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Bioorganic & Medicinal Chemistry Letters

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Bioorganic & Medicinal Chemistry Letters Volume 20, Issue 18, 2010

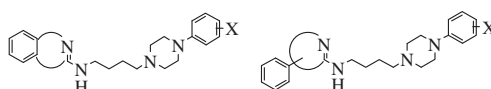
Contents

BMCL DIGEST

Synthesis and evaluation of amides surrogates of dopamine D3 receptor ligands

pp 5376–5379

Mickaël Jean, Jacques Renault, Nicolas Levoine, Denis Danvy, Thierry Calmels, Isabelle Berrebi-Bertrand, Philippe Robert, J.C. Schwartz, J.M. Lecomte, Philippe Uriac, Marc Capet*

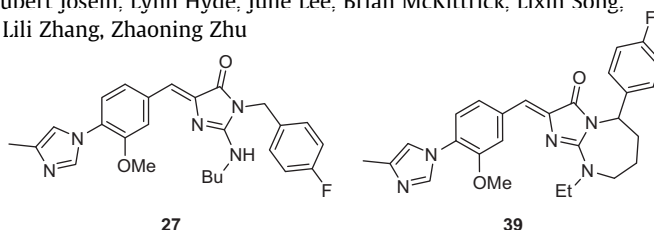


REGULAR ARTICLES

Iminoheterocycles as γ -secretase modulators

pp 5380–5384

John P. Caldwell*, Chad E. Bennett, Troy M. McCracken, Robert D. Mazzola, Thomas Bara, Alexei Buevich, Duane A. Burnett, Inhou Chu, Mary Cohen-Williams, Hubert Josein, Lynn Hyde, Julie Lee, Brian McKittrick, Lixin Song, Giuseppe Terracina, Johannes Voigt, Lili Zhang, Zhaoning Zhu

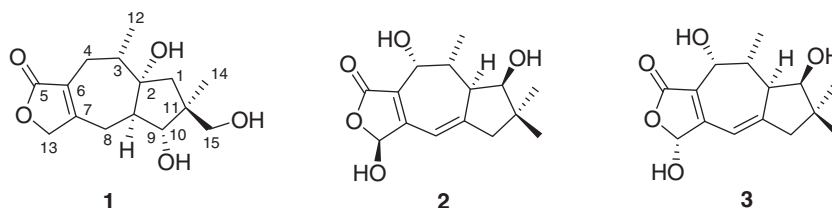


The synthesis of a novel series of iminoheterocycles and their structure–activity relationship (SAR) as modulators of γ -secretase activity will be detailed. Encouraging SAR generated from a monocyclic core led to a structurally unique bicyclic core. Selected compounds exhibit good potency as γ -secretase modulators, excellent rat pharmacokinetics, and lowering of A β ₄₂ levels in various in vivo models.

Lactarane sesquiterpenoids from *Lactarius subvellereus* and their cytotoxicity

pp 5385–5388

Ki Hyun Kim, Hyung Jun Noh, Sang Un Choi, Ki Moon Park, Soon-Ja Seok, Kang Ro Lee*

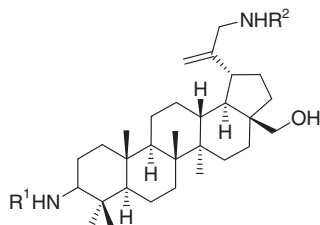


Chemical investigation of the fruiting bodies of *Lactarius subvellereus* resulted in the isolation of three new lactarane sesquiterpenoids, subvellerolactones B (1), D (2), and E (3), together with four known lactarane sesquiterpenes (4–7).

Synthesis, proapoptotic screening, and structure–activity relationships of novel aza-lupane triterpenoids

pp 5389–5393

Aye Aye Mar, Erika L. Szotek, Ali Koohang, William P. Flavin, David A. Eiznhamer, Michael T. Flavin, Ze-Qi Xu*

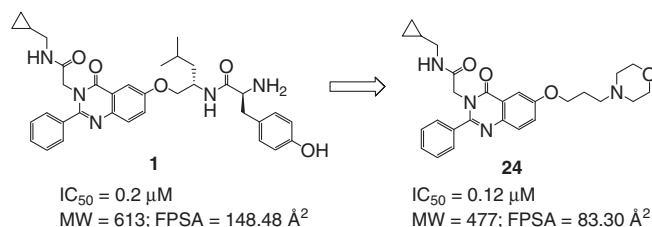


3,30-Bis(aza) derivatives were identified not only to possess improved cytotoxicity compared to the natural product betulonic acid but also to affect cell death predominantly via apoptosis, whereas the mono(aza) derivatives apparently triggered cell death via different, non-apoptotic pathway(s).

Identification and optimization of novel 2-(4-oxo-2-aryl-quinazolin-3(4H)-yl)acetamide vasopressin V3 (V1b) receptor antagonists

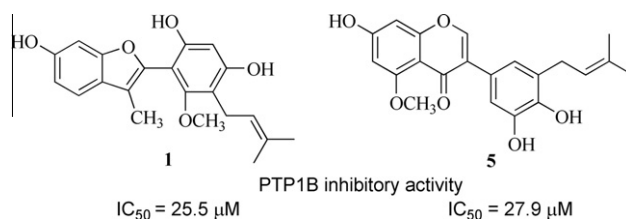
pp 5394–5397

Jeffrey J. Letourneau*, Christopher M. Riviello, Hong Li, Andrew G. Cole, Koc-Kan Ho, Heather A. Zanetakos, Hema Desai, Jiuqiao Zhao, Douglas S. Auld, Susan E. Napier, Fiona J. Thomson, Katharine A. Goan, J. Richard Morphy, Michael H.J. Ohlmeyer, Maria L. Webb

