

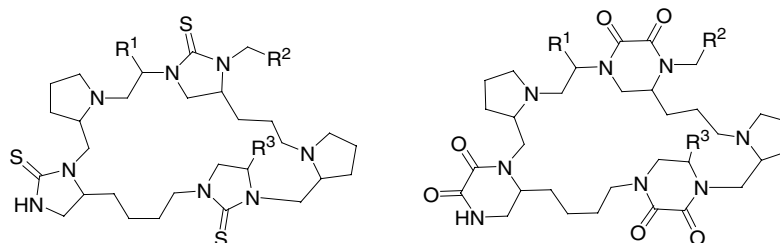
Contents

ARTICLES

A versatile access to new macrocyclic oligoheterocycles (MOH)

pp 3358–3361

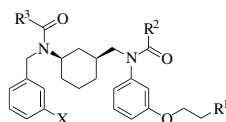
Adel Nefzi* and Rodegar T. Santos



Synthesis and SAR of 1,3-disubstituted cyclohexylmethyl urea and amide derivatives as non-peptidic motilin receptor antagonists

pp 3362–3366

Sigmond G. Johnson,* Joseph W. Gunnet, John B. Moore, William Miller, Pam Wines, Ralph A. Rivero, Don Combs and Keith T. Demarest

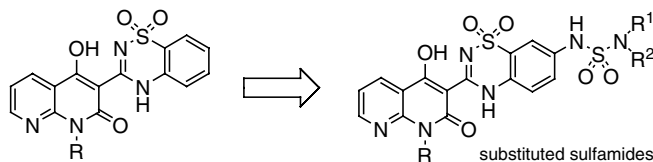


A novel and potent motilin antagonist series was derived based on an understanding of the key binding elements of a known motilin antagonist.

Inhibitors of HCV NS5B polymerase: Synthesis and structure–activity relationships of *N*-alkyl-4-hydroxyquinolon-3-yl-benzothiadiazine sulfamides

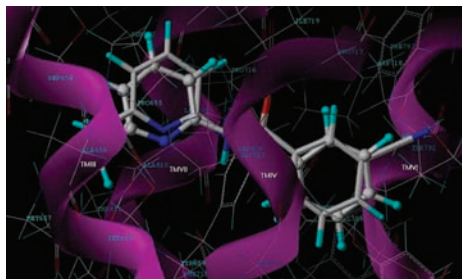
pp 3367–3370

A. Chris Krueger,* Darold L. Madigan, Wen W. Jiang, Warren M. Kati, Dachun Liu, Yaya Liu, Clarence J. Maring, Sherie Masse, Keith F. McDaniel, Tim Middleton, Hongmei Mo, Akhteruzzaman Molla, Debra Montgomery, John K. Pratt, Todd W. Rockway, Rong Zhang and Dale J. Kempf



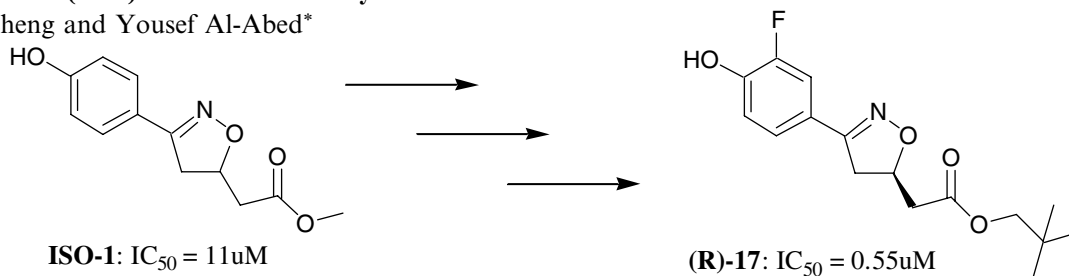
Design and synthesis of noncompetitive metabotropic glutamate receptor subtype 5 antagonists

pp 3371–3375

Santosh S. Kulkarni, Barbara Nightingale, Christina M. Dersch,
Richard B. Rothman and Amy Hauck Newman***Critical modifications of the ISO-1 scaffold improve its potent inhibition of macrophage migration inhibitory factor (MIF) tautomerase activity**

pp 3376–3379

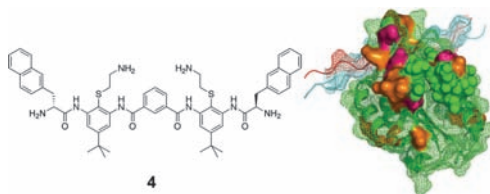
Kai Fan Cheng and Yousef Al-Abed*



Based on the scaffold of ISO-1, two critical modifications and chiral resolution have significantly improved the potency of the inhibitor up to 20-folds as compared to the parent compound. Compound (R)-17 inhibits MIF tautomerase with an IC_{50} of 550 nM.

