

Contents

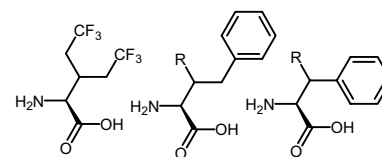
ARTICLES

Asymmetric synthesis of novel α -amino acids with β -branched side chains

pp 2401–2403

Minsheng Zhang,* Alex Porte, George Diamantidis, Kimberly Sogi, Dennis Kubrak, Lynn Resnick, Scott C. Mayer, Zheng Wang, Anthony F. Kreft and Boyd L. Harrison

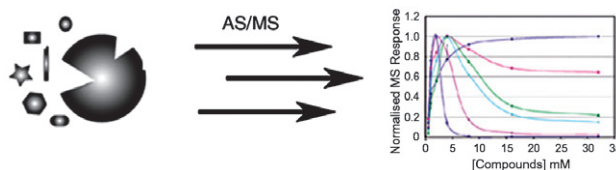
An asymmetric synthesis of α -amino acids with novel β -branched side chains has been implemented. The syntheses feature a *p*-toluenesulfonylimine induced chiral Strecker approach and were found to be applicable to the introduction of both aliphatic and aromatic β -branched side chains for preparation of previously unknown α -amino acids.



Affinity-based ranking of ligands for DPP-4 from mixtures

pp 2404–2407

Gregory C. Adam,* Juncai Meng, John Athanasopoulos, Xiaoping Zhang and Kevin T. Chapman

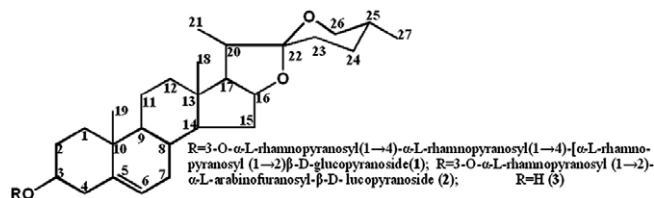


A method for rank ordering ligands by affinity selection is described and demonstrated with a series of inhibitors for DPP-IV.

Immuno-stimulating properties of diosgenyl saponins isolated from *Paris polyphylla*

pp 2408–2413

Xiu-feng Zhang, Yan Cui, Jia-jun Huang, Ya-zhou Zhang, Zhou Nie, Lan-fen Wang, Bao-zhen Yan, Ya-lin Tang and Yang Liu*



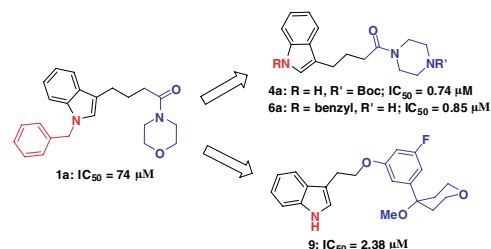
The effects of three diosgenyl saponins on the immuno-stimulating activity in relation to phagocytosis, respiratory burst, and nitric oxide production in RAW 264.7 cells have been investigated. Only saponins with sugar moiety have more immunomodulatory activities than diosgenin.

Indole derivatives as potent inhibitors of 5-lipoxygenase: Design, synthesis, biological evaluation, and molecular modeling

pp 2414–2420

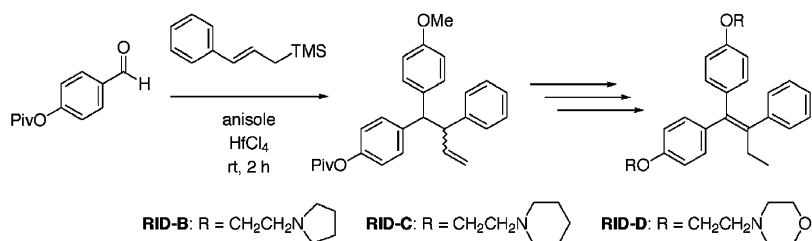
Mingfang Zheng, Mingyue Zheng, Deju Ye, Yangmei Deng, Shuifeng Qiu, Xiaomin Luo, Kaixian Chen, Hong Liu* and Hualiang Jiang*

Four compounds (**1m**, **1s**, **4a**, and **6a**) exhibited the potent inhibitory activity against 5-LOX in rat peritoneal leukocytes, with IC_{50} values ranging from 0.74 μ M to 0.95 μ M, which are very close to the reference drug (Zileuton, $IC_{50} = 0.83 \mu$ M).

**Synthesis of the new pseudo-symmetrical tamoxifen derivatives and their anti-tumor activity**

pp 2421–2424

Isamu Shiina,* Yoshiyuki Sano, Kenya Nakata, Takaaki Kikuchi, Akane Sasaki, Masahiko Ikekita* and Yoshimune Hasome

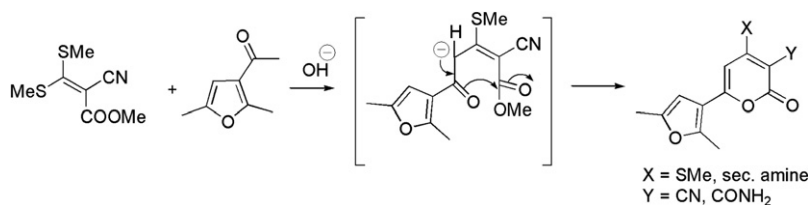


The synthesis of new tamoxifen derivatives is reported. Their effects on growth of HL-60 cells are determined.