**Prenylflavonoids from *Glycyrrhiza uralensis* and their protein tyrosine phosphatase-1B inhibitory activities**

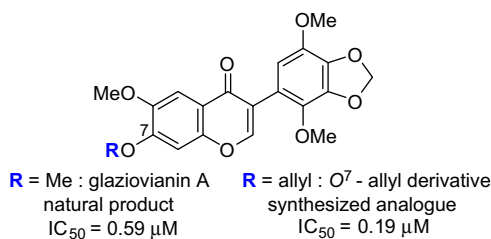
pp 5398–5401

Songpei Li, Wei Li*, Yinghua Wang, Yoshihisa Asada, Kazuo Koike

**Structure–activity relationship study of glaziovianin A against cell cycle progression and spindle formation of HeLa S₃ cells**

pp 5402–5404

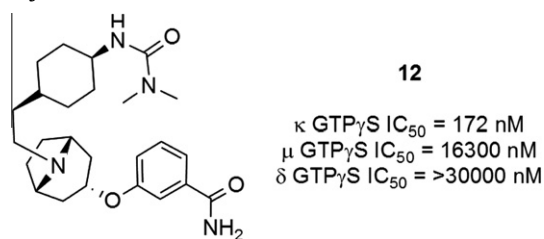
Akiyuki Ikedo, Ichiro Hayakawa, Takeo Usui, Sayaka Kazami, Hiroyuki Osada, Hideo Kigoshi*



SAR development of a series of 8-azabicyclo[3.2.1]octan-3-yloxy-benzamides as kappa opioid receptor antagonists. Part 2

pp 5405–5410

Todd A. Brugel*, Reed W. Smith, Michael Balestra, Christopher Becker, Thalia Daniels, Gerard M. Koether, Scott R. Throner, Laura M. Panko, Dean G. Brown, Ruifeng Liu, John Gordon, Matthew F. Peters

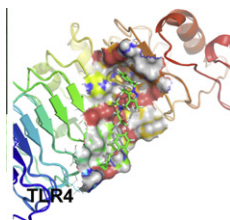


Additional SAR for an extended set of structural modification to key moieties of a novel series of selective kappa opioid receptor antagonists based on a previously disclosed series of 8-azabicyclo[3.2.1]octan-3-yloxybenzamides is described.

Application of a novel in silico high-throughput screen to identify selective inhibitors for protein–protein interactions

pp 5411–5413

Catherine Joce, Joshua A. Stahl, Mitesh Shridhar, Mark R. Hutchinson, Linda R. Watkins, Peter O. Fedichev, Hang Yin*

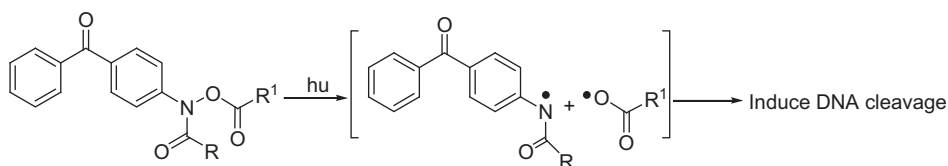


Increasing numbers of target protein structures available for computational studies makes the structure-based screening paradigm more attractive for initial hit identification. We have developed a novel in silico screening methodology incorporating Molecular Mechanics (MM)/implicit solvent methods to evaluate binding free energies and applied this technology to the identification of inhibitors of the TLR4/MD-2 interaction.

**N,O-Diacyl-4-benzoyl-N-phenylhydroxylamines as photoinduced DNA cleaving agents**

pp 5414–5417

Nilanjana Chowdhury, Sansa Dutta, Boda Nishitha, Swagata Dasgupta, N. D. Pradeep Singh*

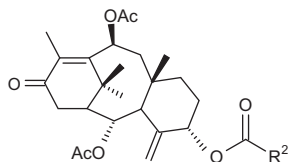


Efficient single strand DNA cleavage by acylaminyl radicals is reported.

**Synthesis and structure–activity relationships of sinenxan A derivatives as multidrug resistance reversal agents**

pp 5418–5421

Meng Huang, Xin Zhao, Meng Zhang, Jun Gu, Xiaoguang Chen, Dali Yin*

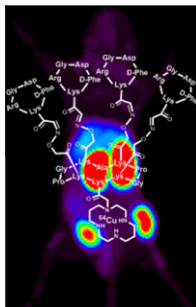


A series of new taxoids derived from sinenxan A were synthesized and evaluated for their in vitro multidrug resistant reversal activities. Four derivatives exhibited better activities than the positive control verapamil. Structure–activity relationships of these derivatives were explored as well.

RGD–cyclam conjugate: Synthesis and potential application for positron emission tomography

pp 5422–5425

Mathieu Galibert, Zhao-Hui Jin, Takako Furukawa, Toshimitsu Fukumura, Tsuneo Saga, Yasuhisa Fujibayashi, Pascal Dumy, Didier Boturyn*

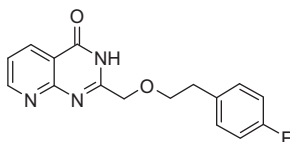


Positron emission tomography radiotracer was prepared by using a modular chemical strategy and applied to the non-invasive nuclear imaging of tumours.

**Pyrido pyrimidinones as selective agonists of the high affinity niacin receptor GPR109A: Optimization of in vitro activity**

pp 5426–5430

Jens-Uwe Peters, Holger Kühne, Henrietta Dehmlow, Uwe Grether*, Aurelia Conte, Dominik Hainzl, Cornelia Hertel, Nicole A. Kratochwil, Michael Otteneder, Robert Narquizian, Constantinos G. Panousis, Fabienne Ricklin, Stephan Röver



Pyrido pyrimidinones are selective agonists of the human high affinity niacin receptor GPR109A (HM74A). They show no activity on the highly homologous low affinity receptor GPR109B (HM74). Starting from a high throughput screening hit the in vitro activity of the pyrido pyrimidinones was significantly improved providing lead compounds suitable for further optimization.

