

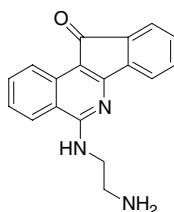
Contents

ARTICLES

Design, docking, and synthesis of novel indeno[1,2-*c*]isoquinolines for the development of antitumor agents as topoisomerase I inhibitors

pp 3531–3534

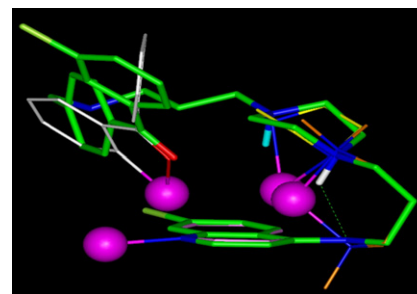
Won-Jea Cho,* Quynh Manh Le, Hue Thi My Van, Kwang Youl Lee, Bok Yun Kang, Eung-Seok Lee, Sang Kook Lee and Youngjoo Kwon



Development of piperazine-tethered heterodimers as potent antimalarials against chloroquine-resistant *P. falciparum* strains. Synthesis and molecular modeling

pp 3535–3539

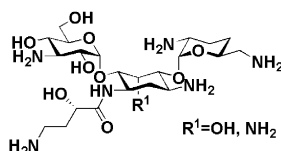
Sandra Gemma, Gagan Kukreja, Giuseppe Campiani,* Stefania Butini, Matteo Bernetti, Bhupendra P. Joshi, Luisa Savini, Nicoletta Basilico, Donatella Taramelli, Vanessa Yardley, Alessia Bertamino, Ettore Novellino, Marco Persico, Bruno Catalanotti and Caterina Fattorusso



Synthesis and antibacterial activity of 5-deoxy-5-episubstituted arbekacin derivatives

pp 3540–3543

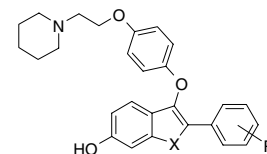
Yukiko Hiraiwa, Takayuki Usui,* Yoshihisa Akiyama, Kazunori Maebashi, Nobuto Minowa* and Daishiro Ikeda*



5-Deoxy-5-episubstituted arbekacin derivatives showed potent antibacterial activity against *Staphylococcus aureus*, including MRSA and *Pseudomonas aeruginosa*.

Structure–activity relationships of SERMs optimized for uterine antagonism and ovarian safety**pp 3544–3549**

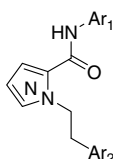
Timothy I. Richardson,* Scott A. Frank, Minmin Wang, Christian A. Clarke, Scott A. Jones, Bai-Ping Ying, Dan T. Kohlman, Owen B. Wallace, Timothy A. Shepherd, Robert D. Dally, Alan D. Palkowitz, Andrew G. Geiser, Henry U. Bryant, Judith W. Henck, Ilene R. Cohen, Daniel G. Rudmann, Denis J. McCann, David E. Coutant, Samuel W. Oldham, Conrad W. Hummel, Kin C. Fong, Ronald Hinklin, George Lewis, Hongqi Tian and Jeffrey A. Dodge



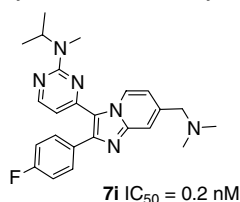
SAR studies are described, which led to the discovery of novel SERMs for the treatment of uterine fibroids.

Novel inhibitors of VEGF receptors-1 and -2 based onazole-5-carboxamide templates**pp 3550–3557**

Alexander S. Kiselyov,* Daniel Milligan and Xiaohu Ouyang

**Synthesis and SAR studies of potent imidazopyridine anticoccidial agents****pp 3558–3561**

Gui-Bai Liang,* Xiaoxia Qian, Dennis Feng, Michael Fisher, Christine M. Brown, Anne Gurnett, Penny Sue Leavitt, Paul A. Liberator, Andrew S. Misura, Tamas Tamas, Dennis M. Schmatz, Matthew Wyvratt and Tesfaye Biftu

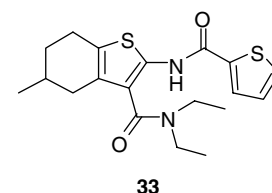


Diaryl imidazo[1,2-*a*]pyridine derivatives bearing *N*-alkyl amino substituents have been synthesized and evaluated as highly potent Et-PKG inhibitor and efficacious anticoccidial agents.

Synthesis and SAR of thiophene containing kinesin spindle protein (KSP) inhibitors**pp 3562–3569**

Anthony B. Pinkerton,* Tom T. Lee, Timothy Z. Hoffman, Yan Wang, Mehmet Kahraman, Travis G. Cook, Daniel Severance, Timothy C. Gahman, Stewart A. Noble, Andrew K. Shiau and Robert L. Davis

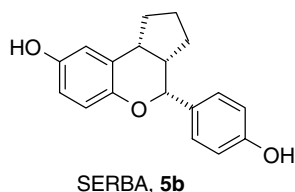
We have identified and synthesized a series of thiophene containing inhibitors of kinesin spindle protein. SAR studies led to the synthesis of **33**, which was co-crystallized with KSP and determined to bind to an allosteric pocket previously described for other known KSP inhibitors.