Synthesis and in vivo antihyperglycemic activity of nature-mimicking furanyl-2-pyranones in STZ-S model

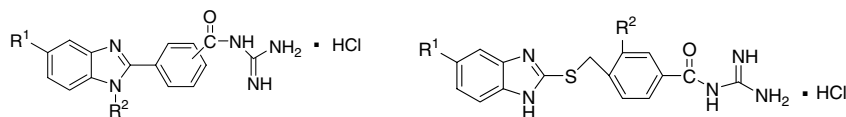
pp 2425–2429

Fateh V. Singh, Sumit Chaurasia, Maya D. Joshi, Arvind K. Srivastava and Atul Goel*

**Benzimidazol-2-yl or benzimidazol-2-ylthiomethyl benzoylguanidines as novel Na⁺/H⁺ exchanger inhibitors, synthesis and protection against ischemic-reperfusion injury**

pp 2430–2433

Rui Zhang, Lin Lei, Yun-Gen Xu,* Wei-Yi Hua and Guo-Qing Gong

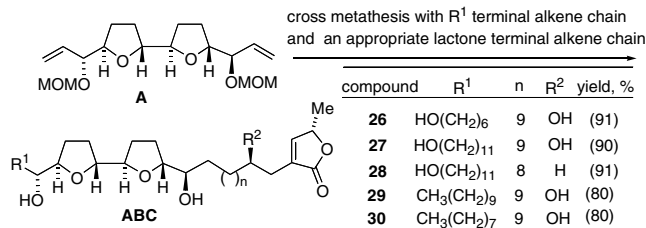


Novel benzimidazol-2-yl or benzimidazol-2-ylthiomethyl benzoylguanidines were designed and synthesized as Na⁺/H⁺ exchanger inhibitors. Most of them possess significant cardioprotective effects.

ABC synthesis and antitumor activity of a series of Annonaceous acetogenin analogs with a *threo, trans, threo, trans, threo*-bis-tetrahydrofuran core unit

pp 2434–2437

James A. Marshall,* Jesse J. Sabatini and Frederick Valeriote



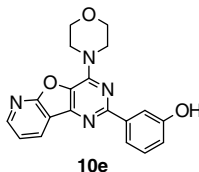
Side-chain analogs of Annonaceous acetogenins with a *threo, trans, threo, trans, threo*-bis-tetrahydrofuran core unit have been prepared and tested for cytotoxicity against HCT-116 human colon cancer cells.



Synthesis and biological evaluation of pyrido[3',2':4,5]furo[3,2-d]pyrimidine derivatives as novel PI3 kinase p110α inhibitors

pp 2438–2442

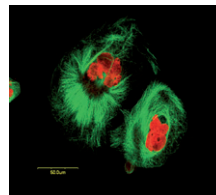
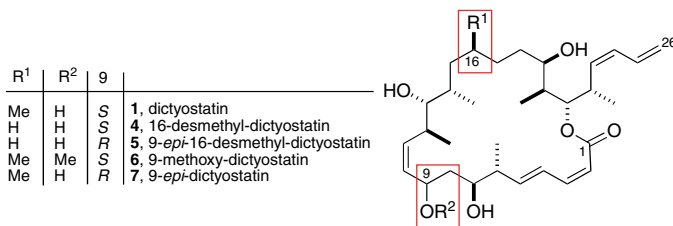
Masahiko Hayakawa,* Hiroyuki Kaizawa, Hiroyuki Moritomo, Tomonobu Koizumi, Takahide Ohishi, Mayumi Yamano, Minoru Okada, Mitsuaki Ohta, Shin-ichi Tsukamoto, Florence I. Raynaud, Paul Workman, Michael D. Waterfield and Peter Parker



Synthesis and biological evaluation of novel analogues of dictyostatin

pp 2443–2447

Ian Paterson,* Nicola M. Gardner, Karine G. Poullennec and Amy E. Wright



PANC-1 after 100 nM incubation with 6.

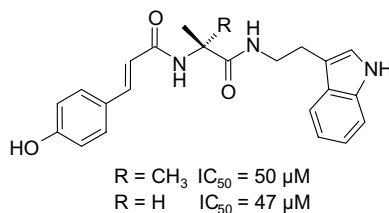
Novel analogues of the microtubule-stabilising agent dictyostatin were designed, synthesised and evaluated in vitro for growth inhibition against a range of human cancer cell lines.



N-(3-(4-Hydroxyphenyl)-propenyl)-amino acid tryptamides as SIRT2 inhibitors

pp 2448–2451

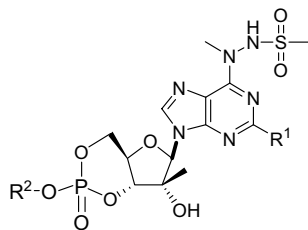
Päivi H. Kiviranta,* Jukka Leppänen, Valtteri M. Rinne, Tiina Suuronen, Olga Kyrylenko, Sergiy Kyrylenko, Erkki Kuusisto, Anu J. Tervo, Tomi Järvinen, Antero Salminen, Antti Poso and Erik A. A. Wallén



Cyclic monophosphate prodrugs of base-modified 2'-C-methyl ribonucleosides as potent inhibitors of hepatitis C virus RNA replication

pp 2452–2455

Esmir Gunic,* Jean-Luc Girardet, Kanda Ramasamy, Vesna Stoislavljevic-Petkov, Suetying Chow, Li-Tain Yeh, Robert K. Hamatake, Anneke Raney and Zhi Hong

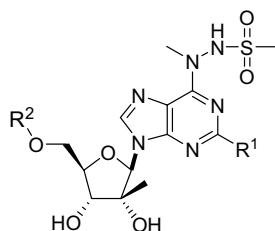


The synthesis of potent anti-HCV nucleotide prodrugs is reported.