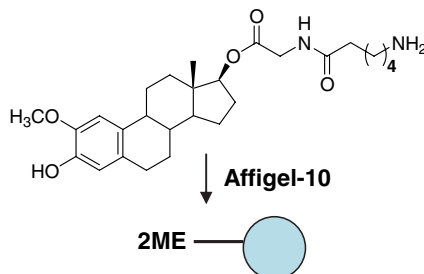
Arylamide derivatives as allosteric inhibitors of the integrin $\alpha_2\beta_1$ /type I collagen interaction

pp 3380–3382

Hang Yin,* Lars Ole Gerlach, Meredith W. Miller, David T. Moore, Dahui Liu,
Gaston Vilaire, Joel S. Bennett and William F. DeGrado***SAR studies of 2-methoxyestradiol and development of its analogs as probes of anti-tumor mechanisms**

pp 3383–3387

Abby Ho, Yang-eon Kim, Hyosung Lee, Kedra Cyrus, Sun-Hee Baek and Kyung-Bo Kim*



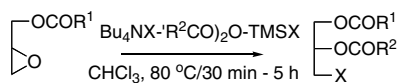
The synthesis and use of 2-methoxyestradiol affinity matrix is reported.



Regioselective and stereospecific cleavage of a terminal oxirane system: A novel synthetic approach to lipid mediator congeners—1,2(2,3)-diacyl-3(1)-halo-*sn*-glycerols

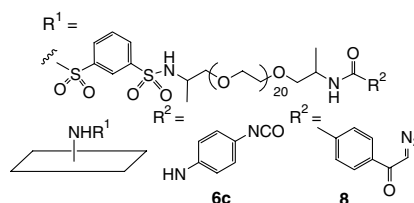
pp 3388–3391

Stephan D. Stamatov* and Jacek Stawinski*

R¹ and R² = long chain fatty acid residue; X = Cl, Br, or IEfficient synthesis of diacyl-halo-*sn*-glycerols is reported.**Small-molecule microarrays: Development of novel linkers and an efficient detection method for bound proteins**

pp 3392–3395

Michio Kurosu* and Williams A. Mowers

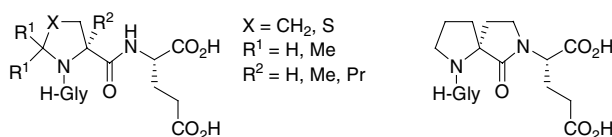


Novel linkers and an efficient detection method of bound proteins for small-molecule microarray are reported.

The neuroprotective activity of GPE tripeptide analogues does not correlate with glutamate receptor binding affinity

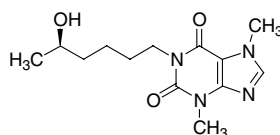
pp 3396–3400

Sergio A. Alonso De Diego, Marta Gutiérrez-Rodríguez, M. Jesús Pérez de Vega, Rosario González-Muñiz, Rosario Herranz, Mercedes Martín-Martínez, Edurne Cenarruzabeitia, Diana Frechilla, Joaquín Del Río, M. Luisa Jimeno and M. Teresa García-López*

**Synthesis and biological evaluation of lisofylline (LSF) analogs as a potential treatment for Type 1 diabetes**

pp 3401–3405

Peng Cui,* Timothy L. Macdonald, Meng Chen and Jerry L. Nadler

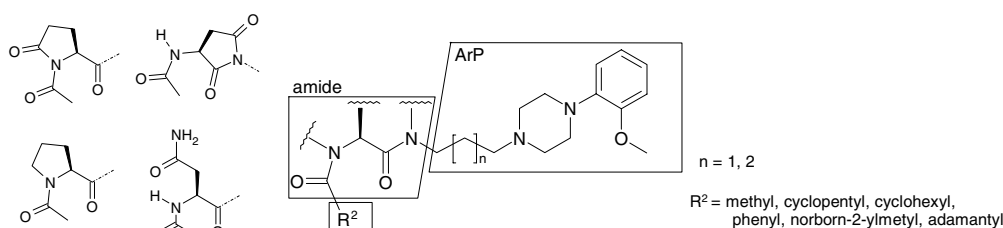


The LSF analogs were synthesized and evaluated for apoptosis protection, the effect on insulin release and metabolic stability.

Arylpiperazines with N-acylated amino acids as 5-HT_{1A} receptor ligands

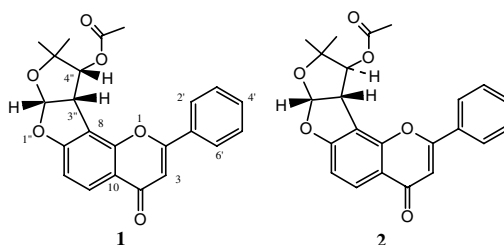
pp 3406–3410

Paweł Zajdel,* Gilles Subra, Andrzej J. Bojarski, Beata Duszyńska, Maciej Pawłowski and Jean Martinez

**Antidyslipidemic activity of furano-flavonoids isolated from *Indigofera tinctoria***

pp 3411–3414

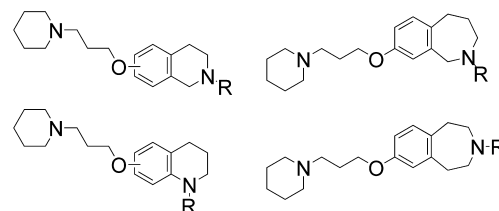
Tadigoppula Narender,* Tanvir Khaliq, Anju Puri and Ramesh chander

