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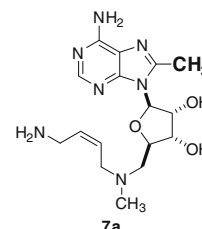
Contents

ARTICLES

Discovery of new *S*-adenosylmethionine decarboxylase inhibitors for the treatment of Human African Trypanosomiasis (HAT) pp 2916–2919

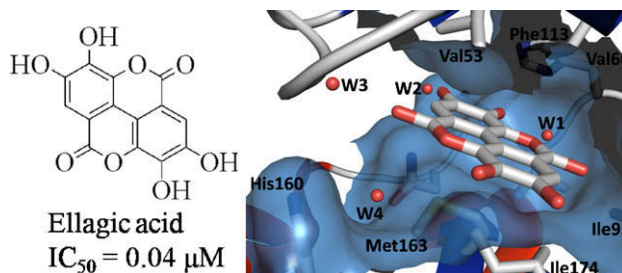
Bradford Hirth, Robert H. Barker Jr., Cassandra A. Celatka, Jeffrey D. Klinger, Hanlan Liu, Bakela Nare, Amarjit Nijjar, Margaret A. Phillips, Edmund Sybertz, Erin K. Willert, Yibin Xiang*

Compound **7a**, which has a methyl substituent at the 8-position of 5'-((*Z*)-4-aminobut-2-enyl)(methylamino)adenosine, demonstrates potent activity against the trypanosomal AdoMetDc enzyme and *Trypanosoma brucei* strains, and has an increased ability to penetrate the blood brain barrier.



Structural insight into human CK2 α in complex with the potent inhibitor ellagic acid pp 2920–2923

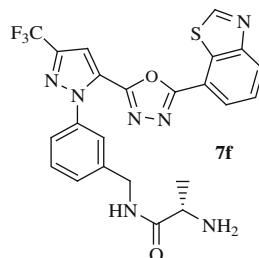
Yusuke Sekiguchi, Tetsuko Nakaniwa, Takayoshi Kinoshita*, Isao Nakanishi, Kazuo Kitaura, Akira Hirasawa, Gozoh Tsujimoto, Toshiji Tada



2.35 Å X-ray crystal structure reveals that ellagic acid binds to human CK2 α with a novel binding mode including four water mediated interactions and induces a specific conformation at His160.

Optimization of pyrazole inhibitors of Coactivator Associated Arginine Methyltransferase 1 (CARM1) pp 2924–2927

Tram Huynh, Zhong Chen, Suhong Pang, Jieping Geng, Tiziano Bandiera, Simona Bindi, Paola Vianello, Fulvia Roletto, Sandrine Thieffine, Arturo Galvani, Wayne Vaccaro, Michael A. Poss, George L. Trainor, Matthew V. Lorenzi, Marco Gottardis, Lata Jayaraman, Ashok V. Purandare*

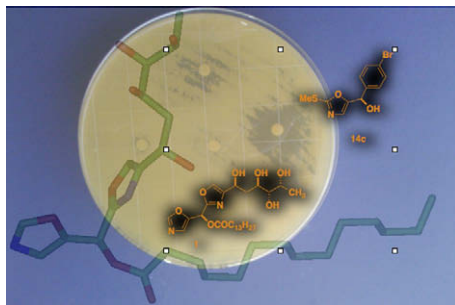


Design, synthesis, and SAR development led to the identification of the potent, novel, and selective pyrazole based inhibitor (**7f**) of CARM1.

Synthesis and structure–activity relationships of bengazole A analogs

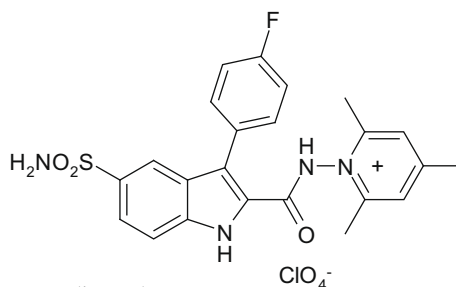
pp 2928–2930

Roger J. Mulder, Cynthia M. Shafer, Doralyn S. Dalisay, Tadeusz F. Molinski*

**Carbonic anhydrase inhibitors. Synthesis of 2,4,6-trimethylpyridinium derivatives of 2-(hydrazinocarbonyl)-3-aryl-1H-indole-5-sulfonamides acting as potent inhibitors of the tumor-associated isoform IX and XII**

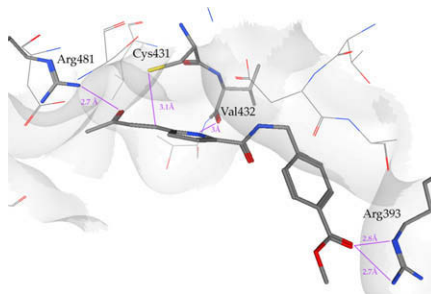
pp 2931–2934

Özlen Güzel, Alfonso Maresca, Andrea Scozzafava, Aydın Salman, Alexandru T. Balaban, Claudiu T. Supuran*

 K_i (hCA I) = 7.6 nM; K_i (hCA II) = 65 nM, K_i (hCA IX) = 8.3 nM; K_i (hCA XII) = 9.5 nM.**Discovery of a novel HCV helicase inhibitor by a de novo drug design approach**

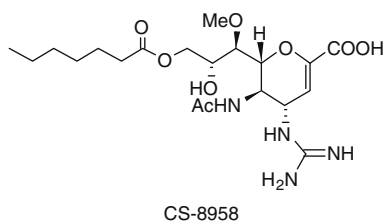
pp 2935–2937

Sahar Kandil, Sonia Biondaro, Dimitrios Vlachakis, Anna-Claire Cummins, Antonio Coluccia, Colin Berry, Pieter Leyssen, Johan Neyts, Andrea Brancale*