6-Hydrazinopurine 2'-methyl ribonucleosides and their 5'-monophosphate prodrugs as potent hepatitis C virus inhibitors

pp 2456–2458

Esmir Gunic, Suetying Chow, Frank Rong, Kanda Ramasamy, Anneke Raney, David Yunzhi Li, Jingfan Huang, Robert K. Hamatake, Zhi Hong and Jean-Luc Girardet*



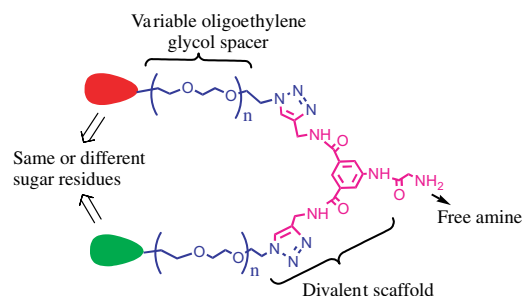
The synthesis of potent anti-HCV nucleotide prodrugs is reported.

Synthesis of soluble multivalent glycoconjugates that target the Hc region of botulinum neurotoxin A

pp 2459–2464

Ramesh R. Kale, Colin M. Clancy, Rebecca M. Vermillion, Eric A. Johnson and Suri S. Iyer*

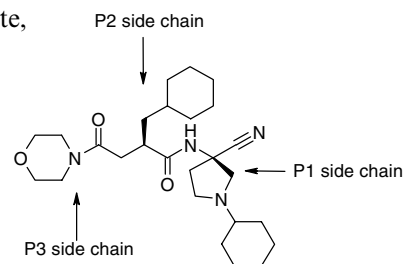
The design, synthesis, and initial inhibitory studies of di- and tetravalent glycoconjugates that target the heavy chain of botulinum neurotoxin A are reported.


Identification of a novel class of succinyl-nitrile-based Cathepsin S inhibitors

pp 2465–2469

Younes Bekkali,* David S. Thomson, Raj Betageri, Michel J. Emmanuel, Ming-Hong Hao, Eugene Hickey, Weimin Liu, Usha Patel, Yancey D. Ward, Erick R. R. Young, Richard Nelson, Alison Kukulka, Maryanne L. Brown, Kathy Crane, Della White, Dorothy M. Freeman, Mark E. Labadia, Jessi Wildeson and Denice M. Spero

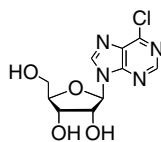
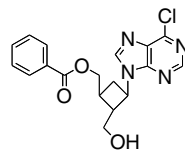
The synthesis and SAR of the first succinyl-nitrile-based compounds as Cathepsin S inhibitors are described.



Synthesis and biological evaluation of nucleoside analogues having 6-chloropurine as anti-SARS-CoV agents

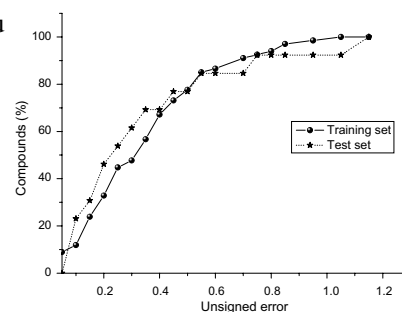
pp 2470–2473

Masahiro Ikejiri, Masayuki Saijo, Shigeru Morikawa, Shuetsu Fukushi, Tetsuya Mizutani, Ichiro Kurane and Tokumi Maruyama*

1: IC₅₀ = 48.7 μM11: IC₅₀ = 14.5 μM**Prediction of binding affinities to β₁ isoform of human thyroid hormone receptor by genetic algorithm and projection pursuit regression**

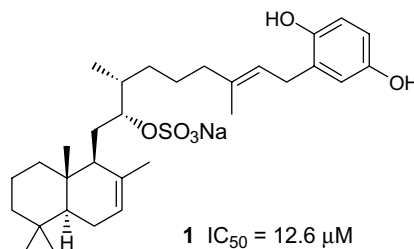
pp 2474–2482

Yueying Ren, Huanxiang Liu, Shuyan Li, Xiaojun Yao* and Mancang Liu

Proportion of compounds within a given deviation from the experimental pIC₅₀ by PPR.**Sesterterpene sulfates as isocitrate lyase inhibitors from tropical sponge *Hippospongia* sp.**

pp 2483–2486

Hyi-Seung Lee, Tae-Hoon Lee, Seung Hwan Yang, Hee Jae Shin, Jongheon Shin* and Ki-Bong Oh*

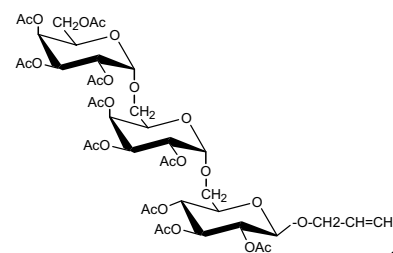
1 IC₅₀ = 12.6 μM

The isolation and bioactivity of three sesterterpene sulfates are described.

Synthesis of new sugar derivatives from *Stachys sieboldi* Miq and antibacterial evaluation against *Mycobacterium tuberculosis*, *Mycobacterium avium*, and *Staphylococcus aureus*

pp 2487–2491

Taku Chiba, Takemasa Takii,* Kenji Nishimura, Yoshifumi Yamamoto, Hiroko Morikawa, Chiyoji Abe and Kikuo Onozaki

The antibacterial properties of sugar derivatives synthesized from stachyose obtained from the root of *Stachys sieboldi* Miq 12 (MIC = 3–25 μg/ml) is reported.