**Synthesis and SAR of novel histamine H₃ receptor antagonists**

pp 3415–3418

Cynthia D. Jesudason,* Lisa S. Beavers, Jeffrey W. Cramer, Joelle Dill, Don R. Finley, Craig W. Lindsley, F. Craig Stevens, Robert A. Galski, Samuel W. Oldham, R. Todd Pickard, Christopher S. Siedem, Dana K. Sindelar, Ajay Singh, Brian M. Watson and Philip A. Hipskind

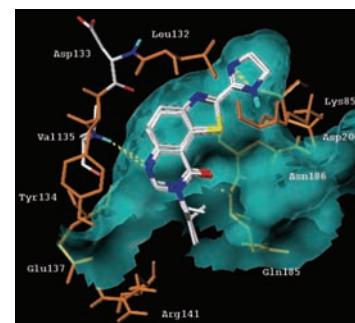
The synthesis and biological evaluation of novel tetrahydroisoquinoline, tetrahydroquinoline, and tetrahydroazepine antagonists of the human and rat H₃ receptors are described.

**Thiazolo[5,4-f]quinazolin-9-ones, inhibitors of glycogen synthase kinase-3**

pp 3419–3423

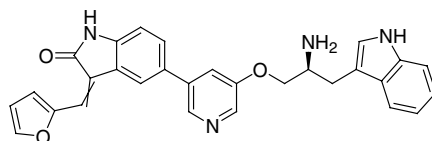
Alexandra Testard, Cédric Logé, Benoît Léger, Jean-Michel Robert, Olivier Lozach, Mélina Blairvacq, Laurent Meijer, Valérie Thiéry and Thierry Besson*

The most selective GSK-3 inhibitors **7a–d** bind into the ATP-binding site through a key hydrogen bond interaction with Val135 and target the specific hydrophobic backpocket of the enzyme.



Discovery and SAR of oxindole–pyridine-based protein kinase B/Akt inhibitors for treating cancers pp 3424–3429

Gui-Dong Zhu,* Viraj B. Gandhi, Jianchun Gong, Yan Luo, Xuesong Liu, Yan Shi, Ran Guan, Shayna R. Magnone, Vered Klinghofer, Eric F. Johnson, Jennifer Bouska, Alexander Shoemaker, Anatol Oleksijew, Ken Jarvis, Chang Park, Ron De Jong, Tilman Oltersdorf, Qun Li, Saul H. Rosenberg and Vincent L. Giranda

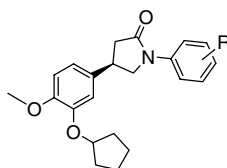


Akt1 IC₅₀ = 0.17 nM

We discovered a series of potent and selective oxindole–pyridine-based protein kinase B/Akt inhibitors with an IC₅₀ of 0.17 nM for the most potent compound. Correlation between in vitro selectivity and in vivo efficacy is also discussed.

Synthesis and evaluation of *N*-aryl pyrrolidinones as novel anti-HIV-1 agents. Part 1 pp 3430–3433

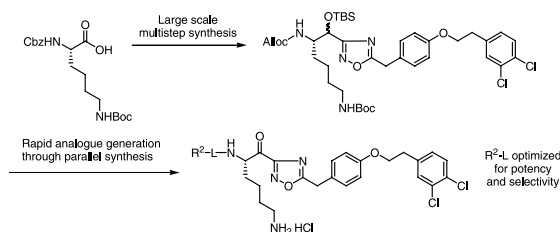
Baogen Wu,* Kelli Kuhen, Truc Ngoc Nguyen, David Ellis, Beth Anaclerio, Xiaohui He, Kunyong Yang, Donald Karanewsky, Hong Yin, Karen Wolff, Kimberly Bieza, Jeremy Caldwell and Yun He*



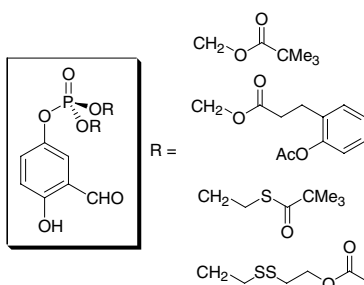
N-Aryl pyrrolidinones as novel anti-HIV-1 agents is reported.

Design and synthesis of selective keto-1,2,4-oxadiazole-based tryptase inhibitors pp 3434–3439

James T. Palmer,* Robert M. Rydzewski, Rohan V. Mendonca, David Sperandio, Jeffrey R. Spencer, Bernard L. Hirschbein, Julia Lohman, Jeri Beltman, Margaret Nguyen and Liang Liu

**Cell permeation of a *Trypanosoma brucei* aldolase inhibitor: Evaluation of different enzyme-labile phosphate protecting groups** pp 3440–3443

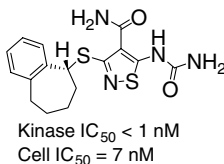
Laurent Azéma, Christian Lherbet, Cécile Baudoin and Casimir Blonski*



Discovery of novel isothiazole inhibitors of the TrkA kinase: Structure–activity relationship, computer modeling, optimization, and identification of highly potent antagonists

pp 3444–3448

Blaise Lippa,* Joel Morris, Matthew Corbett, Tricia A. Kwan, Mark C. Noe, Sheri L. Snow, Thomas G. Gant, Melchiorra Mangiaracina, Heather A. Coffey, Barbara Foster, Elisabeth A. Knauth and Matthew D. Wessel



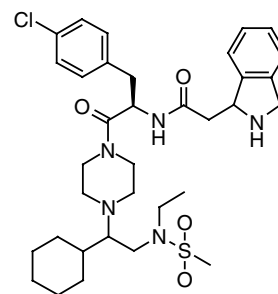
The design, synthesis, and biological evaluation of potent isothiazole inhibitors of the TrkA kinase is presented.