The discovery of a novel HCV helicase inhibitor (IC_{50} = 0.26 μ M) is reported.**Synthesis and in vivo influenza virus-inhibitory effect of ester prodrug of 4-guanidino-7-O-methyl-Neu5Ac2en**

pp 2938–2940

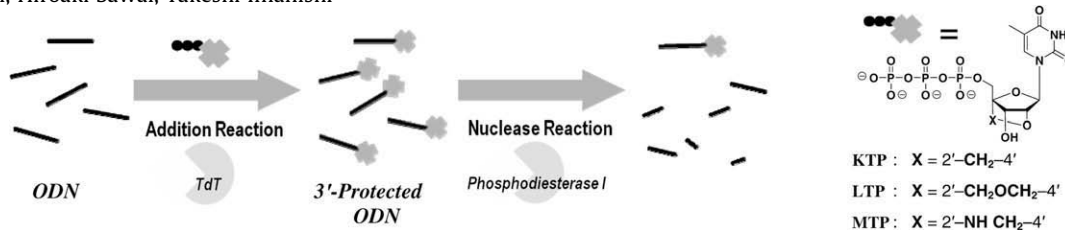
Takeshi Honda*, Shuku Kubo, Takeshi Masuda, Masami Arai, Yoshiyuki Kobayashi, Makoto Yamashita



Smart conferring of nuclease resistance to DNA by 3'-end protection using 2',4'-bridged nucleoside-5'-triphosphates

pp 2941–2943

Masayasu Kuwahara*, Satoshi Obika, Hidetoshi Takeshima, Yoshihiko Hagiwara, Jun-ichi Nagashima, Hiroaki Ozaki, Hiroaki Sawai, Takeshi Imanishi



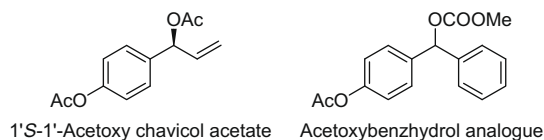
The enzymatic addition of BNA nucleotides to the 3'-end of oligodeoxyribonucleotide (ODN) was examined using terminal deoxynucleotidyl transferase (TdT); nuclease resistance was conferred on DNA, depending on the types of BNA nucleotides added.



Acetoxybenzhydrols as highly active and stable analogues of 1'S-1'-acetoxychavicol, a potent antiallergic principal from *Alpinia galanga*

pp 2944–2946

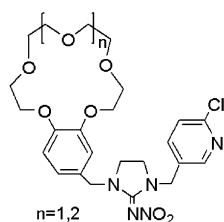
Tomohisa Yasuhara, Yoshiaki Manse, Takayuki Morimoto, Wang Qilong, Hisashi Matsuda, Masayuki Yoshikawa, Osamu Muraoka*



Crown-capped imidacloprid: A novel design and insecticidal activity

pp 2947–2948

Shinzo Kagabu*, Masaru Takagi, Ikuya Ohno, Tsuyoshi Mikawa, Toru Miyamoto

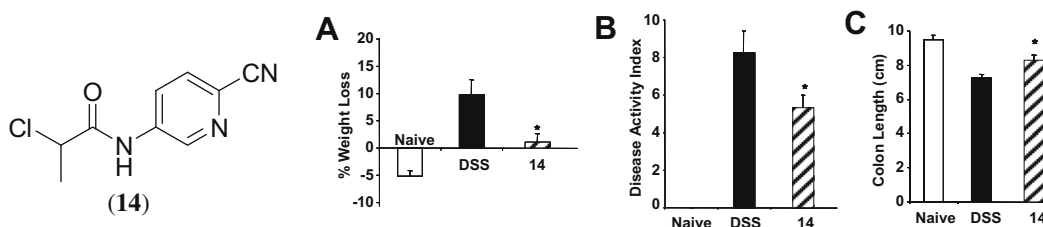


Benzocrown-capped imidacloprid displayed higher insecticidal activity than imidacloprid.

Synthesis and therapeutic evaluation of pyridyl based novel mTOR inhibitors

pp 2949–2952

Vijaykumar Deore, Nilambari Yewalkar, Dimple Bhatia, Nikesh Desai, Ravindra D. Gupte, Shruta S. Dadarkar, Mahesh G. Jadhav, Aditi A. Tannu, Pooja Bhatt, Kumar V. S. Nemmani, Ram A. Vishwakarma, Somesh Sharma, Abhijit Roychowdhury, Nilesh M. Dagia, Mandar R. Bhonde, Sanjay Kumar*



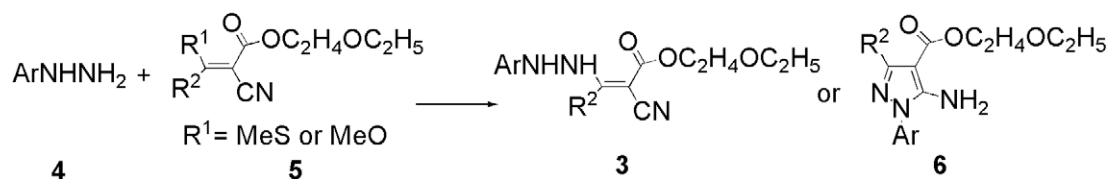
Systemic application of compound 14, a novel mTOR inhibitor, significantly suppresses macroscopic and histologic abnormalities associated with chemically-induced murine ulcerative colitis.



Synthesis and biological evaluation of arylhydrazinocyanoacrylates and *N*-aryl pyrazolecarboxylates

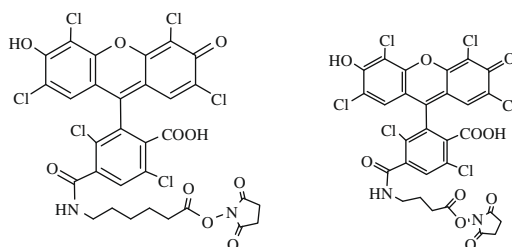
pp 2953–2956

Yuxiu Liu, Shaohua Liu, Yonghong Li, Haibin Song, Qingmin Wang*

**Synthesis and biological applications of two novel fluorescent proteins-labeling probes**

pp 2957–2959

Xiang-long Wu, Min Tian, Huai-zhen He, Wei Sun, Jian-li Li, Zhen Shi*

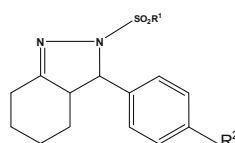


Two novel chlorinated fluoresceins 2',4',5',7'-tetrachloro-6-(5-carboxypentyl)-4,7-dichlorofluorescein succinimidyl ester and 2',4',5',7'-tetrachloro-6-(3-carboxypropyl)-4,7-dichlorofluorescein succinimidyl ester were synthesized as fluorescent probes for labeling proteins. The investigation in immunofluorescence histochemistry showed them had strong fluorescence, high photostability and good biocompatibility.