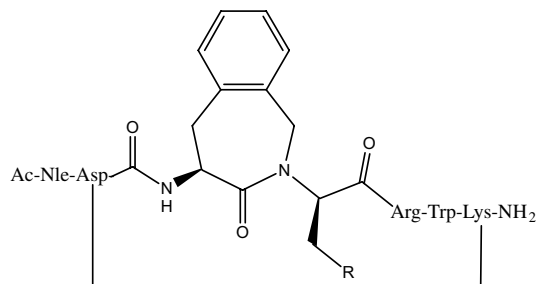
12 MIC = 3–25 μg/ml



Novel selective human melanocortin-3 receptor ligands: Use of the 4-amino-1,2,4,5-tetrahydro-2-benzazepin-3-one (Aba) scaffold

pp 2492–2498

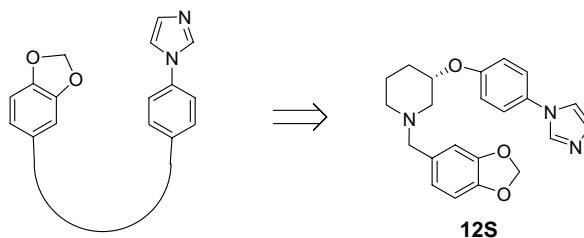
Steven Ballet,* Alexander V. Mayorov, Mingying Cai, Dagmara Tymecka, Kevin B. Chandler, Erin S. Palmer, Karolien Van Rompaey, Aleksandra Misicka, Dirk Tourwé and Victor J. Hruby


1-(1,3-Benzodioxol-5-ylmethyl)-3-[4-(1*H*-imidazol-1-yl)phenoxy]-piperidine analogs as potent and selective inhibitors of nitric oxide formation

pp 2499–2504

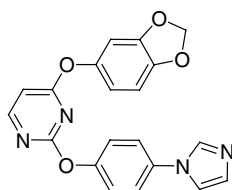
Robert G. Wei,* Marc Adler, David Davey, Elena Ho, Raju Mohan, Mark Polokoff, Jih-Lie Tseng, Marc Whitlow, Wei Xu, Shendong Yuan and Gary Phillips

A new series of 1-(1,3-benzodioxol-5-ylmethyl)-3-[4-(1*H*-imidazol-1-yl)phenoxy]-piperidine analogs were discovered as potent and selective inhibitors of NO formation. Compound **12S** showed high potency and high iNOS selectivity versus nNOS and eNOS.


The rational design of inhibitors of nitric oxide formation by inducible nitric oxide synthase

pp 2505–2508

Marc Whitlow, Marc Adler, David Davey, Qinglan Huang, Sunil Koovakkat, John F. Parkinson, Eric Pham, Mark Polokoff, Wei Xu, Shendong Yuan and Gary Phillips*

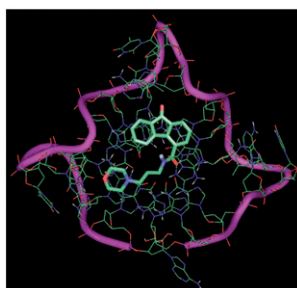


A novel class of compounds that block nitric oxide formation from cells overexpressing iNOS is described.

Tetraplex DNA specific ligands based on the fluorenone-carboxamide scaffold

pp 2509–2514

Stefano Alcaro,* Anna Artese, James N. Iley, Rosanna Maccari, Sotiris Missailidis, Francesco Ortuso, Rosaria Ottanà, Patricia Ragazzon and Maria Gabriella Vigorita

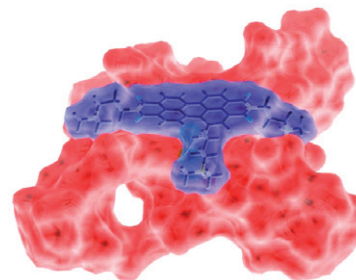


New highly hydrosoluble and not self-aggregated perylene derivatives with three and four polar side-chains as G-quadruplex telomere targeting agents and telomerase inhibitors

pp 2515–2522

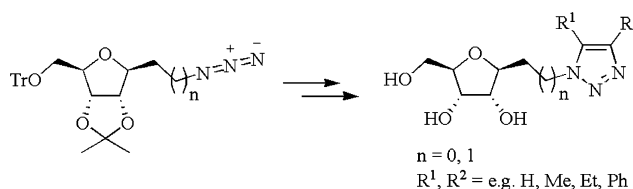
Marco Franceschin,* Emanuela Pascucci, Antonello Alvino, Danilo D'Ambrosio, Armandodoriano Bianco, Giancarlo Ortaggi and Maria Savino

Four new perylene derivatives with three and four basic side chains, readily soluble in water and not self-aggregated, are presented here. All four compounds are able to inhibit human telomerase and to induce different G-quadruplex structures.

**1,2,3-Triazolylalkylribitol derivatives as nucleoside hydrolase inhibitors**

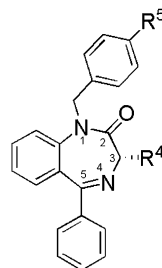
pp 2523–2526

A. Goeminne, M. McNaughton,* G. Bal, G. Surpateanu, P. Van der Veken, S. De Prol, W. Versées, J. Steyaert, S. Apers, A. Haemers and K. Augustyns*

**Novel 1,4-benzodiazepine derivatives with antiproliferative properties on tumor cell lines**

pp 2527–2530

Jennifer Dourlat, Wang-Qing Liu, Nohad Gresh and Christiane Garbay*

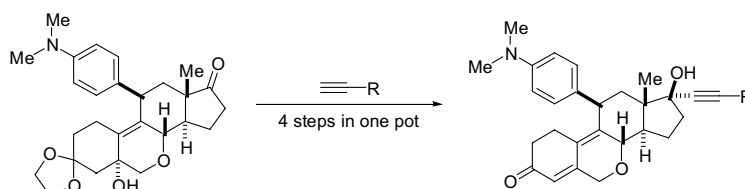


Novel 1,4-benzodiazepine compounds were synthesized and displayed antiproliferative activities in the micromolar range against tumor cell lines.