Privileged structure based ligands for melanocortin-4 receptors—Aliphatic piperazine derivatives

pp 3449–3453

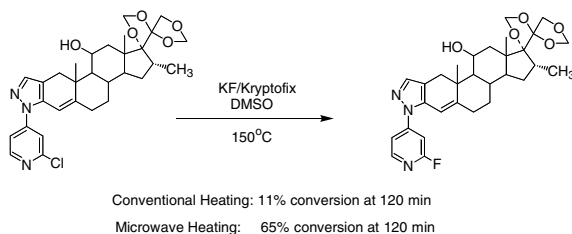
Karin Briner, Iván Collado, Matthew J. Fisher, Cristina García-Paredes, Saba Husain, Steven L. Kuklish, Ana I. Mateo, Thomas P. O'Brien, Paul L. Ornstein, John Zgombick and Óscar de Frutos*

Different substituted cyclic aliphatic piperazines provide useful privileged structures for the construction of ligands with affinity for melanocortin 4 receptors.


Microwave-enhanced nucleophilic fluorination in the synthesis of fluoropyridyl derivatives of [3,2-c]pyrazolo-corticosteroids, potential glucocorticoid receptor-mediated imaging agents

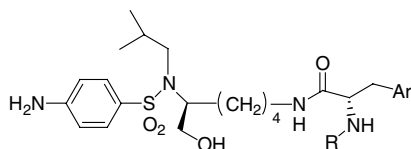
pp 3454–3458

Michael G. C. Kahn, Emmanuel Konde, Francis Dossou, David C. Labaree, Richard B. Hochberg and Robert M. Hoyte*


Lysine sulfonamides as novel HIV-protease inhibitors: *N*ε-Acyl aromatic α-amino acids

pp 3459–3462

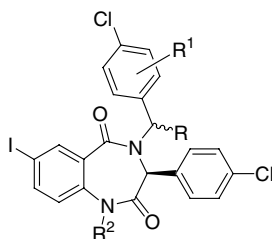
Brent R. Stranix,* Jean-François Lavallée, Guy Sévigny, Jocelyn Yelle, Valérie Perron, Nicholas LeBerre, Dominik Herbart and Jinzi J. Wu



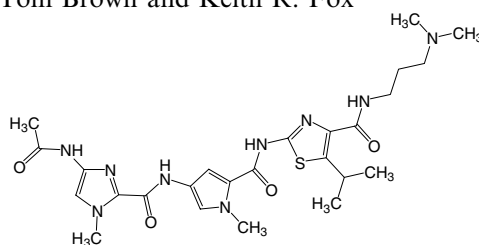
A series of *N*α-isobutyl-*N*α-arylsulfonamido-(*N*ε-acyl aromatic amino acid)lysine derivatives were prepared and evaluated as inhibitors of HIV protease and viral replication.

Novel 1,4-benzodiazepine-2,5-diones as Hdm2 antagonists with improved cellular activity**pp 3463–3468**

Kristi Leonard,* Juan Jose Marugan, Pierre Raboisson, Raul Calvo, Joan M. Gushue, Holly K. Koblish, Jennifer Lattanze, Shuyuan Zhao, Maxwell D. Cummings, Mark R. Player, Anna C. Maroney and Tianbao Lu*

**DNA sequence recognition by an imidazole-containing isopropyl-substituted thiazole polyamide (thiazotropsin B)****pp 3469–3474**

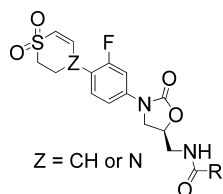
Andrew J. Hampshire, Hannah Khairallah, Abedawn I. Khalaf, Abdolrasoul H. Ebrahimabadi, Roger D. Waigh, Colin J. Suckling, Tom Brown and Keith R. Fox*



Thiazotropsin B binds to the sequence (A/T)CGCG(T/A).

Synthesis and structure–activity studies of antibacterial oxazolidinones containing dihydrothiopyran or dihydrothiazine C-rings**pp 3475–3478**

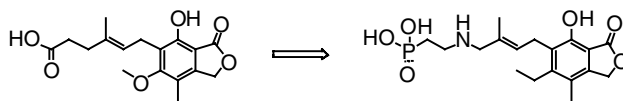
Adam R. Renslo,* Gary W. Luehr, Stuart Lam, Neil E. Westlund, Marcela Gómez, Corrine J. Hackbarth, Dinesh V. Patel and Mikhail F. Gordeev



A new series of oxazolidinone analogs bearing unsaturated sulfur-containing C-rings is described. New synthetic approaches to the dihydrothiazine ring system are also disclosed.

