; Fish & Richardson P.C., P.O. Box 1022, Minneapolis, MN 55440-1022 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, 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, 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,

[Continued on next page]

(54) Title: INDOLE COMPOUNDS

Row	IUPAC name	COX-1 IC50 (µm)	COX-2 IC50 (µm)
1	{6-fluoro-5-methoxy-2-methyl-1-[(5-methyl-2-thienyl)carbonyl]-1H-indol-3-yl}acetic acid	3.3	0.29
2	{1-[(5-chloro-2-thienyl)carbonyl]-5-methoxy-2-methyl-1H-indol-3-yl}acetic acid	5	0.2
3	{1-(cyclohexylcarbonyl)-5-hydroxy-2-methyl-1H-indol-3-yl}acetic acid	>100	3.22
4	{6-fluoro-5-methoxy-2-methyl-1-(2-thienylcarbonyl)-1H-indol-3-yl}acetic acid	6.3	0.32
5	{6-fluoro-5-hydroxy-2-methyl-1-[(5-methyl-2-thienyl)carbonyl]-1H-indol-3-yl}acetic acid	16.3	0.41
6	{6-fluoro-5-hydroxy-2-methyl-1-(2-thienylcarbonyl)-1H-indol-3-yl}acetic acid	27.3	0.23
7	{1-[(5-chloro-2-thienyl)carbonyl]-6-fluoro-5-methoxy-2-methyl-1H-indol-3-yl}acetic acid	35	0.2
8	{1-[(5-chloro-2-thienyl)carbonyl]-6-fluoro-5-hydroxy-2-methyl-1H-indol-3-yl}acetic acid	85, 90	0.56 0.6
9	{1-[(6-chloropyridin-3-yl)carbonyl]-5-hydroxy-2-methyl-1H-indol-3-yl}acetic acid	>100	>10
10	{1-[(6-chloropyridin-3-yl)carbonyl]-5-methoxy-2-methyl-1H-indol-3-yl}acetic acid	>100	2.8
11	{5-hydroxy-2-methyl-1-(piperidin-1-ylcarbonyl)-1H-indol-3-yl}acetic acid	>100	8.9
12	{5-methoxy-2-methyl-1-(piperidin-1-ylcarbonyl)-1H-indol-3-yl}acetic acid	>100	>22.2
13	{1-[(5-chloro-2-thienyl)methyl]-5-fluoro-2-methyl-1H-indol-3-yl}acetic acid	>100	>10%
14	{6-chloro-1-[(5-chloro-2-thienyl)methyl]-5-methoxy-2-methyl-1H-indol-3-yl}acetic acid	>100	>10%
15	{1-[(5-chloro-2-thienyl)methyl]-5-hydroxy-2-methyl-1H-indol-3-yl}acetic acid	>100	>100
16	{1-[(5-chloro-2-thienyl)methyl]-5-methoxy-2-methyl-1H-indol-3-yl}acetic acid	>100	>100
17	{1-(cyclohex-1-en-1-ylcarbonyl)-6-fluoro-5-methoxy-2-methyl-1H-indol-3-yl}acetic acid	>100	3.03
18	{1-(cyclohexylcarbonyl)-6-fluoro-5-methoxy-2-methyl-1H-indol-3-yl}acetic acid	>100	0.4
19	{1-(cyclohexylcarbonyl)-5-methoxy-2-methyl-1H-indol-3-yl}acetic acid	>100	0.8

(57) Abstract: Indole derivatives that are useful for treating pain, inflammation and other conditions are described. Certain of the compounds are benzyl derivatives and others are benzoyl derivatives. The compounds are substituted at least at the 3 position of the indole.

WO 2008/019357 A2



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, MT, 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:

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