Benzopyrans as selective estrogen receptor β agonists (SERBAs). Part 2: Structure–activity relationship studies on the benzopyran scaffold

pp 3570–3574

Timothy I. Richardson,* Bryan H. Norman, Charles W. Lugar, Scott A. Jones, Yong Wang, Jim D. Durbin, Venkatesh Krishnan and Jeffrey A. Dodge



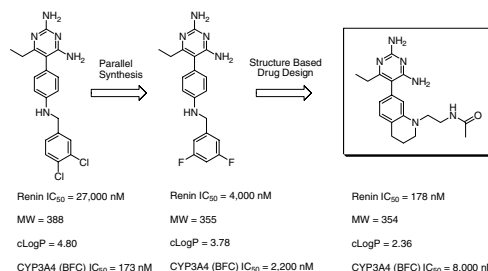
Structure–activity relationship studies that lead to the discovery of benzopyran **5b** are reported.

Discovery of 6-ethyl-2,4-diaminopyrimidine-based small molecule renin inhibitors

pp 3575–3580

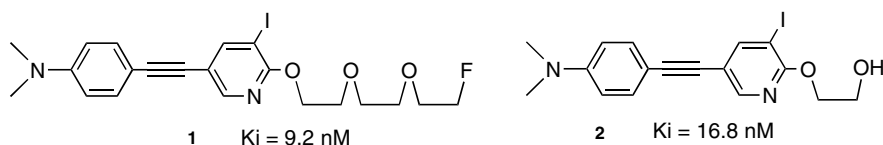
Daniel D. Holsworth,* Mehran Jalaie, Thomas Belliotti, Cuiman Cai, Wendy Collard, Suzie Ferreira, Noel A. Powell, Michael Stier, Erli Zhang, Pat McConnell, Igor Mochalkin, Michael J. Ryan, John Bryant, Tingsheng Li, Aparna Kasani, Rajendra Subedi, Samarendra N. Maiti and Jeremy J. Edmunds

Novel 2,4-diaminopyrimidine-based small molecule renin inhibitors are disclosed. Through high throughput screening, parallel synthesis, X-ray crystallography, and structure based drug design, we have developed the first non-chiral, non-peptidic, small molecular template to possess moderate potency against renin. The designed compounds consist of a novel 6-ethyl-5-(1,2,3,4-tetrahydroquinolin-7-yl)pyrimidine-2,4-diamine ring system that exhibit moderate potency (IC_{50} : 91–650 nM) against renin while remaining 'Rule-of-five' compliant.

**Radioiodinated aza-diphenylacetylenes as potential SPECT imaging agents for β -amyloid plaque detection**

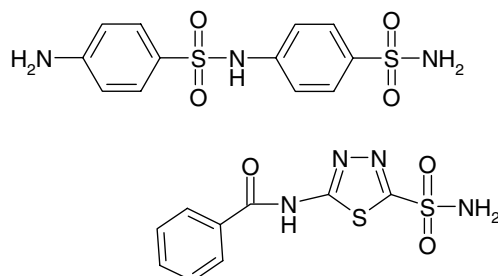
pp 3581–3584

Wenchao Qu, Mei-Ping Kung, Catherine Hou, Lee-Way Jin and Hank F. Kung*

**Carbonic anhydrase inhibitors: The β -carbonic anhydrase from *Helicobacter pylori* is a new target for sulfonamide and sulfamate inhibitors**

pp 3585–3594

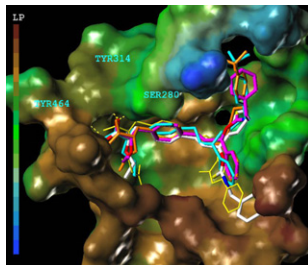
Isao Nishimori, Tomoko Minakuchi, Takuhiro Kohsaki, Saburo Onishi, Hiroaki Takeuchi, Daniela Vullo, Andrea Scozzafava and Claudiu T. Supuran*



Design, synthesis, and structure–activity relationship of carbamate-tethered aryl propanoic acids as novel PPAR α / γ dual agonists

pp 3595–3598

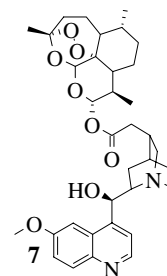
Nam-Jung Kim, Kwang-Ok Lee, Bon-Woong Koo, Funan Li, Ja-Kyung Yoo, Hyun-Ju Park, Kyung-Hoon Min, Joong In Lim, Mi Kyung Kim, Jin-Kwan Kim and Young-Ger Suh*


A novel artemisinin–quinine hybrid with potent antimalarial activity

pp 3599–3602

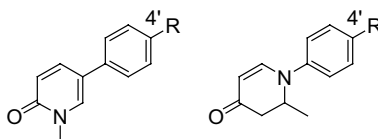
John J. Walsh,* David Coughlan, Nicola Heneghan, Caroline Gaynor and Angus Bell

The artemisinin–quinine hybrid **7** was synthesised and shown to have potent activity against the 3D7 and drug-resistant FcB1 strains of *Plasmodium falciparum* in culture. Its activity was superior to that of artemisinin alone, quinine alone, or a 1:1 mixture of artemisinin and quinine.


Evaluation of 4'-substituted bicyclic pyridones as non-steroidal inhibitors of steroid 5 α -reductase

pp 3603–3607

Anna R. McCarthy,* Rolf W. Hartmann and Andrew D. Abell

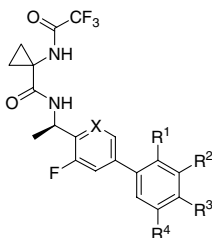


4'-Substituted bicyclic pyridones were prepared and evaluated for non-steroidal inhibition of type 1 and 2 steroid 5 α -reductase (SR). SAR for 4'-substituents were determined and compared to SAR derived from a known class of SR inhibitor.