**Parallel synthesis and SAR study of novel oxa-steroids as potent and selective progesterone receptor antagonists**

pp 2531–2534

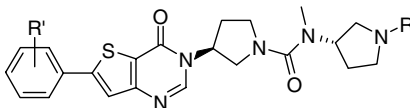
Fu-An Kang,* Jihua Guan, Nareshkumar Jain, George Allan, Olivia Linton, Pamela Tannenbaum, Xin Chen, Jun Xu, Peifang Zhu, Joseph Gunnet, Keith Demarest, Scott Lundeen and Zhihua Sui



Thienopyrimidinone bis-aminopyrrolidine ureas as potent melanin-concentrating hormone receptor-1 (MCH-R1) antagonists

pp 2535–2539

Mingzhu Zhang, Junko Tamiya,* Linh Nguyen, Martin W. Rowbottom, Brian Dyck, Troy D. Vickers, Jonathan Grey, David A. Schwarz, Christopher E. Heise, Jason Haelewyn, Monica S. Mistry and Val S. Goodfellow

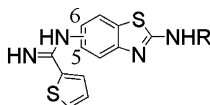


A series of thienopyrimidinone bis-aminopyrrolidine ureas were designed, synthesized, and evaluated for their ability to bind melanin-concentrating hormone receptor-1. These compounds exhibit potent binding affinity ($K_i = 3$ nM) and good in vitro metabolic stability.

Novel 2-aminobenzothiazoles as selective neuronal nitric oxide synthase inhibitors

pp 2540–2544

Joanne Patman, Namrta Bhardwaj, Jailall Ramnauth,* Subhash C. Annedi, Paul Renton, Shawn P. Maddaford, Suman Rakhit and John S. Andrews

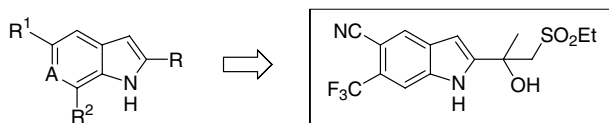


A novel series of 2-aminobenzothiazoles were synthesized and shown to be selective inhibitors of neuronal nitric oxide synthase (nNOS).

 β -Alkylthio indolyl carbinols: Potent nonsteroidal antiandrogens with oral efficacy in a prostate cancer model

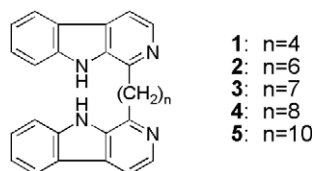
pp 2545–2548

James C. Lanter,* James J. Fiordeliso, Vernon C. Alford, Xuqing Zhang, Kenneth M. Wells, Ronald K. Russell, George F. Allan, Muh-Tsann Lai, Olivia Linton, Scott Lundeen and Zhihua Sui


Non-covalent complexes between bis- β -carboline and double-stranded DNA: A study by electrospray ionization FT-ICR mass spectrometry (I)

pp 2549–2553

Xiaochun Dong, Ying Xu, Carlos Afonso, Weiqun Jiang, Jean Yves Laronze, Ren Wen* and Jean-Claude Tabet*

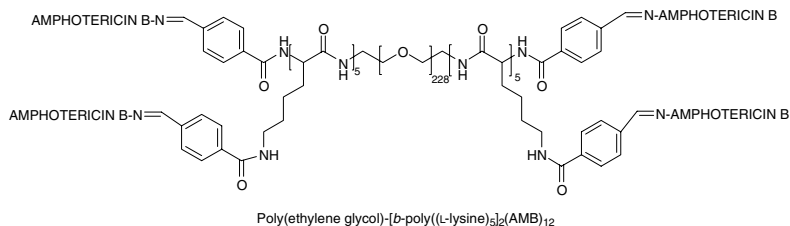


The non-covalent complexes of five bis- β -carboline **1-5** with three different 12-mer double-stranded oligodeoxynucleotides were investigated by ESI-FT-ICR MS. The structure–activity relationships and sequence selectivities were discussed.

Synthesis and characterisation of a new pH-sensitive amphotericin B—poly(ethylene glycol)-*b*-poly(L-lysine) conjugate

pp 2554–2557

Miloš Sedlák,* Martin Pravda, Lenka Kubicová, Petra Mikulčíková and Karel Ventura

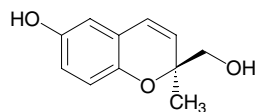


A new intravenous of pH-sensitive conjugate of amphotericin B (AMB) has been synthesized and characterised: poly(ethylene glycol)-[*b*-poly(L-lysine)₅]₂-(AMB)₁₂ ($M_w = 26,700$).

Quercinol, an anti-inflammatory chromene from the wood-rotting fungus *Daedalea quercina* (Oak Mazegill)

pp 2558–2560

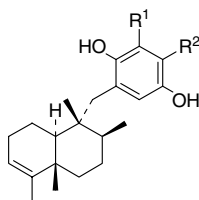
P. Gebhardt, K. Dornberger, F. A. Gollmick, U. Gräfe, A. Härtl, H. Görls, B. Schlegel and C. Hertweck*



Synthesis and evaluation of diverse thio avarol derivatives as potential UVB photoprotective candidates

pp 2561–2565

María Amigó, María C. Terencio, Miguel Payá,* Carmine Iodice and Salvatore De Rosa

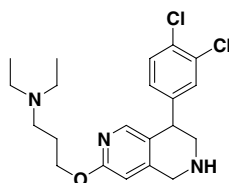


Semisynthesis of 13 new thio avarol derivatives (**4–16**) and in vitro evaluation on the photodamage response induced by UVB irradiation are described. Their ability to inhibit NF- κ B activation and TNF- α generation in HaCaT cells as well as their antioxidant capacity in human neutrophils has been also reported.