Synthesis, antimicrobial activity and QSAR studies of new 2,3-disubstituted-3a,4,5,6,7-hexahydro-2*H*-indazoles

pp 2960–2964

Maninder Minu*, Ananda Thangadurai, Sharad Ramesh Wakode, Shyam Sundar Agrawal, Balasubramanian Narasimhan

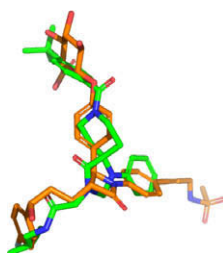


QSAR study of synthesized hexahydroindazole derivatives indicated the importance of topological parameters ²χ and ²χ^v in contribution to antimicrobial activity.

**Spiroimidazolidinone NPC1L1 inhibitors. 1: Discovery by 3D-similarity-based virtual screening**

pp 2965–2968

Daniel R. McMasters*, Margarita Garcia-Calvo, Vladimir Maiorov, Margaret E. McCann, Roger D. Meurer, Herbert G. Bull, JeanMarie Lisnock, Koborn L. Howell, Robert J. DeVita

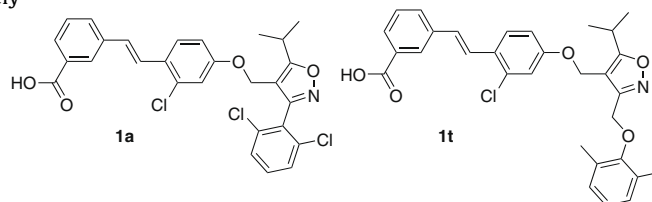


A series of spiroimidazolidinone NPC1L1 inhibitors was discovered by virtual screening of the Merck corporate sample repository using 3D-similarity-based screening.

Substituted isoxazole analogs of farnesoid X receptor (FXR) agonist GW4064

pp 2969–2973

Jonathan Y. Bass, Richard D. Caldwell, Justin A. Caravella, Lihong Chen, Katrina L. Creech, David N. Deaton, Kevin P. Madauss, Harry B. Marr, Robert B. McFadyen*, Aaron B. Miller, Derek J. Parks, Dan Todd, Shawn P. Williams, G. Bruce Wisely

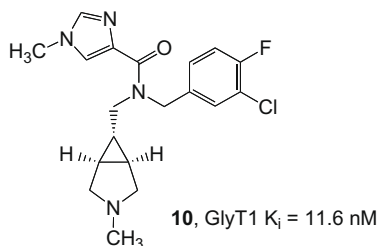


Starting from the known FXR agonist GW 4064 **1a**, a series of alternately 3,5-substituted isoxazoles was prepared. Several of these analogs were potent full FXR agonists. A subset of this series, with a tether between the isoxazole ring and the 3-position aryl substituent, were equipotent FXR agonists to GW 4064 **1a**, with the 2,6-dimethyl phenol analog **1t** having greater FRET FXR potency than GW 4064 **1a**.

The discovery of a structurally novel class of inhibitors of the type 1 glycine transporter

pp 2974–2976

John A. Lowe III*, Xinjun Hou, Christopher Schmidt, F. David Tingley III, Stan McHardy, Monica Kalman, Shari DeNinno, Mark Sanner, Karen Ward, Lorraine Lebel, Don Tunucci, James Valentine

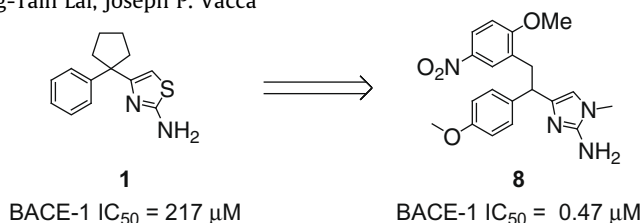


The discovery of a potent, selective inhibitor of the type 1 glycine transporter, **10**, is reported.

**Discovery of aminoheterocycles as a novel β -secretase inhibitor class: pH dependence on binding activity part 1**

pp 2977–2980

Shawn J. Stachel*, Craig A. Coburn*, Diane Rush, Kristen L. G. Jones, Hong Zhu, Hemaka Rajapakse, Samuel L. Graham, Adam Simon, M. Katharine Holloway, Tim J. Allison, Sanjeev K. Munshi, Amy S. Espeseth, Paul Zuck, Dennis Colussi, Abigail Wolfe, Beth L. Pietrak, Ming-Tain Lai, Joseph P. Vacca



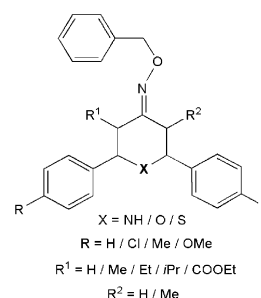
A novel series of heteroaromatic BACE-1 inhibitors is described. These inhibitors interact with the enzyme in a unique fashion that allows for potent binding in a non-traditional paradigm. In addition to the elucidation of their binding profile, a pH dependent effect on the binding affinity as a result of the intrinsic pK_a of these inhibitors and the pH of the BACE-1 enzyme binding assay is discussed.