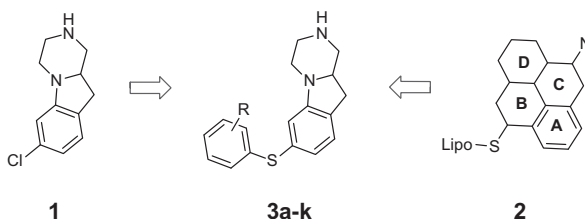
Novel 7-phenylsulfanyl-1,2,3,4,10,10a-hexahydro-pyrazino[1,2-a]indoles as dual serotonin 5-HT_{2C} and 5-HT₆ receptor ligands

pp 5431–5433

N. Krogsgaard-Larsen, A.A. Jensen, J. Kehler* 5-HT₂ agonist:

Hybrid with dual 5-HT_{2C} and 5HT₆ receptor activity:

5-HT₆ antagonistic pharmacophore model:

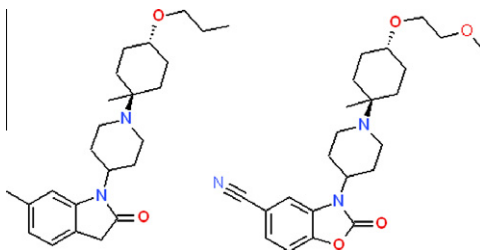


Novel 7-Phenylsulfanyl-1,2,3,4,10,10a-hexahydro-pyrazino[1,2-a]indoles **3a–k** are synthesized using a new and improved ring-closing methodology based on intramolecular C–H insertion of a carbene. The new compounds act as dual serotonin 5-HT_{2C}- and 5-HT₆-ligands.

**The discovery of a series of N-substituted 3-(4-piperidinyl)-1,3-benzoxazolinones and oxindoles as highly brain penetrant, selective muscarinic M₁ agonists**

pp 5434–5438

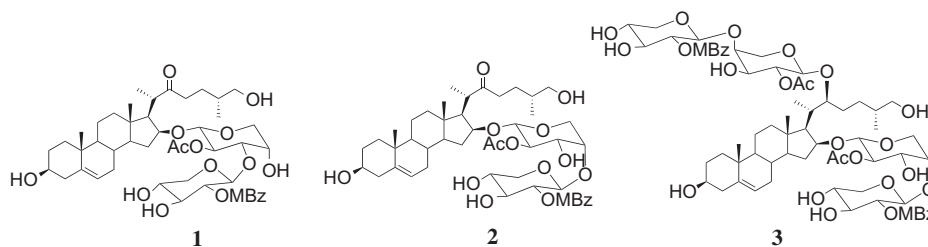
Dale J. Johnson*, Ian T. Forbes, Steve P. Watson, Vincenzo Garzya, Graeme I. Stevenson, Graham R. Walker, Harminder S. Mudhar, Sean T. Flynn, Paul A. Wyman, Paul W. Smith, Graham S. Murkitt, Adam J. Lucas, Claudette R. Mookherjee, Jeannette M. Watson, Jane E. Gartlon, Andrea M. Bradford, Fiona Brown



Synthesis of cholestane glycosides bearing the OSW-1 disaccharide or its 1→4-linked analogue and their antitumor activities

pp 5439–5442

Dan Zheng, Liang Zhou, Yuyao Guan, Xiaozhuo Chen, Wanqi Zhou, Xiaoguang Chen, Pingsheng Lei*

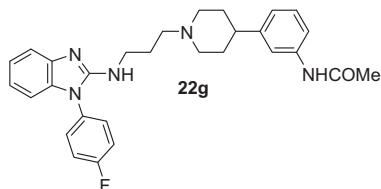


Three cholestane glycosides bearing the OSW-1 disaccharide or its 1→4-linked analogue were synthesized, and their cytotoxic activities were determined. Compound **1** showed potent cytotoxicity against five types of human tumor cells, with IC_{50} ranging between 1.3 and 73 nM.

**Discovery of novel, orally available benzimidazoles as melanin concentrating hormone receptor 1 (MCHR1) antagonists**

pp 5443–5448

Pradip K. Sasmal*, Sanjita Sasmal, P. Tirumala Rao, B. Venkatesham, M. Roshaiiah, Chandrasekhar Abbineni, Ish Khanna*, Vikram P. Jadhav, J. Suresh, Rashmi Talwar, Syed Muzeeb, Jean-Marie Receveur, Thomas M. Frimurer, Øystein Rist, Lisbeth Elster, Thomas Högberg*

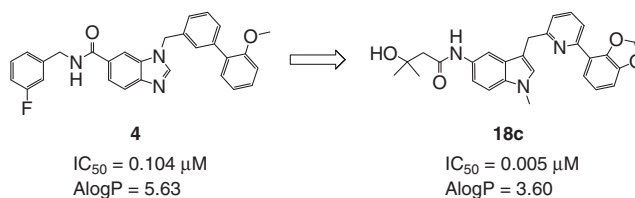


The synthesis and biological evaluation of novel benzimidazole derivatives as MCHR1 antagonists are described. The in vivo proof of principle for weight loss is exemplified with compound **22g** from this series.