Phosphonic acid-containing analogues of mycophenolic acid as inhibitors of IMPDH**pp 3479–3483**

William J. Watkins,* James M. Chen, Aesop Cho, Lee Chong, Nicole Collins, Maria Fardis, Wei Huang, Magdeleine Hung, Thorsten Kirschberg, William A. Lee, Xiaohong Liu, William Thomas, Jie Xu, Ameneh Zeynalzadegan and Jennifer Zhang



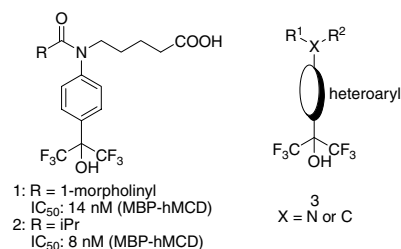
The design, synthesis, and IMPDH inhibitory activity of a series of phosphonic acid-containing analogues of mycophenolic acid are described.

Heteroaryl substituted bis-trifluoromethyl carbinols as malonyl-CoA decarboxylase inhibitors

pp 3484–3488

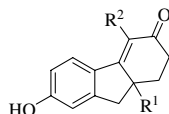
Jie-Fei Cheng,* Chi Ching Mak, Yujin Huang, Richard Penuliar, Masahiro Nishimoto, Lin Zhang, Mi Chen, David Wallace, Thomas Arrhenius, Donald Chu, Guang Yang, Miguel Barbosa, Rick Barr, Jason R. B. Dyck, Gary D. Lopaschuk and Alex M. Nadzan

A series of heteroaryl-substituted bis-trifluoromethyl carbinols **3** were prepared and evaluated as malonyl-CoA decarboxylase inhibitors. Several thiazole derivatives showed potent in vitro inhibitory activities and caused a 5-fold stimulation of glucose oxidation rates in isolated working rat hearts.

**The discovery of tetrahydrofluorenones as a new class of estrogen receptor β -subtype selective ligands**

pp 3489–3494

R. R. Wilkening,* R. W. Ratcliffe, E. C. Tynebor, K. J. Wildonger, A. K. Fried, M. L. Hammond, R. T. Mosley, P. M. D. Fitzgerald, N. Sharma, B. M. McKeever, S. Nilsson, M. Carlquist, A. Thorsell, L. Locco, R. Katz, K. Frisch, E. T. Birzin, H. A. Wilkinson, S. Mitra, S. Cai, E. C. Hayes, J.M. Schaeffer and S. P. Rohrer

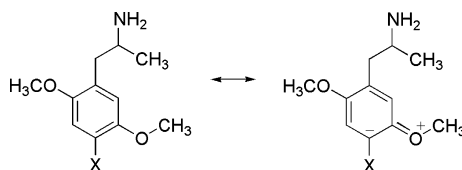


Synthesis and derivatization of a series of substituted tetrahydrofluorenone analogs giving potent, ER β subtype-selective ligands are described.

Effect of 4-substitution on psychotomimetic activity of 2,5-dimethoxy amphetamines as studied by means of different substituent parameter scales

pp 3495–3498

Kari Neuvonen,* Helmi Neuvonen and Ferenc Fülöp



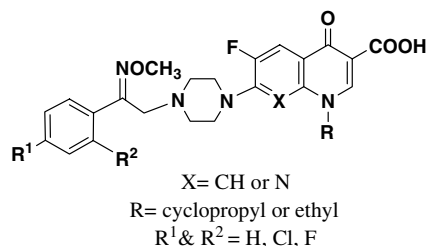
Electron-donating substituents decrease the psychotomimetic activity through a specific effect relating to the diminution of the conjugative electron release from the 5-methoxy group to the phenyl ring.

Synthesis and antibacterial activity of new fluoroquinolones containing a substituted N-(phenethyl)piperazine moiety

pp 3499–3503

Alireza Foroumadi,* Shahram Ghodsi, Saeed Emami, Somayyeh Najjari, Nasrin Samadi, Mohammad Ali Faramarzi, Leila Beikmohammadi, Farshad H. Shirazi and Abbas Shafiee

Novel N-substituted piperazinyl quinolone derivatives, which bear a 2-aryl-2-methoxyiminoethyl substituent and some related residues in the 4-position of the piperazine ring, have been synthesized and evaluated for antimicrobial activity. Some ciprofloxacin derivatives showed in vitro Gram-positive and Gram-negative activity superior to that of reference quinolones.

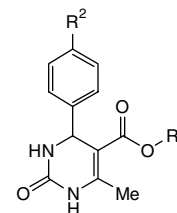


Identification and characterization of 4-aryl-3,4-dihydropyrimidin-2(1H)-ones as inhibitors of the fatty acid transporter FATP4

pp 3504–3509

Christopher Blackburn,* Bing Guan, James Brown, Courtney Cullis, Stephen M. Condon, Tracy J. Jenkins, Stephane Peluso, Yingchun Ye, Ruth E. Gimeno, Sandhya Punreddy, Ying Sun, Hui Wu, Brian Hubbard, Virendar Kaushik, Peter Tummino, Praveen Sanchetti, Dong Yu Sun, Tom Daniels, Effie Tozzo, Suresh K. Balani and Prakash Raman

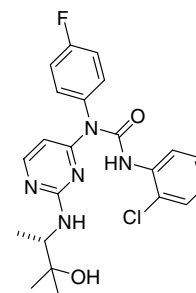
Several potent, cell permeable 4-aryl-dihydropyrimidinones have been identified as inhibitors of FATP4. Lipophilic ester substituents at the 5-position and substitution at the *para*-position (optimal groups being $-\text{NO}_2$ and CF_3) of the 4-aryl group led to active compounds. In two cases racemates were resolved and the *S* enantiomers shown to have higher potencies.