Synthesis, spectral, crystal and antimicrobial studies of biologically potent oxime ethers of nitrogen, oxygen and sulfur heterocycles

pp 2981–2985

Paramasivam Parthiban, Gopalakrishnan Aridoss, Paramasivam Rathika, Venkatachalam Ramkumar, Senthamarai Kannan Kabilan*

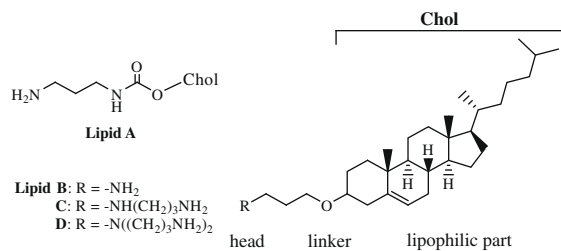
Series of N, O and S heterocyclic oxime ethers were synthesized and their stereochemistry is established. All the synthesized oxime ethers were evaluated for in vitro antibacterial and antifungal potency by serial dilution method, thus obtained MICs provide better structure–activity correlations (SAR).



Synthesis of novel cholesterol-based cationic lipids for gene delivery

pp 2986–2989

Bieong-Kil Kim, Kyung-Oh Doh, Joo Hyeung Nam, Hyungu Kang, Jong-Gu Park, Ik-Jae Moon, Young-Bae Seu*

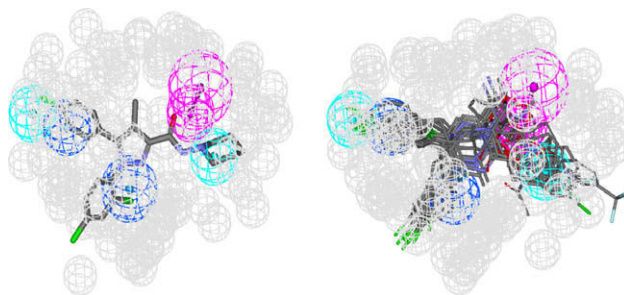


The development of optimum cationic lipids for cationic liposome delivery systems.

Predictive models of Cannabinoid-1 receptor antagonists derived from diverse classes

pp 2990–2996

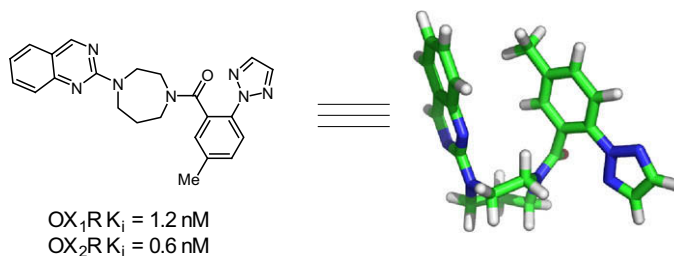
Nam Sook Kang*, Gil Nam Lee, Sung-Eun Yoo



Conformational analysis of *N,N*-disubstituted-1,4-diazepane orexin receptor antagonists and implications for receptor binding

pp 2997–3001

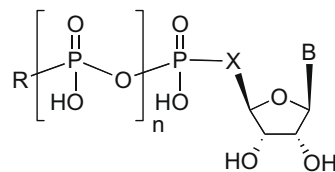
Christopher D. Cox*, Georgia B. McGaughey, Michael J. Bogusky, David B. Whitman, Richard G. Ball, Christopher J. Winrow, John J. Renger, Paul J. Coleman



Synthesis and P2Y receptor activity of nucleoside 5'-phosphonate derivatives

pp 3002–3005

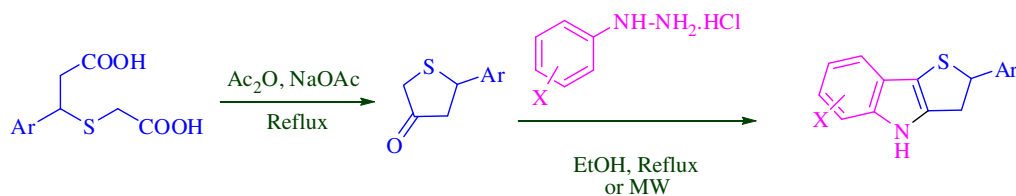
Liesbet Cosyn, Serge Van Calenbergh, Bhalchandra V. Joshi, Hyojin Ko, Rhonda L. Carter, T. Kendall Harden, Kenneth A. Jacobson*



A microwave-assisted facile regioselective Fischer indole synthesis and antitubercular evaluation of novel 2-aryl-3,4-dihydro-2H-thieno[3,2-b]indoles

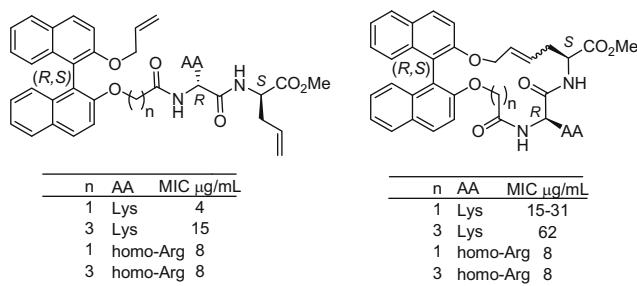
pp 3006–3009

Subramanian Vedhanarayanan Karthikeyan, Subbu Perumal*, Krithika Arun Shetty, Perumal Yogeeswari, Dharmarajan Sriram

**Binaphthyl scaffolded peptoids via ring-closing metathesis reactions and their anti-bacterial activities**

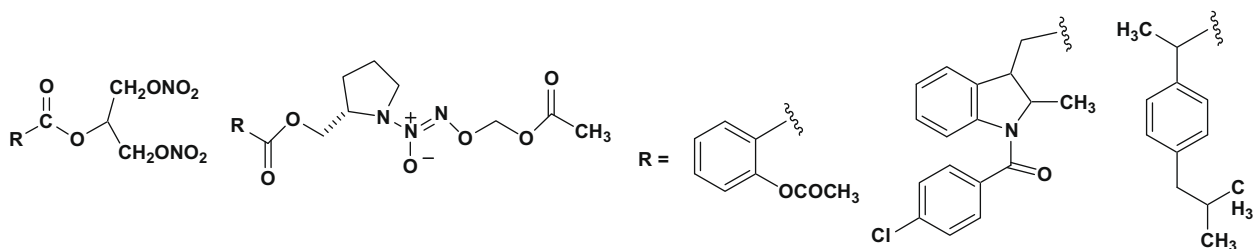
pp 3010–3013

Adel Garas, John B. Bremner*, Jonathan Coates, John Deadman, Paul A. Keller*, Stephen G. Pyne*, David I. Rhodes