**Identification and hit-to-lead optimization of a novel class of CB1 antagonists**

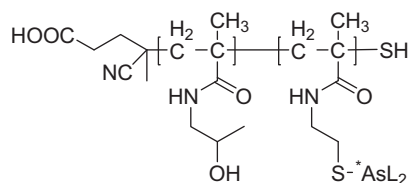
pp 5449–5453

Jeffrey J. Letourneau*, Patrick Jokiel, John Olson, Christopher M. Riviello, Koc-Kan Ho, Lihong McAleer, Jingchun Yang, Robert N. Swanson, James Baker, Phillip Cowley, Darren Edwards, Nick Ward, Michael H.J. Ohlmeyer, Maria L. Webb

**^{72/74}As-labeling of HPMA based polymers for long-term in vivo PET imaging**

pp 5454–5458

Matthias M. Herth*, Matthias Barz, Markus Jahn, Rudolf Zentel, Frank Rösch

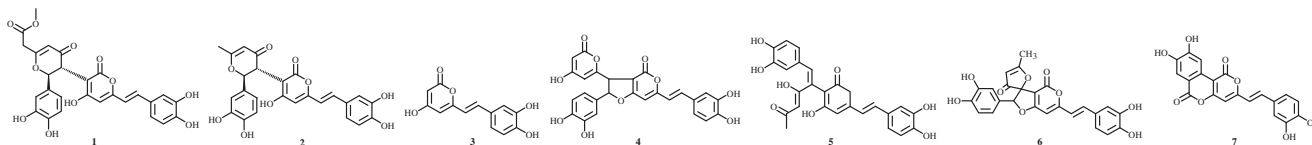


^{72/74}As labeling of thiol modified HPMA based polymers succeeded in satisfying radiochemical yields of ~70%. These promising results will enable long-term PET imaging in the close future.

Styrylpyrones from the medicinal fungus *Phellinus baumii* and their antioxidant properties

pp 5459–5461

In-Kyoung Lee, Myung-Suk Han, Myeong-Seok Lee, Young-Sook Kim, Bong-Sik Yun*



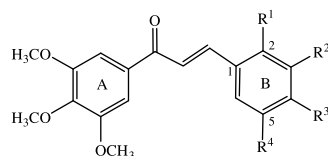
A new styrylpyrone, baumin, was isolated from the cultivated medicinal fungus *Phellinus baumii*, together with known compounds, davallialactone, hispidin, hypholomine B, interfungin A, inoscavin A, and phelligradin D, which were previously isolated from the medicinal fungi *Phellinus ignarius*, *Phellinus linteus*, and *Inonotus xeranticus*. Their structures were elucidated by extensive spectroscopic methods. These compounds exhibited antioxidant properties through Fenton reaction inhibition via iron chelation and free radical scavenging.

Identification of 3',4',5'-trimethoxychalcone analogues as potent inhibitors of *Helicobacter pylori*-induced inflammation in human gastric epithelial cells

pp 5462–5465

Chih-Ho Lai, Yerra Koteswara Rao, Shih-Hua Fang, Yu-Ting Sing, Yew-Min Tzeng*

Among 23 3',4',5'-trimethoxychalcone analogues tested, some of the chalcones displayed potent antibacterial activity against *Helicobacter pylori*, in addition, **1**, **7**, and **13** showed the bactericide activity against the reference as well as multidrug-resistant strains. Additionally, **1**, **7**, and **13** potentially inhibited the *H. pylori*-induced inflammation in human gastric epithelial cells.



1. $R^1 = \text{OMe}, R^2 = \text{OMe}, R^3 = \text{H}, R^4 = \text{H}$

7. $R^1 = \text{H}, R^2 = \text{OMe}, R^3 = \text{OH}, R^4 = \text{H}$

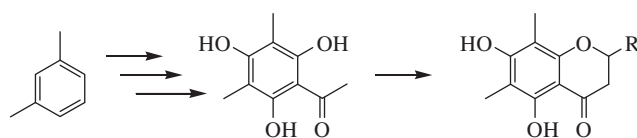
13. $R^1 = \text{H}, R^2 = \text{H}, R^3 = \text{OMe}, R^4 = \text{H}$



Synthesis and biological activity of flavanone derivatives

pp 5466–5468

Lei Shi, Xiu E Feng, Jing Rong Cui, Lian Hua Fang, Guan Hua Du, Qing Shan Li*



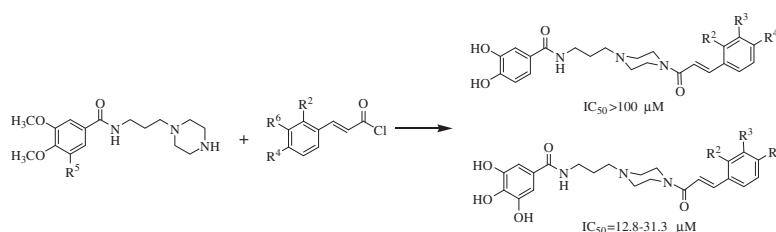
Synthetic route of target compounds



Synthesis of polyhydroxylated aromatics having amidation of piperazine nitrogen as HIV-1 integrase inhibitor

pp 5469–5471

Leifu Yang, Xuemei Xu, Yali Huang, Bin Zhang, Chengchu Zeng, Hongqiu He, Cunxin Wang, Liming Hu*



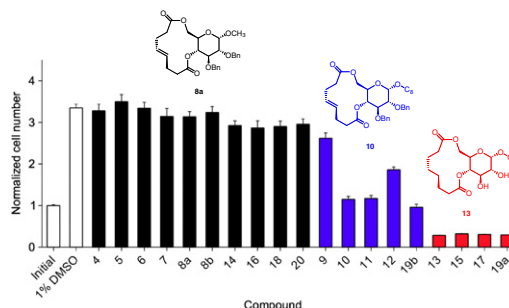
A series of polyhydroxylated aromatics having amidation of piperazine nitrogen were prepared and their HIV-1 IN inhibitory activities were evaluated. The galloyl moiety was a core pharmacophore in the inhibitory of HIV integrase.