Bradykinin B₁ antagonists: Biphenyl SAR studies in the cyclopropanecarboxamide series

pp 3608–3612

Scott D. Kuduk,* Robert M. DiPardo, Ronald K. Chang, Christina N. Di Marco, Kathy L. Murphy, Richard W. Ransom, Duane R. Reiss, Cuyue Tang, Thomayant Prueksaritanont, Douglas J. Pettibone and Mark G. Bock

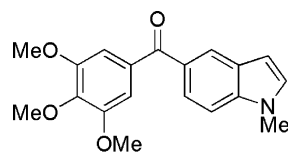


SAR study of the biphenyl region of cyclopropanecarboxamide derived bradykinin B₁ antagonists was examined.

Novel potent antimitotic heterocyclic ketones: Synthesis, antiproliferative activity, and structure–activity relationships

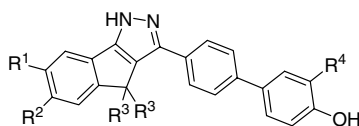
pp 3613–3617

Laixing Hu, Jian-dong Jiang, Jinrong Qu, Yan Li, Jie Jin, Zhuo-rong Li* and David W. Boykin*

**8b**: IC₅₀ = 9.2–26 nM**1,4-Dihydroindeno[1,2-*c*]pyrazoles as potent checkpoint kinase 1 inhibitors: Extended exploration on phenyl ring substitutions and preliminary ADME/PK studies**

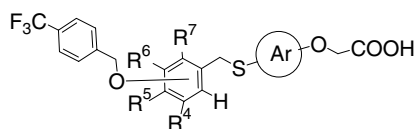
pp 3618–3623

Yunsong Tong,* Akiyo Claiborne, Magdalena Pyzytulinska, Zhi-Fu Tao, Kent D. Stewart, Peter Kovar, Zehan Chen, Robert B. Credo, Ran Guan, Philip J. Merta, Haiying Zhang, Jennifer Bouska, Elizabeth A. Everitt, Bernard P. Murry, Dean Hickman, Tim J. Stratton, Jian Wu, Saul H. Rosenberg, Hing L. Sham, Thomas J. Sowin and Nan-horng Lin

**Discovery of highly potent and selective benzyloxybenzyl-based peroxisome proliferator-activator receptor (PPAR) δ agonists**

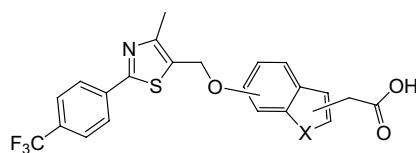
pp 3624–3629

Larry D. Bratton,* Gary F. Filzen, Andrew Geyer,* Jennifer K. Hoffman, Gina Lu, Jim Pulaski, Bharat K. Trivedi, Paul C. Unangst and Xiangyang Xu

**Synthesis and SAR of selective benzothiophene, benzofuran, and indole-based peroxisome proliferator-activated receptor δ agonists**

pp 3630–3635

Gary F. Filzen,* Larry Bratton, Xue-Min Cheng, Noe Erasga, Andrew Geyer, Chitase Lee, Gina Lu, Jim Pulaski, Roderick J. Sorenson, Paul C. Unangst, B. K. Trivedi and Xiangyang Xu

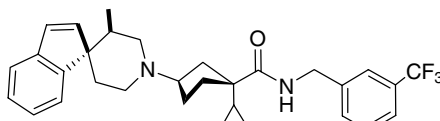
**X = O, N, S**

The synthesis and structure–activity relationships of a series of novel and selective benzothiophene, benzofuran and indole-based peroxisome proliferator-activated receptor δ agonists.

3-Amino-1-alkyl-cyclopentane carboxamides as small molecule antagonists of the human and murine CC chemokine receptor 2

pp 3636–3641

Gabor Butora,* Richard Jiao, William H. Parsons, Pasquale P. Vicario, Hong Jin, Julia M. Ayala, Margaret A. Cascieri and Lihu Yang



6f, *hCCR2* IC₅₀ = 2 nM
mCCR2 IC₅₀ = 8 nM

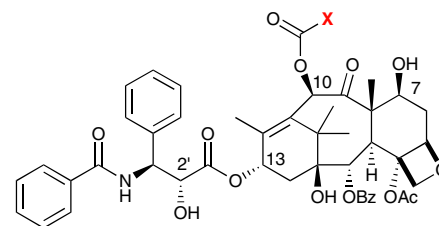
A series of low molecular weight antagonists of both the human and murine CC chemokine receptor 2, containing a 1-alkyl-3-(3-methyl-4-spiroindenylpiperidine)-substituted cyclopentanecarboxamide, is described.

Paclitaxel C-10 carbamates: Potential candidates for the treatment of neurodegenerative tauopathies

pp 3642–3646

Carlo Ballatore,* Edward Hyde, Robert F. Deiches, Virginia M.-Y. Lee, John Q. Trojanowski, Donna Huryn and Amos B. Smith III*

A series of paclitaxel C-10 carbamates was synthesized and evaluated in a bi-directional permeability assay in comparison with paclitaxel and the blood–brain barrier-permeable C-10 ester derivative, TX-67.



X = CH₃, **Paclitaxel**

X = CH₂CH₂COOH, **TX-67**

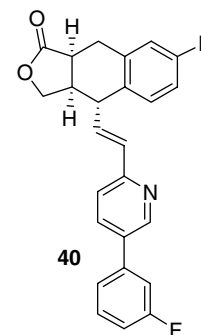
X = NHCH₂COOH, **CNDR-3**

Himbacine derived thrombin receptor antagonists: Discovery of a new tricyclic core

pp 3647–3651

Martin C. Clasby,* Samuel Chackalamannil, Michael Czarniecki, Dario Doller, Keith Eagen, William J. Greenlee, Yan Lin, Jayaram R. Tagat, Hsingan Tsai, Yan Xia, Ho-Sam Ahn, Jacqueline Agans-Fantuzzi, George Boykow, Madhu Chintala, Yunsheng Hsieh and Andrew T. McPhail

The synthesis and biological activity of a novel series of thrombin receptor antagonists is described. This series of compounds showed excellent in vitro and in vivo potency. The most potent compound (40) had an IC₅₀ of 7.6 nM and showed robust inhibition of platelet aggregation in a cynomolgus monkey model after oral administration.