**Dinitroglyceryl and diazen-1-ium-1,2-diolated nitric oxide donor ester prodrugs of aspirin, indomethacin and ibuprofen: Synthesis, biological evaluation and nitric oxide release studies**

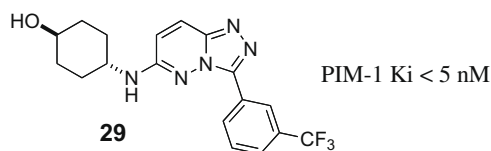
pp 3014–3018

Khaled R. A. Abdellatif, Morshed Alam Chowdhury, Ying Dong, Dipankar Das, Gang Yu, Carlos A. Velázquez, Mavanur R. Suresh, Edward E. Knaus*

**Structure-based design of 3-aryl-6-amino-triazolo[4,3-b]pyridazine inhibitors of Pim-1 kinase**

pp 3019–3022

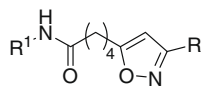
Ron Grey, Albert C. Pierce, Guy W. Bemis, Marc D. Jacobs, Cameron Stuver Moody, Rahul Jajoo, Narinder Mohal, Jeremy Green*



Isoxazole moiety in the linker region of HDAC inhibitors adjacent to the Zn-chelating group: Effects on HDAC biology and antiproliferative activity

pp 3023–3026

Subhasish Tapadar, Rong He, Doris N. Luchini, Daniel D. Billadeau, Alan P. Kozikowski *



R¹ = Different aromatic or heteroaromatic
or alicyclic group

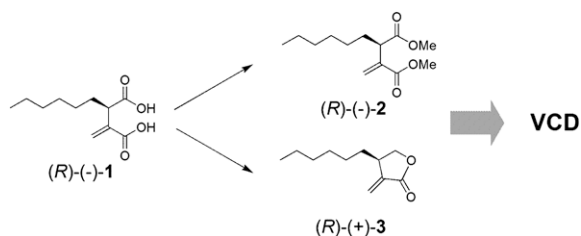
R = CONHOH, CONH₂, COOH, CH₂OH

The synthesis, HDAC inhibition, and antiproliferative activity of isoxazole hydroxamate based HDAC inhibitors with varied cap groups (**1–10**) are reported.

Stereochemical studies of hexylitaconic acid, an inhibitor of p53–HDM2 interaction

pp 3027–3030

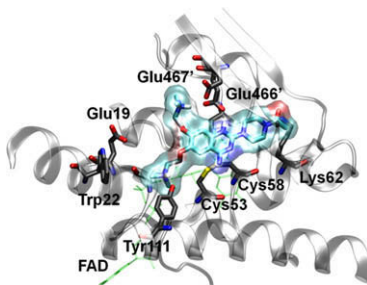
Atsufumi Nakahashi, Nobuaki Miura, Kenji Monde *, Sachiko Tsukamoto



Privileged structure-guided synthesis of quinazoline derivatives as inhibitors of trypanothione reductase

pp 3031–3035

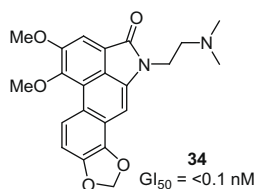
Andrea Cavalli, Federica Lizzi, Salvatore Bongarzone, Reto Brun, R. Luise Krauth-Siegel, Maria Laura Bolognesi *



Synthesis of aristolactam analogues and evaluation of their antitumor activity

pp 3036–3040

Young Lok Choi, Joa Kyum Kim, Sang-Un Choi, Yong-Ki Min, Myung-Ae Bae, Bum Tae Kim, Jung-Nyoung Heo *

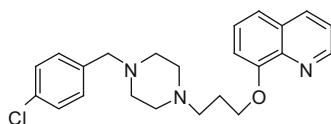


A series of natural aristolactams and their analogues have been prepared and evaluated for antitumor activity against human cancer cells, including multi-drug resistant cell lines. Compound **34** exhibited potent antitumor activities against a broad array of cancer cell lines with GI₅₀ values in the subnanomolar range.

Synthesis and evaluation of 1-(quinoliloxypentyl)-4-aryl piperazines for atypical antipsychotic effect

pp 3041–3044

Alka Bali*, Sarika Malhotra, Himjyoti Dhir, Anil Kumar, Ajay Sharma

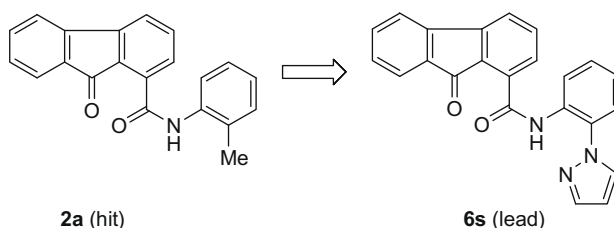


The synthesis and evaluation of a series of 1-(quinoliloxypentyl)-4-aryl piperazines for atypical antipsychotic effect is reported. Using appropriate physicochemical properties, similarity of the compounds with standard drugs has been calculated.

**Discovery of *N*-aryl-9-oxo-9*H*-fluorene-1-carboxamides as a new series of apoptosis inducers using a cell- and caspase-based high-throughput screening assay. 1. Structure–activity relationships of the carboxamide group**

pp 3045–3049

William Kemnitzer, Nilantha Sirisoma, Bao Nguyen, Songchun Jiang, Shailaja Kasibhatla, Candace Crogan-Grundy, Ben Tseng, John Drewe, Sui Xiong Cai*



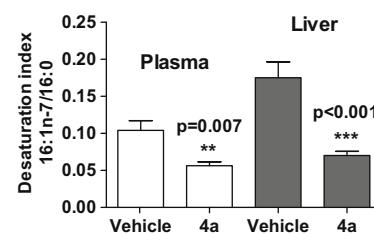
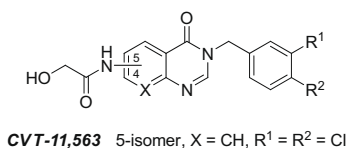
The synthesis and SAR of a group of apoptosis-inducing 9-oxo-9*H*-fluorene-1-carboxamides with modifications at the carboxamide group are reported.