Synthesis and evaluation of antimigratory and antiproliferative activities of lipid-linked [13]-macrolactones

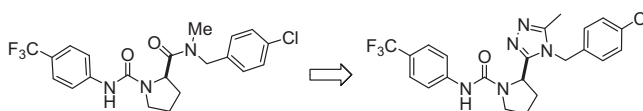
pp 5472–5476

Anniefer N. Magpusao, Richard T. Desmond, Katelyn J. Billings, Gabriel Fenteany*, Mark W. Peczuh*

**Novel pyrrolidine heterocycles as CCR1 antagonists**

pp 5477–5479

J. Robert Merritt*, Ray James, Vidyadhar M. Paradkar, Chongwu Zhang, Ruiyan Liu, Jinqi Liu, Biji Jacob, Camelia Chiriac, Michael J. Ohlmeyer, Elizabeth Quadros, Pamela Wines, Jennifer Postelnek, Catherine M. Hicks, Weiqing Chen, Earl F. Kimble, Linda O'Brien, Nicole White, Hema Desai, Kenneth C. Appell, Maria L. Webb

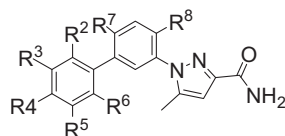


A novel series of pyrrolidine heterocycles was prepared and found to show potent inhibitory activity of CCR1 binding and CCL3 mediated chemotaxis of a CCR1-expressing cell line. A potent, optimized triazole lead from this series was found to have acceptable pharmacokinetics and microsomal stability in rat and is suitable for further optimization and development.

**Substituted biaryl pyrazoles as sodium channel blockers**

pp 5480–5483

Sriram Tyagarajan*, Prasun K. Chakravarty, Bishan Zhou, Brett Taylor, Michael H. Fisher, Mathew J. Wyvratt, Kathy Lyons, Tracy Klatt, Xiaohua Li, Sanjeev Kumar, Brande Williams, John Felix, Birgit T. Priest, Richard M. Brochu, Vivien Warren, McHardy Smith, Maria Garcia, Gregory J. Kaczorowski, William J. Martin, Catherine Abbadie, Erin McGowan, Nina Jochnowitz, William H. Parsons

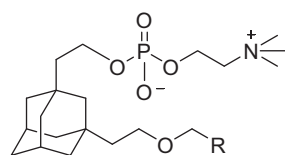


A series of low molecular weight biaryl substituted pyrazoles with good in-vitro potency and in-vivo efficacy were identified as Na_v1.7 blockers. These state dependent sodium channel blockers were synthesized and evaluated for treatment of neuropathic pain.

Design and synthesis of new adamantyl-substituted antileishmanial ether phospholipids

pp 5484–5487

Ioannis Papanastasiou, Kyriakos C. Prousis, Kalliopi Georgikopoulou, Theofilos Pavlidis, Effie Scoullica, Nicolas Kolocouris, Theodora Calogeropoulou*



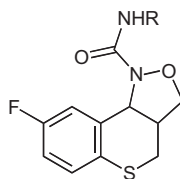
R = C₃H₇, C₅H₁₁, C₇H₁₅,
C₉H₁₉, C₁₁H₂₃, C₆H₅



N-Tetrahydrothiochromenoisoxazole-1-carboxamides as selective antagonists of cloned human 5-HT_{2B}

pp 5488–5490

Yoon Jin Kwon, Simon Saubern*, James M. Macdonald, Xi-Ping Huang, Vincent Setola, Bryan L. Roth



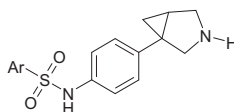
R = cyclohexyl

The serendipitous discovery of *N*-cyclohexyl-8-fluoro-3,3a,4,9b-tetrahydro-1*H*-thiochromeno[4,3-*c*]isoxazole-1-carboxamide as a selective human serotonin 5-HT_{2B} antagonist with *K_i* of 42 ± 5 nM is reported herein. A subsequent functional assay indicated little agonist activity compared to 5-HT itself.

**[3-Azabicyclo[3.1.0]hex-1-yl]phenyl-benzenesulfonamides as selective dopamine D₃ antagonists**

pp 5491–5494

Fabrizio Micheli*, Dieter Hamprecht, Giorgio Bonanomi, Romano Di Fabio, Daniele Donati, Gabriella Gentile, Christian Heidbreder, Adolfo Prandi, Luca Tarsi, Silvia Terreni

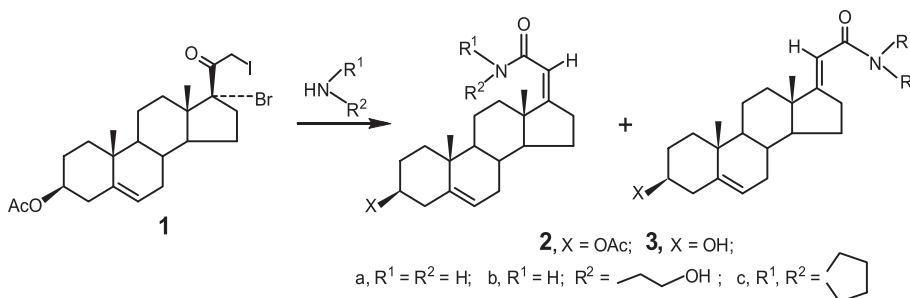


The new class of azabicyclo[3.1.0]benzenesulfonamides as selective dopamine D₃ antagonists is presented together with SAR and selectivity data.