Novel naphthyridines are histamine H₃ antagonists and serotonin reuptake transporter inhibitors

pp 2566–2569

Michael A. Letavic,* John M. Keith, Kiev S. Ly, Ann J. Barbier, Jamin D. Boggs, Sandy J. Wilson, Brian Lord, Timothy W. Lovenberg and Nicholas I. Carruthers



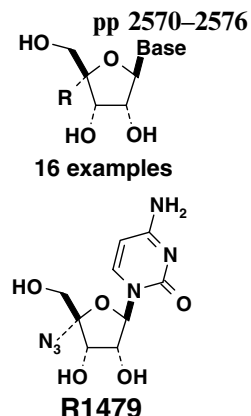
12f, hH₃ K_i=7 nM,
hSERT K_i=26 nM

The synthesis and in vitro activity of novel histamine H₃ antagonists with serotonin reuptake activity are reported.

Design, synthesis, and antiviral properties of 4'-substituted ribonucleosides as inhibitors of hepatitis C virus replication: The discovery of R1479

David B. Smith,* Joseph A. Martin, Klaus Klumpp, Stewart J. Baker, Peter A. Blomgren, Rene Devos, Caroline Granycome, Julie Hang, Christopher J. Hobbs, Wen-Rong Jiang, Carl Laxton, Sophie Le Pogam, Vincent Leveque, Han Ma, Graham Maile, John H. Merrett, Arkadius Pichota, Keshab Sarma, Mark Smith, Steven Swallow, Julian Symons, David Vesey, Isabel Najera and Nick Cammack

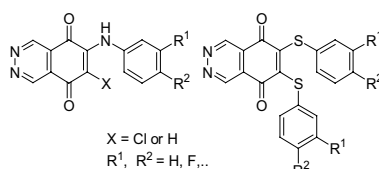
The synthesis of 4'-substituted nucleosides as potential antiviral agents is reported.



Synthesis and antifungal activity of 6-arylamino-phthalazine-5,8-diones and 6,7-bis(arylthio)-phthalazine-5,8-diones

Chung-Kyu Ryu,* Rae-Eun Park, Mi-Young Ma and Ji-Hee Nho

pp 2577–2580

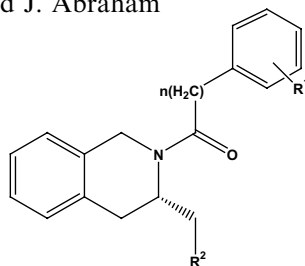


Phthalazine-4,7-diones were synthesized and tested for in vitro antifungal activity against Fungi. Many of those tested compounds exhibited potent antifungal activity.

Identification of a series of tetrahydroisoquinoline derivatives as potential therapeutic agents for breast cancer

Hsiang-Ru Lin,* Martin K. Safo and Donald J. Abraham

pp 2581–2589

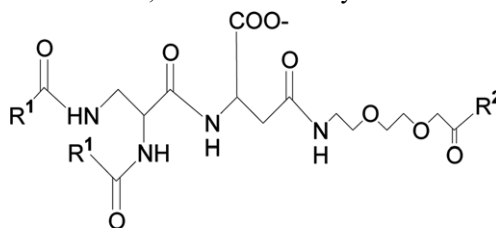


The synthesis and evaluation of 1,2,3,4-tetrahydroisoquinoline-*N*-phenylamide derivatives as estrogen receptor antagonists are reported.

Synthesis and evaluation of a novel lipid-peptide conjugate for functionalized liposome

Nobuhiro Yagi, Yuko Yano, Kentaro Hatanaka, Yuusaku Yokoyama and Hiroaki Okuno*

pp 2590–2593



R¹; alkyl chain, R²; peptide ligand

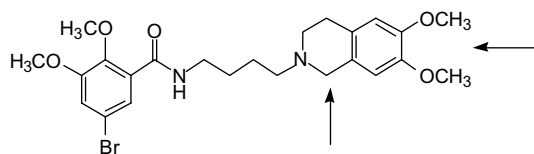
A convenient synthetic route for novel lipopeptide modified with TAT has been established, and functionalized liposome was successfully prepared and efficiently incorporated into living cells.



Synthesis and in vitro evaluation of tetrahydroisoquinolinyl benzamides as ligands for σ receptors

pp 2594–2597

Rong Xu, John R. Lever and Susan Z. Lever*

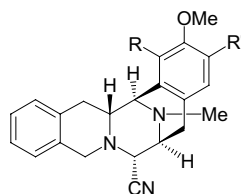


Synthetic modification at two sites on the tetrahydroisoquinolinyl benzamide resulted in significant changes to σ receptor affinity and selectivity.

Synthesis and inhibition of cancer cell proliferation of (1,3')-bis-tetrahydroisoquinolines and piperazine systems

pp 2598–2602

Sylvain Aubry, Stéphane Pellet-Rostaing, Jérémie Fournier dit Chabert, Sylvie Ducki and Marc Lemaire*



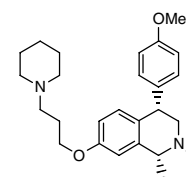
The synthesis and biological evaluation of (1,3')-bis-tetrahydroisoquinolines and pentacyclic piperazine core alkaloids is reported.