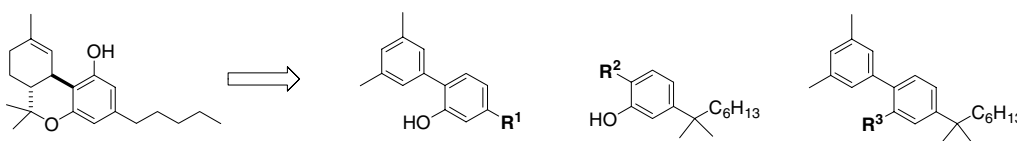


40

Biaryl cannabinoid mimetics—Synthesis and structure–activity relationship

pp 3652–3656

Karin Worm,* Q. Jean Zhou, Gabriel J. Stabley, Robert N. DeHaven and Roland E. Dolle



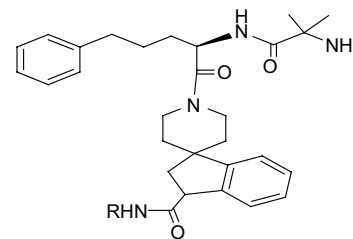
A series of novel-substituted biaryl cannabinoid mimetics was synthesized and their biological activity determined.

Highly potent growth hormone secretagogues

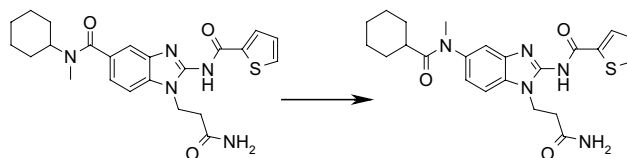
pp 3657–3659

Zhijian Lu,* James R. Tata, Kang Cheng, Liente Wei, Wanda W.-S. Chan, Bridget Butler, Klaus D. Schleim, Thomas M. Jacks, Gerard Hickey and Arthur A. Patchett

During an effort to search for more potent growth hormone secretagogues, we discovered a class of compounds of which the best compound **8** was 7-fold more active in vitro than the best compound in the series we revealed before [Tata, J. R.; Lu, Z.; Jacks, T. M.; Schleim, K. D.; Cheng, K.; Wei, L.; Chan, W.-S.; Butler, B.; Tsou, N.; Leung, K.; Chiu, S.-H. L.; Hickey, G. J.; Smith, R. G.; Patchett, A. A. *Bioorg. Med. Chem. Lett.* **1997**, 7, 2319.]. Animal studies show that compound **8** can stimulate growth hormone release at the oral dose as low as 0.06 mpk. Chemistry and biological studies are discussed.

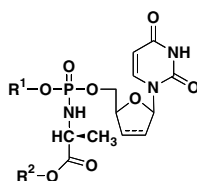
**Hit-to-lead studies on benzimidazole inhibitors of ITK: Discovery of a novel class of kinase inhibitors** pp 3660–3665

Roger J. Snow,* Asitha Abeywardane, Scot Campbell, John Lord, Mohammed A. Kashem, Hnin Hnin Khine, Josephine King, Jennifer A. Kowalski, Steven S. Pullen, Teresa Roma, Gregory P. Roth, Christopher R. Sarko, Noel S. Wilson, Michael P. Winters, John P. Wolak and Charles L. Cywin

**Design, synthesis, and anti-HIV activity of 2',3'-didehydro-2',3'-dideoxyuridine (d4U), 2',3'-dideoxyuridine (ddU) phosphoramidate 'ProTide' derivatives**

pp 3666–3669

Youcef Mehellou, Christopher McGuigan,* Andrea Brancale and Jan Balzarini

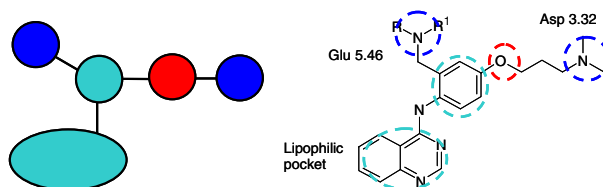


Phosphate pro-drug technologies (ProTides) lead to the activation of inactive nucleosides such as ddU, but not d4U, versus HIV. Reasons for the difference are explored, including the second phosphorylation step.

A new class of histamine H₃ receptor antagonists derived from ligand based design

pp 3670–3675

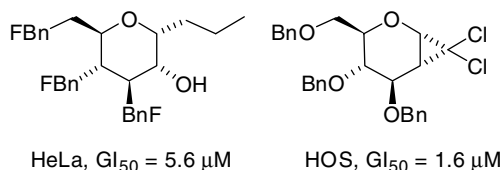
Olivier Roche and Rosa María Rodríguez Sarmiento*



Cytotoxic effects of C-glycosides in HOS and HeLa cell lines

pp 3676–3681

Carlos A. Sanhueza, Carlos Mayato, Rubén P. Machín, José M. Padrón, Rosa L. Dorta and Jesús T. Vázquez*

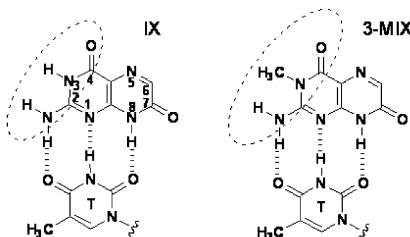


Fifty-two C-glycosides were synthesized and their in-vitro antiproliferative activity against human cervical carcinoma (HeLa) and osteosarcoma (HOS) screened, showing significant activity.