[17(20)*E*]- and [17(20)*Z*]-pregna-5,17(20)-dien-21-oylamides. Facile synthesis and primary evaluation for cancer cells proliferation

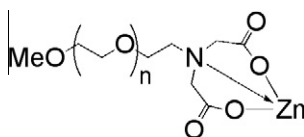
pp 5495–5498

Sergey V. Stulov, Maria G. Zavialova, Arif R. Mehtiev, Roman A. Novikov, Yaroslav V. Tkachev, Vladimir P. Timofeev*, Alexander Yu Misharin

**PEGylated iminodiacetic acid zinc complex stabilizes cationic RNA-bearing nanoparticles**

pp 5499–5501

Daniel E. Levy*, Zhongli Ding*, Chiwei Hu, Samuel Zalipsky

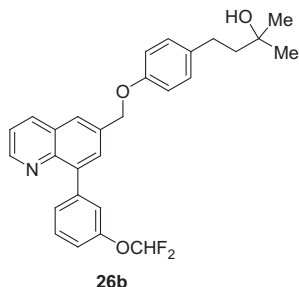


Successful nanoparticle-based delivery of siRNA requires shielding of particle surfaces from plasma proteins to allow sufficient circulation time. However, permanent PEGylation can inhibit cellular uptake. Herein, we report that nanoparticle stability can be enhanced through temporary zinc-mediated grafting of PEG to pre-formed nanoparticles.

The discovery and synthesis of highly potent subtype selective phosphodiesterase 4D inhibitors

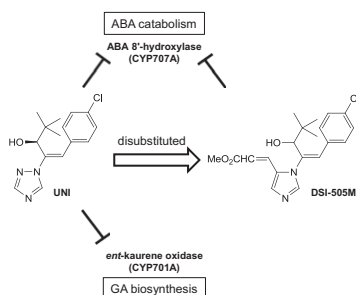
pp 5502–5505

Renee Aspiotis*, Denis Deschênes, Daniel Dubé, Yves Girard, Zheng Huang, France Laliberté, Susana Liu, Robert Papp, Donald W. Nicholson, Robert N. Young

**Selectivity improvement of an azole inhibitor of CYP707A by replacing the monosubstituted azole with a disubstituted azole**

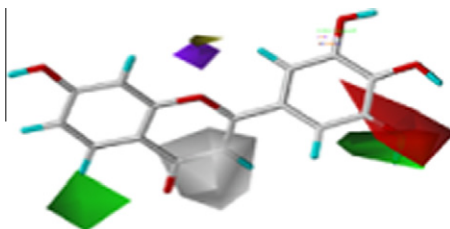
pp 5506–5509

Yasushi Todoroki*, Kumi Naiki, Hikaru Aoyama, Minaho Shirakura, Kotomi Ueno, Masaharu Mizutani, Nobuhiro Hirai

**Relationships between structures of hydroxyflavones and their antioxidative effects**

pp 5510–5513

Jiye Hyun, Yoonkyung Woo, Do-seok Hwang, Geunhyeong Jo, Sunglock Eom, Younggiu Lee, Jun Cheol Park, Yoongho Lim*

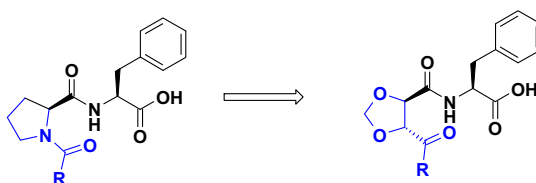


While the radical scavenging activity of galangin, 3,5,7-trihydroxyflavone was 52.5%, fisetin, 3,7,3',4'-tetrahydroxyflavone showed 85.2%. To investigate the relationships between the structures of 30 hydroxyflavones and their antioxidative effects, the three-dimensional quantitative structure–activity relationships were examined.

**Synthesis and biological activity of N-substituted aminocarbonyl-1,3-dioxolanes as VLA-4 antagonists**

pp 5514–5520

Abdul Rehman*, Ajay Soni, Keshav Naik, Sreeji Nair, Venkata P. Palle, Sunanda Dastidar, Abhijit Ray, M.S. Alam, Mohammad Salman, Ian A. Cliffe, Viswajanani Sattigeri

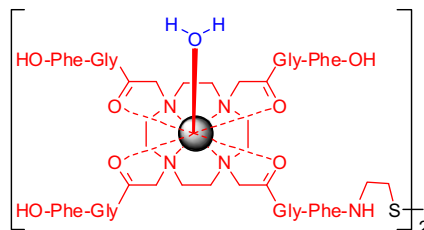


Pyrolidine ring in the N-acylphenylalanine class of VLA-4 antagonists has been successfully replaced by a 1,3-dioxolane and resulting derivative (**18e**) found to be potent in the series.

Synthesis of MRI contrast agents derived from DOTAM-Gly-L-Phe-OH incorporating a disulfide bridge: Conjugation to a cell penetrating peptide and preparation of a dimeric agent

pp 5521–5526

Mojmír Suchý, Alex X. Li, Robert Bartha, Robert H.E. Hudson*



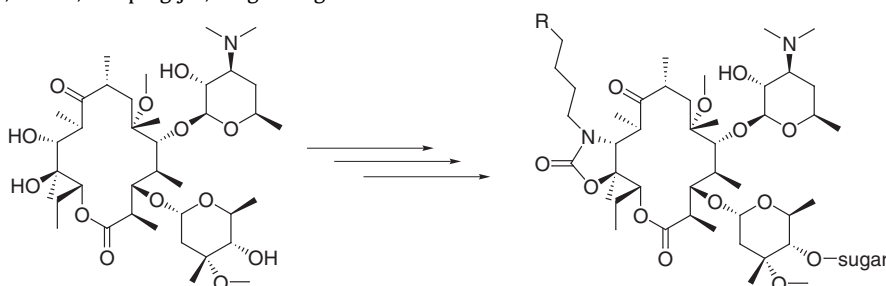
Synthesis and characterization of disulfide-bridged cell penetrating peptide conjugated and dimeric PARACEST MRI contrast agents based on DOTAM-Gly-L-Phe-OH scaffold.