Orally bioavailable, liver-selective stearyl-CoA desaturase (SCD) inhibitors

pp 3050–3053

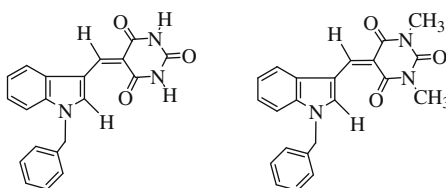
Dmitry O. Koltun*, Natalya I. Vasilevich, Eric Q. Parkhill, Andrei I. Glushkov, Timur M. Zilbershtein, Elena I. Mayboroda, Melanie A. Boze, Andrew G. Cole, Ian Henderson, Nathan A. Zautke, Sandra A. Brunn, Nancy Chu, Jia Hao, Nevena Mollova, Kwan Leung, Jeffrey W. Chisholm, Jeff Zablocki

We discovered a structurally novel SCD inhibitor CVT-11,563 (IC₅₀ 119 nM, HEPG2 assay), selective against Δ5 and Δ6 desaturases, with excellent PK parameters (*F* = 90% and dAUC 935 ng h/mL). This compound was found to have moderately selective liver distribution and low brain penetration. In a 5-day study CVT-11,563 significantly reduced SCD activity in plasma and liver.

**Design, synthesis and anticancer activities of hybrids of indole and barbituric acids—Identification of highly promising leads**

pp 3054–3058

Palwinder Singh*, Matinder Kaur, Pooja Verma

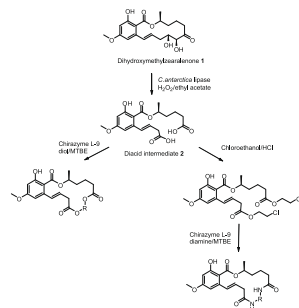
GI₅₀ for:

A498 = 0.03 μM
MDA-MB-468 = 0.1 μM

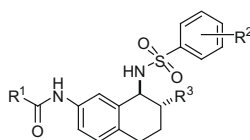
IGROV1 = 0.06 μM
MDA-MB-468 = 0.02 μM

Application of combinatorial biocatalysis for a unique ring expansion of dihydroxymethylzearelenone

pp 3059–3062

Joseph O. Rich^{*}, Cheryl L. Budde, Luke D. McConeghey, Ian C. Cotterill, Vadim V. Mozhaev, Sheo B. Singh, Michael A. Goetz, Annie Zhao, Peter C. Michels, Yuri L. Khmel'nitsky^{*}**Aryl sulfonamido tetralin inhibitors of the Kv1.5 ion channel**

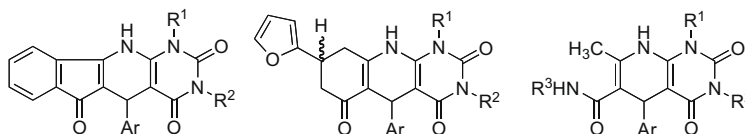
pp 3063–3066

Michael F. Gross, Neil A. Castle^{*}, Anruo Zou, Alan D. Wickenden, Weifeng Yu, Kerry L. Spear

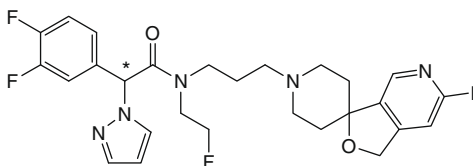
Structure–activity relationship of a new class of Kv1.5 inhibitors based on the tetraline scaffold was investigated.

Novel pyridopyrimidine derivatives as inhibitors of stable toxin a (STa) induced cGMP synthesis

pp 3067–3071

Eric A. Tanifum, Alexander Y. Kots, Byung-Kwon Choi, Ferid Murad, Scott R. Gilbertson^{*}A series of pyridopyrimidine derivatives were synthesized and evaluated for their ability to inhibit cyclic nucleotide synthesis in the presence of stable toxin a of *Escherichia coli*.**Discovery of novel spiro-piperidine derivatives as highly potent and selective melanin-concentrating hormone 1 receptor antagonists**

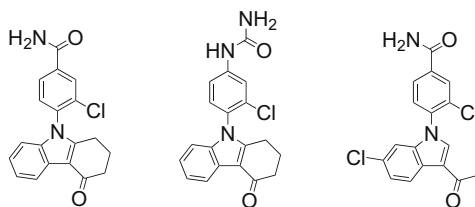
pp 3072–3077

Takao Suzuki^{*}, Minoru Moriya, Toshihiro Sakamoto, Takuya Suga, Hiroyuki Kishino, Hidekazu Takahashi, Makoto Ishikawa, Keita Nagai, Yumiko Imai, Etsuko Sekino, Masahiko Ito, Hisashi Iwaasa, Akane Ishihara, Shigeru Tokita, Akio Kanatani, Nagaaki Sato^{*}, Takehiro Fukami**3c**: hMCH-1R (IC₅₀) = 0.09 nMThe identification of highly potent and selective MCH-1R antagonist **3c** is reported.