**Pyrrolidino-tetrahydroisoquinolines as potent dual H_3 antagonist and serotonin transporter inhibitors**

pp 2603–2607

John M. Keith,* Leslie A. Gomez, Ronald L. Wolin, Ann J. Barbier, Sandy J. Wilson, Jamin D. Boggs, Curt Mazur, Ian C. Fraser, Brian Lord, Leah Aluisio, Timothy W. Lovenberg and Nicholas I. Carruthers

A series of novel and potent pyrrolidino-tetrahydroisoquinolines with dual histamine H_3 antagonist/serotonin transporter inhibitor activity is described. A highly regio- and diastereoselective synthesis of the pyrrolidino-tetrahydroisoquinoline core involving acid mediated ring-closure of an acetophenone intermediate followed by reduction with NaCNBH_3 was developed. In vitro and in vivo data are discussed.



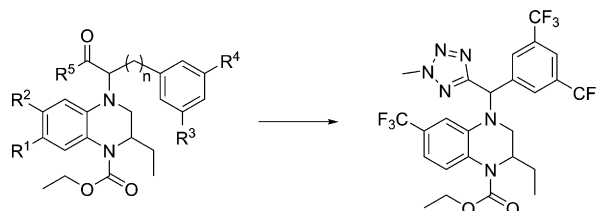
7o $hH_3 K_i = 0.7 \text{ nM}$
 $hSERT K_i = 3.3 \text{ nM}$

Tetrazole and ester substituted tetrahydroquinoxalines as potent cholesteryl ester transfer protein inhibitors

pp 2608–2613

C. Todd Eary,* Zachary S. Jones, Robert D. Groneberg, Laurence E. Burgess, David A. Mareska, Mark D. Drew, James F. Blake, Ellen R. Laird, Devan Balachari, Michael O'Sullivan, Andrew Allen and Vivienne Marsh

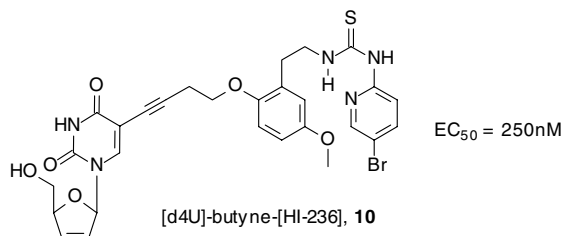
The SAR and synthesis of a series of substituted tetrahydroquinoxaline CETP inhibitors is described from early lead to advanced analogs.



[d4U]-butyne-[HI-236] as a non-cleavable, bifunctional NRTI/NNRTI HIV-1 reverse-transcriptase inhibitor

pp 2614–2617

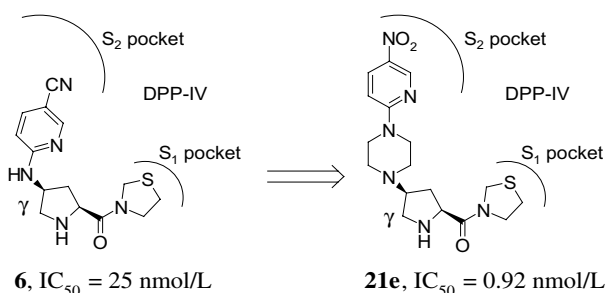
Roger Hunter,* Clare I. Muhanji,* Ian Hale, Christopher M. Bailey, Aravind Basavapathruni and Karen S. Anderson

**[(S)-γ-(4-Aryl-1-piperazinyl)-L-prolyl]thiazolidines as a novel series of highly potent and long-lasting DPP-IV inhibitors**

pp 2618–2621

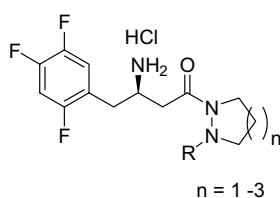
Tomohiro Yoshida, Hiroshi Sakashita, Fumihiko Akahoshi* and Yoshiharu Hayashi

By introducing 4-arylpiperazine into the γ -position of L-proline structure, **21e** shows a sub-nanomolar ($IC_{50} = 0.92 \text{ nmol/L}$) DPP-IV inhibitory activity despite the lack of an electrophilic trap at the P_1 position.

**Synthesis, biological evaluation and structural determination of β -aminoacyl-containing cyclic hydrazine derivatives as dipeptidyl peptidase IV (DPP-IV) inhibitors**

pp 2622–2628

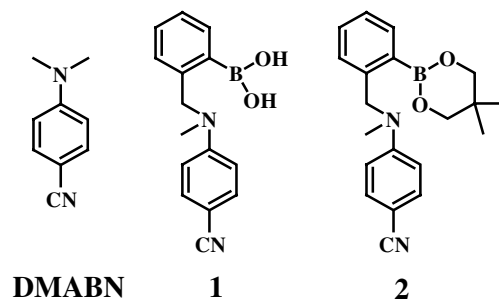
Jin Hee Ahn,* Mi Sik Shin, Mi Ae Jun, Sun Ho Jung, Seung Kyu Kang, Kwang Rok Kim, Sang Dal Rhee, Nam Sook Kang, Sun Young Kim, Sang-Kwon Sohn, Sung Gyu Kim, Mi Sun Jin, Jie Oh Lee, Hyae Gyeong Cheon and Sung Soo Kim*

**4-N-Methyl-N'-(2-dihydroxyboryl-benzyl)amino benzonitrile and its boronate analogue sensing saccharides and fluoride ion**

pp 2629–2633

Wei Tan, Deqing Zhang* and Daoben Zhu*

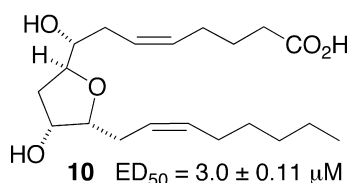
DMABN derivatives **1** and **2** were designed as new ratiometric fluorescent sensors for saccharides and fluoride ion (F^-), respectively, based on the TICT (twisted intramolecular charge-transfer) mechanism.