**Development of *N*-2,4-pyrimidine-*N*-phenyl-*N'*-phenyl ureas as inhibitors of tumor necrosis factor alpha (TNF- α) synthesis. Part 1**

pp 3510–3513

Todd A. Brugel,* Jennifer A. Maier, Michael P. Clark, Mark Sabat, Adam Golebiowski, Roger G. Bookland, Matthew J. Laufersweiler, Steven K. Laughlin, John C. VanRens, Biswanath De, Lily C. Hsieh, Marlene J. Mekel and Michael J. Janusz

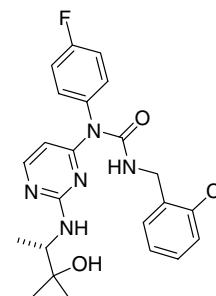
A new class of tumor necrosis factor alpha (TNF- α) synthesis inhibitors based on an *N*-2,4-pyrimidine-*N*-phenyl-*N'*-phenyl urea scaffold is described.

**Development of *N*-2,4-pyrimidine-*N*-phenyl-*N'*-alkyl ureas as orally active inhibitors of tumor necrosis factor alpha (TNF- α) synthesis. Part 2**

pp 3514–3518

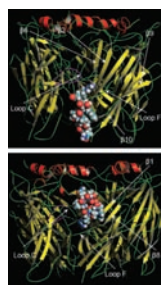
Jennifer A. Maier, Todd A. Brugel,* Michael P. Clark, Mark Sabat, Adam Golebiowski, Roger G. Bookland, Matthew J. Laufersweiler, Steven K. Laughlin, John C. VanRens, Biswanath De, Lily C. Hsieh, Kimberly K. Brown, Karen Juergens, Richard L. Walter and Michael J. Janusz

A new class of tumor necrosis factor alpha (TNF- α) synthesis inhibitors based on an *N*-2,4-pyrimidine-*N*-phenyl-*N'*-alkyl urea scaffold is described.

**Fully flexible docking models of the complex between $\alpha 7$ nicotinic receptor and a potent heptapeptide inhibitor of the β -amyloid peptide binding**

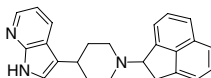
pp 3519–3523

L. Michel Espinoza-Fonseca* and José G. Trujillo-Ferrara



3-(4-Piperidiny)indoles and 3-(4-piperidiny)pyrrolo-[2,3-*b*]pyridines as ligands for the ORL-1 receptor pp 3524–3528

Gilles C. Bignan,* Kathleen Battista, Peter J. Connolly, Michael J. Orsini, Jingchun Liu, Steven A. Middleton and Allen B. Reitz



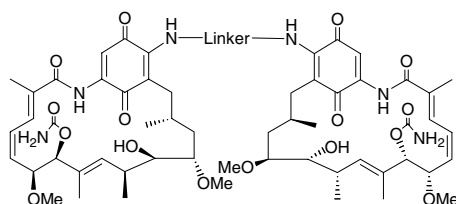
ORL-1 $K_i = 4$ nM

The synthesis and biological evaluation of a series of 3-(4-piperidiny)indoles and 3-(4-piperidiny)pyrrolo[2,3-*b*]pyridines afforded compounds with high ORL-1 affinity.

Synthesis of Hsp90 dimerization modulators

pp 3529–3532

Gabriela Chiosis,* Julia Aguirre and Christopher V. Nicchitta

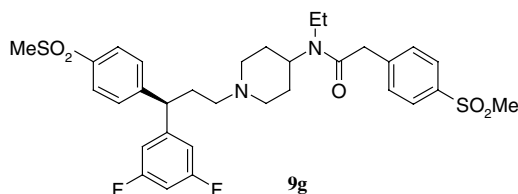


The synthesis and evaluation of several Hsp90 chemical modulators is reported.

**Modulators of the human CCR5 receptor. Part 3: SAR of substituted 1-[3-(4-methanesulfonylphenyl)-3-phenylpropyl]-piperidiny phenylacetamides**

pp 3533–3536

John G. Cumming,* Simon J. Brown, Anne E. Cooper, Alan W. Faull, Anthony P. Flynn, Ken Grime, John Oldfield, John S. Shaw, Emma Shepherd, Howard Tucker and David Whittaker

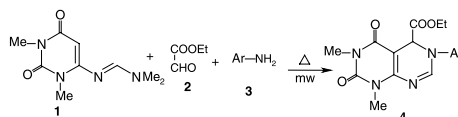


SAR and PK studies led to the identification of compound **9g** as a highly potent and selective ligand for the human CCR5 chemokine receptor with good oral pharmacokinetic properties.