A new series of macrolide derivatives with 4''-O-saccharide substituents

pp 5527–5531

Peng Xu, Xiao-zhuo Chen, Lu Liu, Zhi-ping Jin, Ping-sheng Lei*



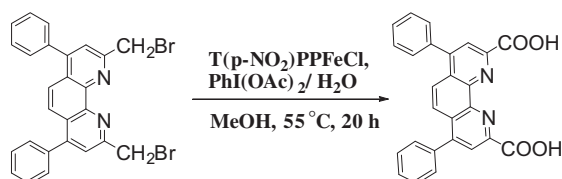
A novel series of macrolide derivatives with mono- or disaccharides substituted at the 4''-O- position has been synthesized, and their *in vitro* antibacterial activities were tested.



Preparation of 4,7-diphenyl-1,10-phenanthroline-2,9-dicarboxylic acid catalyzed by iron(III)porphyrins with (diacetoxyiodo)benzene

pp 5532–5535

Qi-Di Zhong, Yun-Zhou Xue, Hong Yan*, Xiu-Qing Song, Ru-Gang Zhong

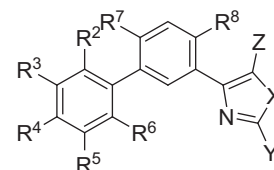


Using iron(III)porphyrins in combination with (diacetoxyiodo)benzene allows the conversion of 2,9-bis(bromomethyl)-4,7-diphenyl-1,10-phenanthroline into 4,7-diphenyl-1,10-phenanthroline -2,9-dicarboxylic acid in good yield. This method provides a cost-effective and environmentally-friendly oxidation procedure due to the utilization of less toxic PhI(OAc)₂ and biologically relevant iron(III)porphyrin.

Substituted biaryl oxazoles, imidazoles, and thiazoles as sodium channel blockers

pp 5536–5540

Sriram Tyagarajan*, Prasun K. Chakravarty, Bishan Zhou, Michael H. Fisher, Mathew J. Wyvrat, Kathy Lyons, Tracy Klatt, Xiaohua Li, Sanjeev Kumar, Brande Williams, John Felix, Birgit T. Priest, Richard M. Brochu, Vivien Warren, McHardy Smith, Maria Garcia, Gregory J. Kaczorowski, William J. Martin, Catherine Abbadie, Erin McGowan, Nina Jochnowitz, William H. Parsons



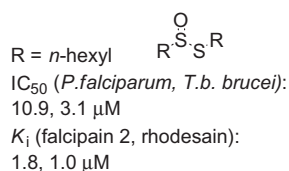
X = O, N or S

A series of low molecular weight biaryl substituted oxazoles, imidazoles, and thiazoles were identified as Na_v1.7 blockers. These state dependent sodium channel blockers were synthesized and evaluated for treatment of neuropathic pain.

Allicin and derivates are cysteine protease inhibitors with antiparasitic activity

pp 5541–5543

Thilo Waag, Christoph Gelhaus, Jennifer Rath, August Stich, Matthias Leippe, Tanja Schirmeister*

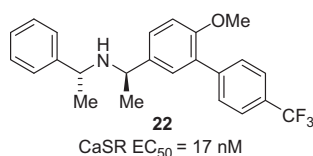


Synthesis and results of protease and parasite growth assays with allicin and related thiosulfonates are presented.

**The discovery of an orally efficacious positive allosteric modulator of the calcium sensing receptor containing a dibenzylamine core**

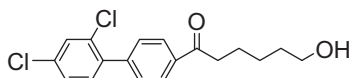
pp 5544–5547

Paul E. Harrington*, David J. St. Jean Jr.*, Jeffrey Clarine, Thomas S. Coulter, Michael Croghan, Adam Davenport, James Davis, Chiara Ghiron, Jonathan Hutchinson, Michael G. Kelly, Fred Lott, Jenny Ying-Lin Lu, David Martin, Sean Morony, Steve F. Poon, Elena Portero-Larragueta, Jeff D. Reagan, Kelly A. Regal, Andrew Tasker, Minghan Wang, Yuhua Yang, Guomin Yao, Qingping Zeng, Charles Henley III III, Christopher Fotsch

Compound **22** suppressed plasma PTH levels relative to vehicle when dosed orally in a rat pharmacodynamic model.**Discovery of biphenylketones as dual modulators of inflammation and bone loss**

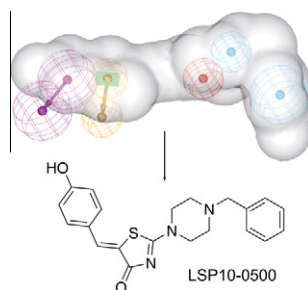
pp 5548–5551

Iain R. Greig*, Emmanuel Coste, Stuart H. Ralston, Rob J. van't Hof

**Identification of a novel NR2B-selective NMDA receptor antagonist using a virtual screening approach**

pp 5552–5558

Laetitia Mony, Nicolas Triballeau, Pierre Paoletti, Francine C. Acher, Hugues-Olivier Bertrand*

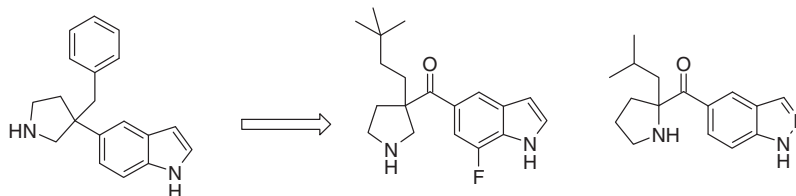


A novel NR2B-selective NMDAR antagonist, LSP10-0500, was identified using a ligand-based virtual screening approach.