Novel carbazole and acyl-indole antimitotics

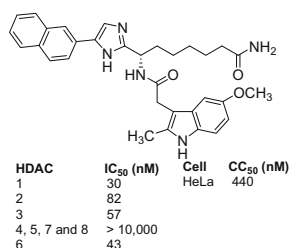
pp 3078–3080

Thomas E. Barta*, Amy F. Barabasz, Briana E. Foley, Lifeng Geng, Steven E. Hall, Gunnar J. Hanson, Matthew Jenks, Wei Ma, John W. Rice, James Veal

**Histone deacetylase inhibitors with a primary amide zinc binding group display antitumor activity in xenograft model**

pp 3081–3084

Barbara Attenni*, Jesus M. Ontoria, Jonathan C. Cruz, Michael Rowley, Carsten Schultz-Fademrecht, Christian Steinkühler, Philip Jones

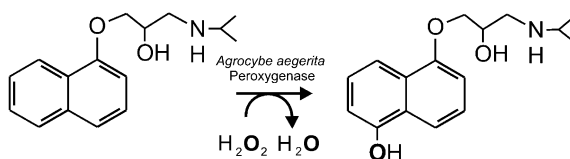


The identification of a selective class I HDAC inhibitor bearing a primary carboxamide as zinc binding group together with its efficacy in vivo is described.

Regioselective preparation of 5-hydroxypropranolol and 4'-hydroxydiclofenac with a fungal peroxxygenase

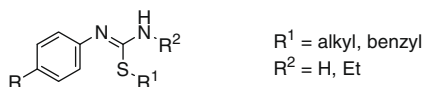
pp 3085–3087

Matthias Kinne*, Marzena Poraj-Kobielska, Elisabet Aranda, René Ullrich, Kenneth E. Hammel, Katrin Scheibner, Martin Hofrichter

**Synthesis of phenylisothiourea derivatives as inhibitors of NO production in LPS activated macrophages**

pp 3088–3092

Guo Hua Jin, Da Yeon Lee, Ye-Jin Cheon, Hyo Jin Gim, Do Hee Kim, Hee-Doo Kim, Jae-Ha Ryu, Raok Jeon*



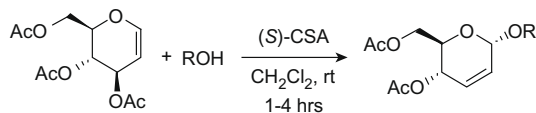
Synthesis of series of phenylisothioureas and their inhibitory activities on the NO production in lipopolysaccharide activated macrophages are reported.



(S)-Camphorsulfonic acid catalyzed highly stereoselective synthesis of pseudoglycosides

pp 3093–3095

Bala Kishan Gorityala, Shuting Cai, Jimei Ma, Xue-Wei Liu *

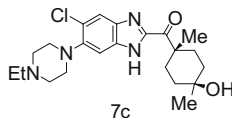


Highly stereoselective synthesis of 2,3-unsaturated glycosides has been developed by employing (S)-camphorsulfonic acid.

2-Cyclohexylcarbonylbenzimidazoles as potent, orally available and brain-penetrable opioid receptor-like 1 (ORL1) antagonists

pp 3096–3099

Kensuke Kobayashi, Minaho Uchiyama, Hirobumi Takahashi, Hiroshi Kawamoto, Satoru Ito, Takashi Yoshizumi, Hiroshi Nakashima, Tetsuya Kato, Atsushi Shimizu, Izumi Yamamoto, Masanori Asai, Hiroshi Miyazoe, Akio Ohno, Mioko Hirayama, Satoshi Ozaki, Takeshi Tani, Yasuyuki Ishii, Takeshi Tanaka, Takanobu Mochidome, Kiyoshi Tadano, Takahiro Fukuroda, Hisashi Ohta, Osamu Okamoto *

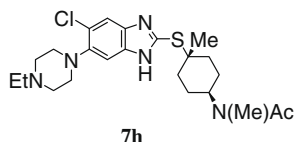


We report identification of 2-cyclohexylcarbonylbenzimidazole **7c** as potent, orally available and brain-penetrable ORL1 antagonist. Compound **7c** showed satisfactory pharmacokinetic profiles and brain penetrability in laboratory animals, and good in vivo antagonism.

Optimization of benzimidazole series as opioid receptor-like 1 (ORL1) antagonists: SAR study directed toward improvement of selectivity over hERG activity

pp 3100–3103

Kensuke Kobayashi, Tetsuya Kato, Izumi Yamamoto, Atsushi Shimizu, Sayaka Mizutani, Masanori Asai, Hiroshi Kawamoto, Satoru Ito, Takashi Yoshizumi, Mioko Hirayama, Satoshi Ozaki, Hisashi Ohta, Osamu Okamoto *

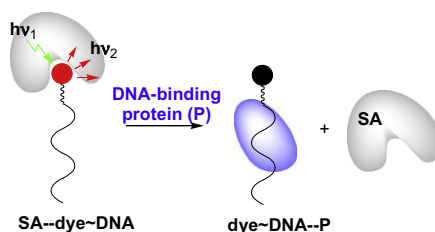


Optimization of benzimidazole series as ORL1 antagonists is reported. Compound **7h** exhibited potent ORL1 activity with high selectivity over binding affinity for hERG.

A simple method for monitoring protein–DNA interactions

pp 3104–3107

Annabelle Fülöp, Dumitru Arian, Andriy Lysenko, Andriy Mokhir *

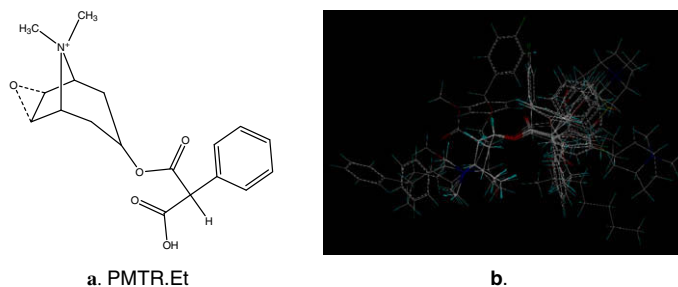


A simple, efficient and cheap method is reported for monitoring interaction between single stranded desoxyribonucleic acids and proteins by using fluorescence spectroscopy.

3D-QSAR study of 8-azabicyclo[3.2.1] octane analogs antagonists of cholinergic receptor

pp 3108–3112

S. M. Verma*, B. K. Razdan, D. Sasmal

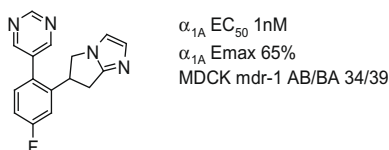


Alignment of the training set: **a** is the template structure (common fragment in red), **b** is the alignment of the training set for ligand-based model.