Regiospecific one-pot synthesis of pyrimido[4,5-*d*]pyrimidine derivatives in the solid state under microwave irradiations

pp 3537–3540

Dipak Prajapati,* Mukut Gohain and Ashim J. Thakur



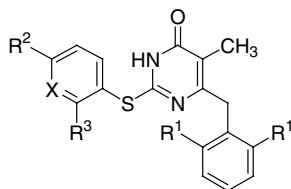
Electron-rich 6-[(dimethylamino)methylene]amino uracil **1** undergoes [4+2] cycloaddition reactions with various in situ generated glyoxylate imine and imine oxides to provide novel pyrimido[4,5-*d*]pyrimidine derivatives of biological significance, after elimination of 1,3-dimethylamine from the (1:1) cycloadducts and oxidative aromatisation.



Synthesis and biological investigation of *S*-aryl-*S*-DABO derivatives as HIV-1 inhibitors

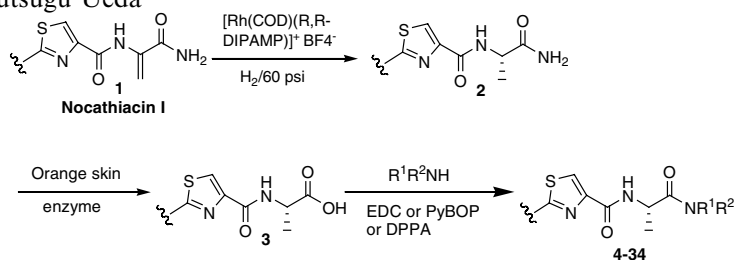
pp 3541–3544

Claudia Mugnaini, Fabrizio Manetti, José A. Esté, Imma Clotet-Codina, Giovanni Maga, Reynel Cancio, Maurizio Botta* and Federico Corelli*

**Synthesis and antibacterial activity of nocathiacin I analogues**

pp 3545–3549

B. Narasimhulu Naidu,* Margaret E. Sorenson, John D. Matiskella, Wenying Li, Justin B. Sausker, Yunhui Zhang, Timothy P. Connolly, Kin S. Lam, Joanne J. Bronson, Michael J. Pucci, Hyekyung Yang and Yasutsugu Ueda

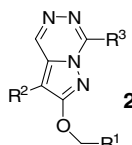


The synthesis and antibacterial activity of nocathiacin I analogues is described.

2,3,7-Trisubstituted pyrazolo[1,5-*d*][1,2,4]triazines: Functionally selective GABA_A α 3-subtype agonists

pp 3550–3554

Robert W. Carling,* Michael G. N. Russell, Kevin W. Moore, Andrew Mitchinson, Alexander Guiblin, Alison Smith, Keith A. Wafford, George Marshall, John R. Attack and Leslie J. Street

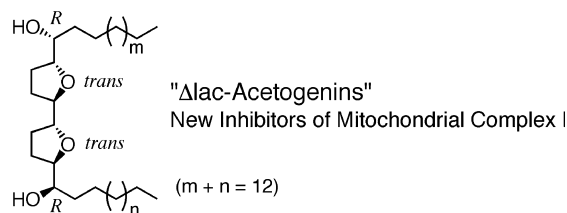


Novel synthetic routes have been devised for the preparation of previously inaccessible 2,3,7-trisubstituted pyrazolo[1,5-*d*][1,2,4]-triazines **2**. These compounds are high affinity, functionally selective ligands for GABA_A α 3-containing benzodiazepine receptors.

Function of the alkyl side chains of Δ lac-acetogenins in the inhibitory effect on mitochondrial complex I (NADH-ubiquinone oxidoreductase)

pp 3555–3558

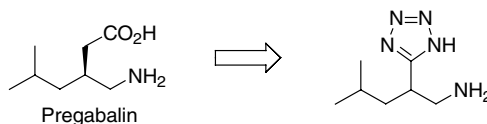
Naoya Ichimaru, Masato Abe, Masatoshi Murai, Mai Senoh, Takaaki Nishioka and Hideto Miyoshi*



Carboxylate bioisosteres of pregabalin

pp 3559–3563

Jacob B. Schwarz,* Norman L. Colbry, Zhijian Zhu, Brian Nicholson, Nancy S. Barta, Kristin Lin, Raymond A. Hudack, Sian E. Gibbons, Paul Galatsis, Russell J. DeOrazio, David D. Manning, Mark G. Vartanian, Jack J. Kinsora, Susan M. Lotarski, Zheng Li, Melvin R. Dickerson, Ayman El-Kattan, Andrew J. Thorpe, Sean D. Donevan, Charles P. Taylor and David J. Wustrow

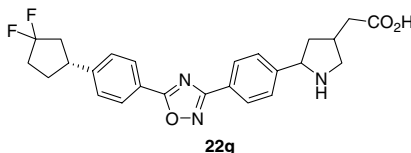


Truncation and acid replacement with tetrazole furnished a compound with a similar pattern of activity to pregabalin.

2-Aryl(pyrrolidin-4-yl)acetic acids are potent agonists of sphingosine-1-phosphate (S1P) receptors

pp 3564–3568

Lin Yan,* Richard Budhu, Pei Huo, Christopher L. Lynch, Jeffrey J. Hale, Sander G. Mills, Richard Hajdu, Carol A. Keohane, Mark J. Rosenbach, James A. Milligan, Gan-Ju Shei, Gary Chrebet, James Bergstrom, Deborah Card and Suzanne M. Mandala

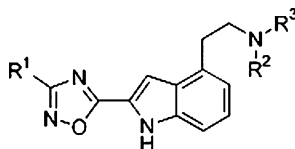


A series of 2-aryl(pyrrolidine-4-yl)acetic acids (e.g., **22g**) were synthesized and evaluated as S1P receptor agonists and were found to lower peripheral lymphocyte counts in mice and to have good overall pharmacokinetic properties in rat.