Improvement of base selectivity and binding affinity by controlling hydrogen bonding motifs between nucleobases and isoxanthopterin: Application to the detection of T/C mutation

pp 3682–3685

Burki Rajendar, Yusuke Sato, Seiichi Nishizawa and Norio Teramae*



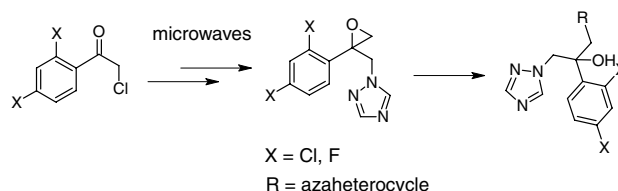
Introducing a methyl group to isoxanthopterin (IX), both selectivity and binding affinity for T against C are achieved by 3-methyl isoxanthopterin (3-MIX).

**Synthesis and antifungal activities of new fluconazole analogues with azaheterocycle moiety**

pp 3686–3689

Nicolas Lebouvier, Fabrice Pagniez, Muriel Duflos, Patrice Le Pape, Young Min Na, Guillaume Le Baut and Marc Le Borgne*

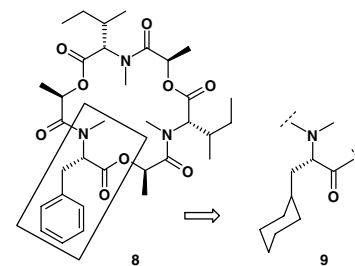
A series of fluconazole analogues **5–20** incorporating azaindole and indole moieties were prepared using oxirane intermediates synthesized under microwave irradiation. All of the compounds were evaluated in vitro against two clinically important fungi, *Candida albicans* and *Aspergillus fumigatus*. Four 2,4-dichlorophenyl derivatives **6**, **13**, **14** and **18** exerted high antifungal activity against *C. albicans* with MIC_{80} values 3- to 28-fold lower than that of fluconazole.

**Synthesis and anthelmintic activity of cyclohexadepsipeptides with cyclohexylmethyl side chains**

pp 3690–3695

Peter Jeschke,* Achim Harder, Winfried Etzel, Michael Schindler and Gerhard Thielking

Cyclohexadepsipeptides (CHDPs) with cyclohexylmethyl side chains represent novel enniatins with in vivo activity against the parasitic nematode *Haemonchus contortus* Rudolphi in sheep. It was found that the replacement of benzylic by cyclohexylmethyl side chains on the enniatin skeleton can increase anthelmintic efficacy. Here we report on a simple total synthesis of the precursors for this type of CHDPs and efficient chemical transformation of the benzylic into the corresponding cyclohexylmethyl side chains.

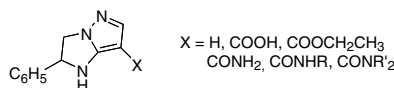


Chemical transformation of the MePhe containing enniatin **8** into the (S)-MeCha containing CHDP **9**.

2-Phenyl-2,3-dihydro-1*H*-imidazo[1,2-*b*]pyrazole derivatives: New potent inhibitors of fMLP-induced neutrophil chemotaxis

pp 3696–3701

Olga Bruno,* Chiara Brullo, Francesco Bondavalli, Angelo Ranise, Silvia Schenone, Maria Sofia Falzarano, Katia Varani and Susanna Spisani



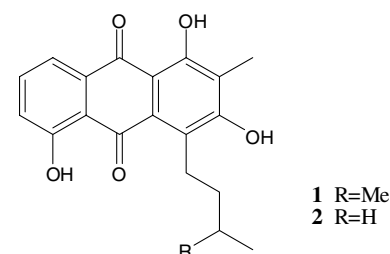
We report here the synthesis of title compounds and their evaluation on neutrophil activation and recruitment.

Antitumor anthraquinones from an endophytic actinomycete *Micromonospora lupini* sp. nov.

pp 3702–3705

Yasuhiro Igarashi,* Martha E. Trujillo, Eustoquio Martínez-Molina, Saeko Yanase, Satoshi Miyanaga, Takamasa Obata, Hiroaki Sakurai, Ikuo Saiki, Tsuyoshi Fujita and Tamotsu Furumai

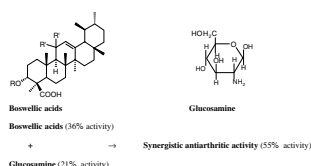
Two novel anthraquinones, lupinacidins A (**1**) and B (**2**), have been isolated from the culture broth of an endophytic actinomycete. Lupinacidins showed significant inhibitory effects on invasion of murine colon 26-L5 carcinoma cells.



Boswellic acids and glucosamine show synergistic effect in preclinical anti-inflammatory study in rats

pp 3706–3711

Surjeet Singh,* Anamika Khajuria, Subhash Chandra Taneja, Ravi Kant Khajuria, Jaswant Singh and Ghulam Nabi Qazi



Leukotriene inhibiting boswellic acids and glucosamine individually are known for their anti-arthritic potential in preclinical and clinical studies. A combination of both displayed significant synergism in chronic inflammation, whereas in acute inflammation it was almost insignificant.