**6,7-Dihydro-5H-pyrrolo[1,2-a] imidazoles as potent and selective α_{1A} adrenoceptor partial agonists**

pp 3113–3117

Lee R. Roberts*, Paul V. Fish, R. Ian Storer, Gavin A. Whitlock

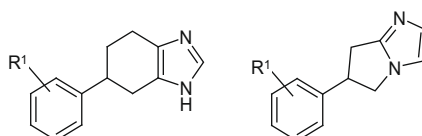


Novel pyrroloimidazoles have been identified as potent partial agonists of the α_{1A} adrenergic receptor, with good selectivity over the α_{1B} , α_{1D} and α_{2A} receptor subtypes. Pyrimidine **20** possessed attractive CNS drug-like properties with good membrane permeability and no evidence for P-gp mediated efflux.

Potent and selective α_{1A} adrenoceptor partial agonists—Novel imidazole frameworks

pp 3118–3121

Gavin A. Whitlock*, Paul E. Brennan, Lee R. Roberts, Alan Stobie

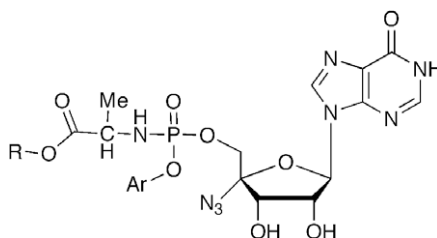


Novel imidazole frameworks have been identified as potent and selective α_{1A} partial agonists with good CNS drug-like properties.

The application of the phosphoramidate ProTide approach confers micromolar potency against Hepatitis C virus on inactive agent 4'-azidoinosine: Kinase bypass on a dual base/sugar modified nucleoside

pp 3122–3124

Christopher McGuigan*, Felice Daverio, Isabel Nájera, Joseph A. Martin, Klaus Klumpp, David B. Smith

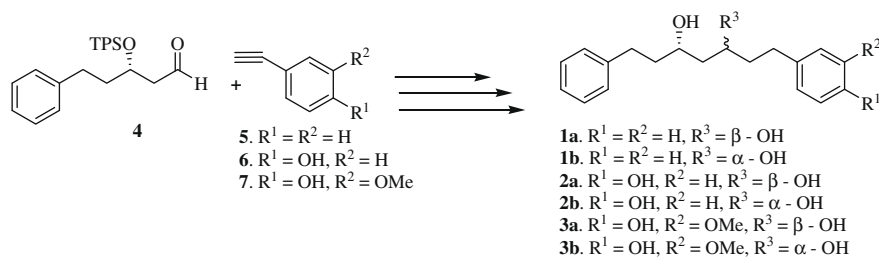


4'-Azidoinosine is inactive versus HCV, while its Pro Tides are active at μ M levels.

Synthesis of yashabushidiol and its analogues and their cytotoxic activity against cancer cell lines

pp 3125–3127

M. Narasimhulu, T. Srikanth Reddy, K. Chinni Mahesh, A. Sai Krishna, J. Venkateswara Rao, Y. Venkateswarlu *

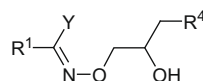


First total stereo selective synthesis of yashabushidiol, a linear diaryl having 1,3-dio system and its analogues.

**Chloro-oxime derivatives as novel small molecule chaperone amplifiers**

pp 3128–3135

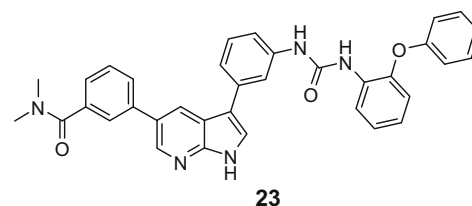
Yuefen Zhou*, Khang Vu, Yongsheng Chen, John Pham, Thomas Brady, Gang Liu, Jinhua Chen, Joonwoo Nam, P. S. Murali Mohan Reddy, Qingyan Au, Il Sang Yoon, Marie-Helene Tremblay, Gary Yip, Charmian Cher, Bin Zhang, Jack R. Barber, Shi Chung Ng

**Discovery of 3,5-disubstituted-1H-pyrrolo[2,3-b]pyridines as potent inhibitors of the insulin-like growth factor-1 receptor (IGF-1R) tyrosine kinase**

pp 3136–3140

Samarjit Patnaik*, Kirk L. Stevens, Roseanne Gerding, Felix Deanda, J. Brad Shotwell, Jun Tang, Toshihiro Hamajima, Hiroko Nakamura, M. Anthony Leesnitzer, Anne M. Hassell, Lisa M. Shewchuck, Rakesh Kumar, Huangshu Lei, Stanley D. Chamberlain

Exploration of the SAR around a series of 3,5-disubstituted-1H-pyrrolo[2,3-b]pyridines led to the discovery of novel pyrrolopyridines as nanomolar inhibitors of the IGF-1R tyrosine kinase.

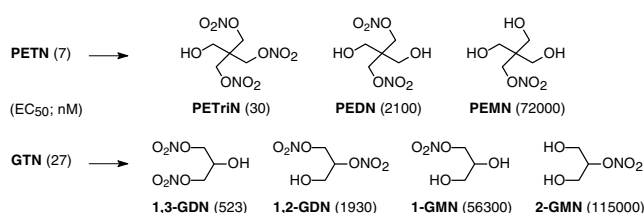


IGF-1R Ezyme IC_{50} 21 nM
 Phospho IGF-1R Cellular IC_{50} 68 nM

NO donors. Part 18: Bioactive metabolites of GTN and PETN—Synthesis and vasorelaxant properties

pp 3141–3144

Kathrin Lange, Andreas Koenig, Carolin Roegler, Andreas Seeling, Jochen Lehmann *




The bioactive metabolites of GTN and PETN were synthesized and their vasorelaxant potencies measured by performing organ bath experiments with porcine pulmonary arteries.



OTHER CONTENTS**Instructions to contributors****p I**

*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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