Epoxygenase eicosanoids: Synthesis of tetrahydrofuran-diol metabolites and their vasoactivity

pp 2634–2638

J. R. Falck,* L. Manmohan Reddy, Kihwan Byun, William B. Campbell and Xiu-Yu Yi

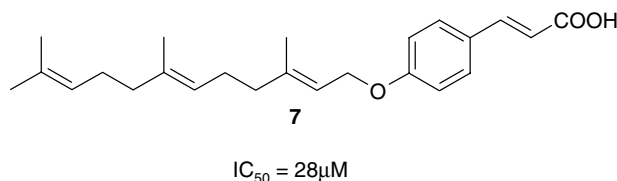


Eight tetrahydrofuran-diols (THFDs), originating from epoxyeicosatrienoic acids (EETs), were prepared from D-(+)-glucose. THFD **10** was equivalent to 14, 15-EET as a vasodilator of pre-contracted bovine arteries.

Prenyloxyphenylpropanoids as novel lead compounds for the selective inhibition of geranylgeranyl transferase I

pp 2639–2642

Francesco Epifano,* Massimo Curini, Salvatore Genovese, Michelle Blaskovich, Andrew Hamilton and Said M. Sebti

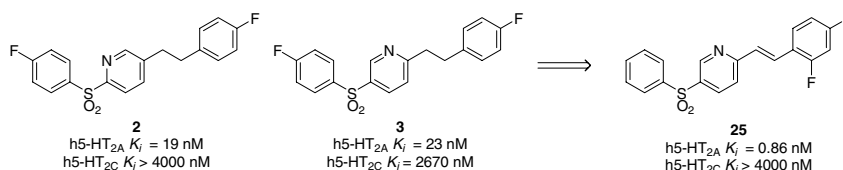


The synthesis of some natural and semisynthetic prenyloxyphenylpropanoids and their selective inhibitory activity on geranylgeranyl transferase I are reported.

2,5-Disubstituted pyridines: The discovery of a novel series of 5-HT_{2A} ligands

pp 2643–2648

Kevin J. Wilson,* Monique B. van Niel, Laura Cooper, Dawn Bloomfield, Desmond O'Connor, L. Rebecca Fish and Angus M. MacLeod

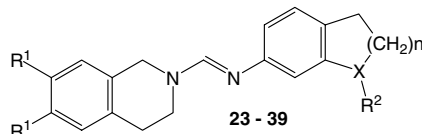


This report describes the effect of replacing the central basic amine present in many known 5-HT_{2A} ligands with an aromatic residue. We targeted the isomeric phenethylpyridines **2** and **3** and these compounds proved to be excellent leads, possessing good 5-HT_{2A} receptor binding affinity and selectivity over the 5-HT_{2C} subtype. Optimization of one isomer led to the identification of **25**, a compound with sub-nanomolar 5-HT_{2A} affinity and selectivity over 5-HT_{2C} of greater than 4600-fold.

M₄ agonists/5HT₇ antagonists with potential as antischizophrenic drugs: Seromimic compounds

pp 2649–2655

Colin J. Suckling,* John A. Murphy, Abedawn I. Khalaf, Sheng-ze Zhou, Dimitris E. Lizos, Albert Nguyen van Nhien, Hiroshi Yasumatsu, Allan McVie, Louise C. Young, Corinna McCraw, Peter G. Waterman, Brian J. Morris, Judith A. Pratt and Alan L. Harvey

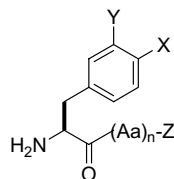


Based upon the activity of natural products, new compounds with activity in an *in vivo* model of schizophrenia have been designed and synthesised.



Further studies of tyrosine surrogates in opioid receptor peptide ligands

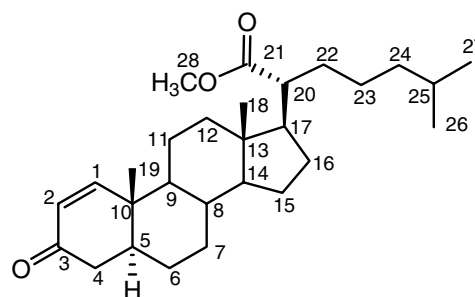
pp 2656–2660

Roland E. Dolle,* Mathieu Michaut, Blanca Martinez-Teipel, Serge Belanger,
Thomas M. Graczyk and Robert N. DeHaven**Methyl spongoate, a cytotoxic steroid from the Sanya soft coral *Spongodes* sp.**

pp 2661–2663

Xiao-Hong Yan, Li-Ping Lin, Jian Ding and Yue-Wei Guo*

A new steroid with an uncommon 21-oic acid methyl ester moiety designated methyl spongoate (**1**) which exhibited potent cytotoxicity against BEL-7402 tumor cells in vitro with IC₅₀ value of 0.14 μM has been isolated from the Sanya soft coral *Spongodes* sp.. Its structure was determined by detailed interpretation of spectroscopic data.

Methyl spongoate (**1**)**OTHER CONTENTS**

Erratum

p 2664

Corrigendum

p 2665

Summary of instructions to authors

p I

*Corresponding author

+ 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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