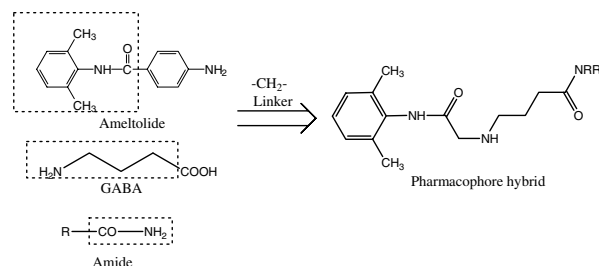


Synthesis and anticonvulsant activity of 4-(2-(2,6-dimethylphenylamino)-2-oxoethylamino)-*N*-(substituted)butanamides: A pharmacophoric hybrid approach

pp 3712–3715

Perumal Yogeeswari,* Dharmarajan Sriram, Puppala Sahitya, Jegadeesan Vaigunda Ragavendran and Velagaleti Ranganadh

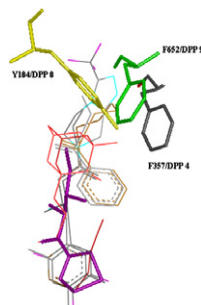
A series of pharmacophoric hybrids of ameltolide-γ-aminobutyric acid (GABA)-amides was designed, synthesized, and evaluated for their anticonvulsant and neurotoxic properties. Compound 4-(2-(2,6-dimethylaminophenylamino)-2-oxoethylamino)-*N*-(2,6-dimethylphenyl) butanamide (**7**) emerged as the most potent derivative effective in all the three animal models of seizure with no neurotoxicity at the anticonvulsant dose.



Docking-based 3D-QSAR study for selectivity of DPP4, DPP8, and DPP9 inhibitors

pp 3716–3721

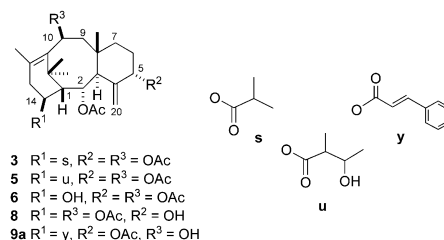
Nam Sook Kang,* Jin Hee Ahn, Sung Soo Kim, Chong Hak Chae and Sung-Eun Yoo

**Synthesis and structure–activity relationships of taxuyunnanine C derivatives as multidrug resistance modulator in MDR cancer cells**

pp 3722–3728

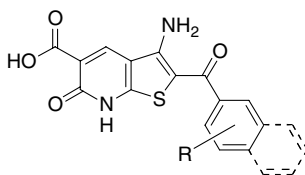
Toshiaki Hasegawa,* Jiao Bai, Jungui Dai, Liming Bai, Junichi Sakai, Shigenori Nishizawa, Yuhua Bai, Midori Kikuchi, Mariko Abe, Takao Yamori, Akihiro Tomida, Takashi Tsuruo, Katsutoshi Hirose and Masayoshi Ando*

New taxoids bearing a bulky acyloxy group at C-2, C-5, C-7, C-9, C-10, and C-14 were obtained by chemical and bio- transformations of taxuyunnanine C and its analogs. In them, compounds **3**, **5**, **6**, **8**, and **9a** have significant effects of the accumulation of calcein in MDR 2780AD. Since compounds **6** and **8** have no cytotoxic activity, they are desirable compounds as MDR cancer reversal agent. Since compounds **3**, **5**, and **9a** have moderate cytotoxic activity, they are expected to be lead compounds of new-type anticancer agents.

**Structure–activity relationship, kinetic mechanism, and selectivity for a new class of ubiquitin C-terminal hydrolase-L1 (UCH-L1) inhibitors**

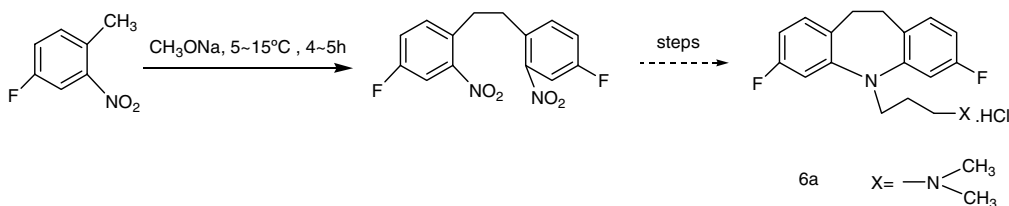
pp 3729–3732

Ara H. Mermerian, April Case, Ross L. Stein and Gregory D. Cuny*

**Synthesis and local anesthetic activity of fluoro-substituted imipramine and its analogues**

pp 3733–3735

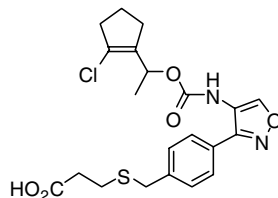
Wen Li and Qidong You*



Synthesis and evaluation of isoxazole derivatives as lysophosphatidic acid (LPA) antagonists

pp 3736–3740

Takashi Yamamoto, Koichi Fujita,* Sayaka Asari, Akira Chiba, Yuka Kataba, Koji Ohsumi, Naoko Ohmura, Yuko Iida, Chiori Ijichi, Satoshi Iwayama, Naoyuki Fukuchi and Masataka Shoji

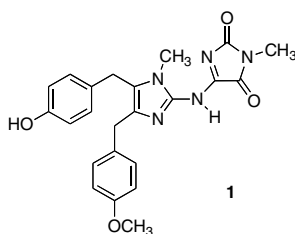


A series of isoxazole derivatives were synthesized and their antagonistic activities against LPA stimulation on both LPA₁/CHO cells and rHSC cells were evaluated. Among them, 3-(4-{4-[1-(2-chloro-cyclopent-1-enyl)-ethoxycarbonylamino]-isoxazol-3-yl}-benzylsulfanyl)-propionic acid (**34**) showed the most potent activities.

Synthesis and biological evaluation of analogues of the anti-tumor alkaloid naamidine A

pp 3741–3744

Nicholas Aberle, Jenny Catimel, Edouard C. Nice and Keith G. Watson*

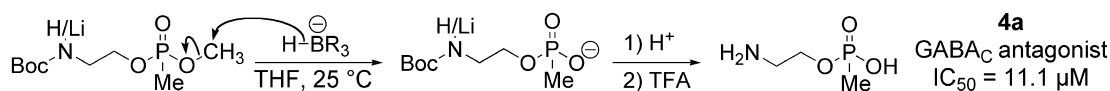


The syntheses of deletion analogues and thiazole analogues of naamidine A (**1**) are reported, together with data indicating inhibition of EGF- and IL3-dependent mitogenesis.