Design, synthesis, and biological evaluation of new monoamine reuptake inhibitors with potential therapeutic utility in depression and pain

pp 5559–5566

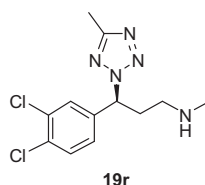
Matthew C. Lucas*, Robert J. Weikert, David S. Carter, Hai-Ying Cai, Robert Greenhouse, Pravin S. Iyer, Clara J. Lin, Eun Kyung Lee, Ann Marie Madera, Amy Moore, Kerem Ozboya, Ryan C. Schoenfeld, Sandra Steiner, Yansheng Zhai, Stephen M. Lynch*



Synthesis and pharmacological evaluation of 3-aryl-3-azolypropan-1-amines as selective triple serotonin/norepinephrine/dopamine reuptake inhibitors

pp 5567–5571

Ki-Ho Lee*, Chun-Eung Park, Kyung-Hyun Min, Yong-Je Shin, Co-Min Chung, Hui-Ho Kim, Hae-Jeoung Yoon, Won-Kim, Eun-Ju Ryu, Yu-Jin Shin, Hyun-Sik Nam, Jeong-Woo Cho, Hee-Yoon Lee



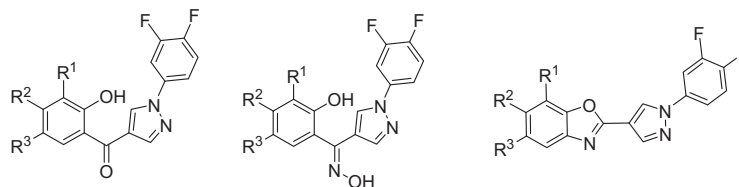
A series of 3-aryl-3-azolypropan-1-amines was prepared and screened for its capability of inhibiting monoamine reuptake. Analogs with nanomolar potency, good human in vitro microsomal stability, and low drug–drug interaction potential were described. In vivo models were used to evaluate the compound **19r** for antidepressive, anxiolytic, and analgesic activity.

Synthesis and antimicrobial activity of novel fluorine containing 4-(substituted-2-hydroxybenzoyl)-1H-pyrazoles and pyrazolyl benzo[d]oxazoles

pp 5572–5576

Amol V. Gadakh, Chetan Pandit, Sahebrao S. Rindhe*, Bhausaheb K. Karale

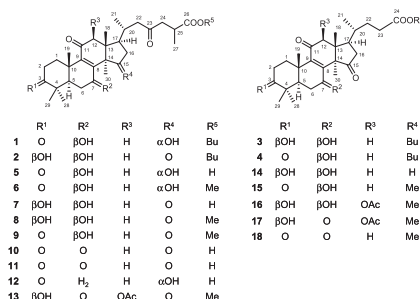
A series of fluorine containing 4-(substituted-2-hydroxybenzoyl) pyrazoles and pyrazolyl benzo[d]oxazoles were synthesized and evaluated for their antibacterial activity against *Staphylococcus aureus*, *Escherichia coli*, *Pseudomonas aeruginosa* and *Bacillus subtilis* and antifungal activity against *Candida albicans*. The antibacterial activities were expressed as the minimum inhibitory concentration (MIC₅₀) in µg/ml. The compounds 1-(3,4-difluorophenyl)-4-(5-fluoro-2-hydroxybenzoyl)-1H-pyrazole (**4b**), oxime derivatives such as 1-(3,4-difluorophenyl)-1H-pyrazol-4-yl(2-hydroxy-4-methylphenyl)methanone oxime (**5b**) and (5-chloro-2-hydroxyphenyl)(1-(3,4-difluorophenyl)-1H-pyrazol-4-yl)methanone oxime (**5e**) exhibited promising activities against tested bacterial strains. Except compound 1-(3,4-difluorophenyl)-4-(2-hydroxybenzoyl)-1H-pyrazole (**4d**), none of the other compounds showed promising antifungal activity.



Lanostane triterpenes from *Ganoderma lucidum* suppress the adipogenesis in 3T3-L1 cells through down-regulation of SREBP-1c


pp 5577–5581

IkSoo Lee, JinPyo Kim, InJa Ryoo, YoungHee Kim, SooJin Choo, IckDong Yoo, ByungSun Min, MinKyun Na, Masao Hattori, KiHwan Bae*



OTHER CONTENTS**Corrigenda****pp 5582–5585**

*Corresponding author

+ Supplementary data available via ScienceDirect**COVER**

Overlay of high resolution co-crystal structures of **R-22**-ADP (cyan) and **1**-ADP (green) bound in an allosteric binding site of the mitotic kinesin KSP. [Roecker, A. J.; Coleman, P. J.; Mercer, S. P.; Schreier, J. D.; Buser, C. A.; Walsh, E. S.; Hamilton, K.; Lobell, R. B.; Tao, W.; Diehl, R. E.; South, V. J.; Davide, J. P.; Kohl, N. E.; Yan, Y.; Kuo, L. C.; Li, C.; Fernandez-Metzler, C.; Mahan, E. A.; Prueksaritanont, T.; Hartman, G. D. *Bioorg. Med. Chem. Lett.* **2007**, 17, 5677.]

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ISSN 0960-894X