**Phosphonic acid analogs of GABA through reductive dealkylation of phosphonic diesters with lithium trialkylborohydrides**

pp 3745–3748

Sarwat Chowdhury, Niraj J. Muni, Nicholas P. Greenwood, David R. Pepperberg* and Robert F. Standaert*

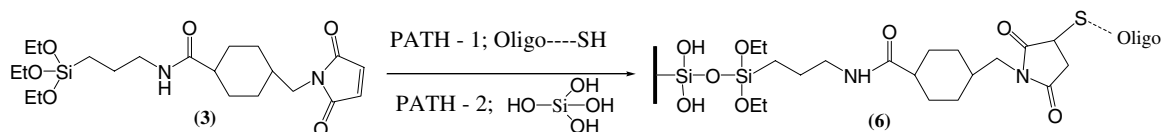


Lithium trialkylborohydrides were found to mono-dealkylate dialkylphosphonates rapidly (rate of cleavage Me, Bn > 1°). The reaction was applied to the synthesis of a new GABA_C antagonist, 2-aminoethyl methylphosphonate (**4a**).

**N-(3-Triethoxysilylpropyl)-4-(N'-maleimidylmethyl)cyclohexanamide (TPMC): A heterobifunctional reagent for immobilization of oligonucleotides on glass surface**

pp 3749–3753

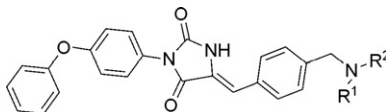
Arvind Misra*



Design and synthesis of novel hydantoin-containing melanin-concentrating hormone receptor antagonists

pp 3754–3759

Fabrice Balavoine,* Patrice Malabre, Thierry Alleaume, Astrid Rey, Valérie Cherfils, Olivier Jeanneton, Sophie Seigneurin-Venin and Frédéric Revah

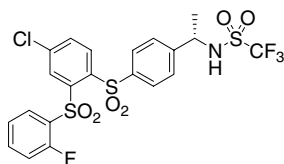


We report here new chemical series acting as antagonists of melanin-concentrating hormone receptor 1 (MCHR-1). Synthesis and structure–activity relationships are described leading to the identification of compounds with optimized in vitro pharmacological and in vitro ADME profiles. In vivo activity has been demonstrated in animal models of food intake and depression.

Optimization of triaryl bis-sulfones as cannabinoid-2 receptor ligands

pp 3760–3764

Brian J. Lavey,* Joseph A. Kozlowski,* Bandarpalle B. Shankar, James M. Spitler, Guowei Zhou, De-Yi Yang, Youheng Shu, Michael K. C. Wong, Shing-Chun Wong, Neng-Yang Shih, Jie Wu, Stuart W. McCombie, Razia Rizvi, Ronald L. Wolin and Charles A. Lunn



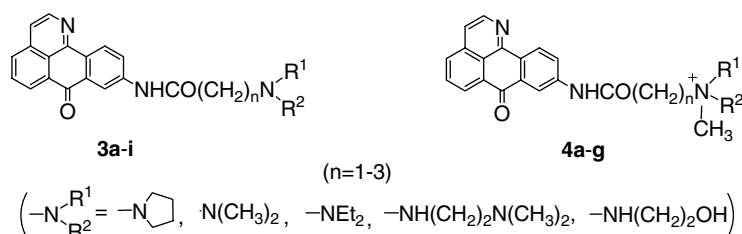
Optimization of triaryl bis-sulfone cannabinoid ligands is described. Formation of the trifluoromethane sulfonamide moiety gives compounds that are highly potent and selective for CB2 with improved plasma levels.



Derivatives of oxoisoaporphine alkaloids: A novel class of selective acetylcholinesterase inhibitors

pp 3765–3768

Huang Tang, Fang-Xian Ning, Yong-Biao Wei, Shi-Liang Huang, Zhi-Shu Huang,* Albert Sun-Chi Chan and Lian-Quan Gu*

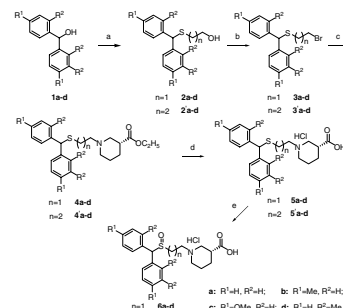


Synthesis and biological evaluation of (R)-N-(diarylmethylthio/sulfinyl)ethyl/propyl-piperidine-3-carboxylic acid hydrochlorides as novel GABA uptake inhibitors

pp 3769–3773

Jiange Zhang,* Pei Zhang, Xianbo Liu, Kai Fang and Guoqiang Lin*

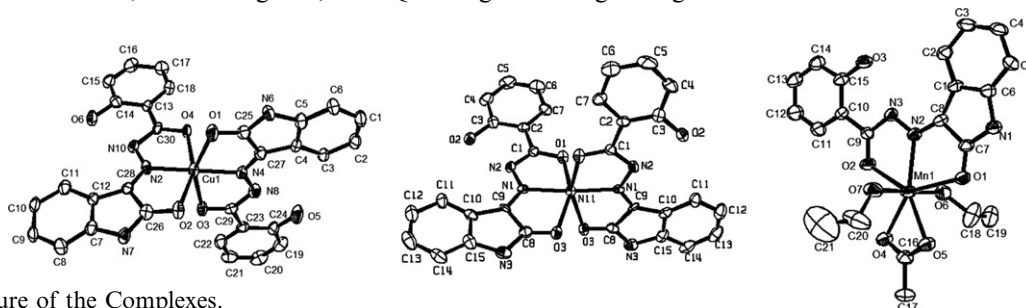
The synthesis of the novel uptake inhibitor **6a** (IC₅₀ = 0.92 μm) is reported.



The crystal structures of copper(II), manganese(II), and nickel(II) complexes of a (Z)-2-hydroxy-*N'*-(2-oxoindolin-3-ylidene) benzohydrazide—potential antitumor agents

pp 3774–3777

Xia Zhong, Hu-Lai Wei, Wei-Sheng Liu,* Da-Qi Wang and Xing Wang

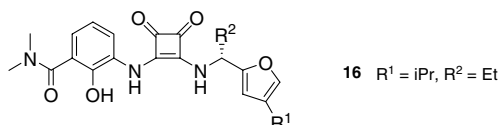


Crystal Structure of the Complexes.

C(4)-alkyl substituted furanyl cyclobutenediones as potent, orally bioavailable CXCR2 and CXCR1 receptor antagonists

pp 3778–3783

Jianhua Chao,* Arthur G. Taveras, Jianping Chao, Cynthia Aki, Michael Dwyer, Younong Yu, Biju Purakkattil, Diane Rindgen, James Jakway, William Hipkin, James Fosetta, Xuedong Fan, Daniel Lundell, Jay Fine, Michael Minniccozzi, Jonathan Phillips and J. Robert Merritt



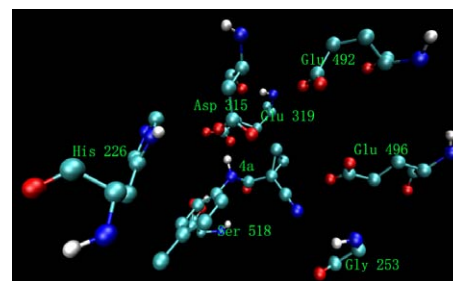
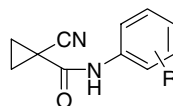
The discovery and synthesis of the potent CXCR2 and CXCR1 dual antagonist **16** is described.

Synthesis, bioactivity, theoretical and molecular docking study of 1-cyano-*N*-substituted-cyclopropanecarboxamide as ketol-acid reductoisomerase inhibitor

pp 3784–3788

Xing-Hai Liu, Pei-Quan Chen, Bao-Lei Wang, Yong-Hong Li, Su-Hua Wang and Zheng-Ming Li*

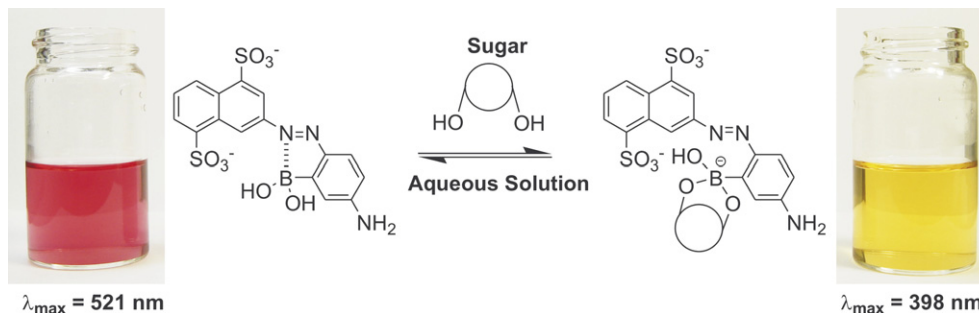
1-Cyano-1-cyclopropane derivatives against KARI were synthesized.



Ortho-azo substituted phenylboronic acids for colorimetric sugar sensors

pp 3789–3792

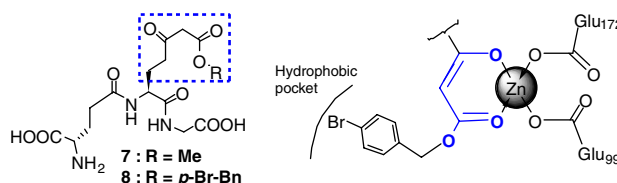
Yuya Egawa,* Ryota Gotoh, Satoshi Niina and Jun-ichi Anzai



Design, synthesis, and binding studies of bidentate Zn-chelating peptidic inhibitors of glyoxalase-I

pp 3793–3797

Swati S. More and Robert Vince*



The known affinity of ethyl acetoacetate (ACC) toward divalent zinc prompted us to attempt its employment as a chelating moiety in the design of glyoxalase-I inhibitors. A practical synthetic route was developed to incorporate this pharmacophore into the side chain of glutamic acid, with flexibility to allow incorporation of additional functionality at the end-stage of the synthesis. Herein, the details of this synthetic approach as well as the evaluation of the resultant β -keto ester compounds are reported.

OTHER CONTENTS

Summary of instructions to authors

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*Corresponding author

i+ Supplementary data available via ScienceDirect

COVER

Typical snapshot of **7b** bound to HIV-RT from an MC simulation. Carbon atoms of **7b** are gold; from the left, Tyr181, Tyr188, Phe227, Leu100, Lys101; Trp229 at the top, Val106 at the bottom. H-bond with Lys101 O on right. Some residues in front including Glu138 have been removed for clarity. The water on N5 is also H-bonded to a carboxylate O of Glu138. [Thakur, V. T.; Kim, J. T.; Hamilton, A. D.; Bailey, C. M.; Domaol, R. A.; Wang, L.; Anderson, K. S.; Jorgensen, W. L. *Bioorg. Med. Chem. Lett.* **2006**, *16*, 5664.]

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