Design, synthesis, and biological evaluation of indole derivatives as novel nociceptin/orphanin FQ (N/OFQ) receptor antagonists

pp 3569–3573

Yuichi Sugimoto,* Atsushi Shimizu, Tetsuya Kato, Atsushi Satoh, Satoshi Ozaki, Hisashi Ohta and Osamu Okamoto

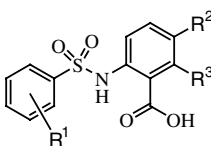


A novel series of 2-(1,2,4-oxadiazol-5-yl)-1H-indole derivatives as nociceptin/orphanin FQ (N/OFQ) receptor antagonists was discovered.

Development of sulfonamide compounds as potent methionine aminopeptidase type II inhibitors with antiproliferative properties

pp 3574–3577

Megumi Kawai,* Nwe Y. BaMaung, Steve D. Fidanze, Scott A. Erickson, Jason S. Tedrow, William J. Sanders, Anil Vasudevan, Chang Park, Charles Hutchins, Kenneth M. Comess, Douglas Kalvin, Jieyi Wang, Qian Zhang, Pingping Lou, Lora Tucker-Garcia, Jennifer Bouska, Randy L. Bell, Richard Lesniewski, Jack Henkin and George S. Sheppard

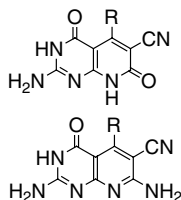


Synthesis and biological activity of novel methionine aminopeptidase type -2 inhibitors having a sulfonamide bond are reported.

New potential inhibitors of cyclin-dependent kinase 4: Design and synthesis of pyrido[2,3-*d*]pyrimidine derivatives under microwave irradiation

pp 3578–3581

Shujiang Tu,* Jinpeng Zhang, Xiaotong Zhu, Jianing Xu, Yan Zhang, Qian Wang, Runhong Jia, Bo Jiang and Junyong Zhang

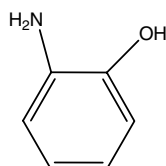


The synthesis of pyrido[2,3-*d*]pyrimidine derivatives as new potential inhibitors of Cdk4 is reported.

The ortho hydroxy-amino group: Another choice for synthesizing novel antioxidants

pp 3582–3585

Weijun Chen, Ping Guo, Jirong Song,* Wei Cao and Jiang Bian

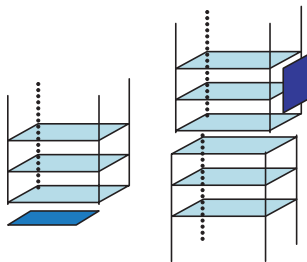


The ortho hydroxy-amino group can be used as another choice for synthesizing novel antioxidants?

Spectroscopic studies of the interaction between quercetin and G-quadruplex DNA

pp 3586–3589

Hongxia Sun, Yalin Tang, Junfeng Xiang, Guangzhi Xu, Yazhou Zhang, Hong Zhang and Lianghua Xu*

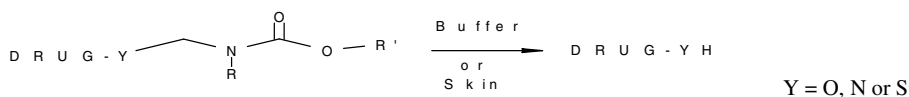


The different interaction modes of monomeric and dimeric G-quadruplexes with quercetin are reported.

Synthesis, hydrolyses and dermal delivery of *N*-alkyl-*N*-alkyloxycarbonylaminomethyl (NANOCAM) derivatives of phenol, imide and thiol containing drugs

pp 3590–3594

Susruta Majumdar and Kenneth B. Sloan*



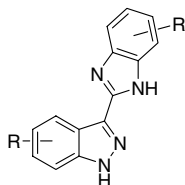
The ability of *N*-alkyl-*N*-alkyloxycarbonylaminomethyl promoiety to act as soft alkylating agent and its influence in increasing membrane permeation for phenols, imides and thiols have been probed.



Design and structure–activity relationship of 3-benzimidazol-2-yl-1*H*-indazoles as inhibitors of receptor tyrosine kinases

pp 3595–3599

Christopher M. McBride, Paul A. Renhowe, Carla Heise, Johanna M. Jansen, Gena Lapointe, Sylvia Ma, Ramon Piñeda, Jayesh Vora, Marion Wiesmann and Cynthia M. Shafer*

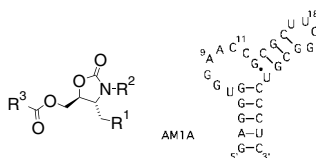


The synthesis and SAR of 3-benzimidazol-2-yl-1*H*-indazole analogs developed as inhibitors of receptor tyrosine kinases (RTK) is reported.

**Structure–activity studies of oxazolidinone analogs as RNA-binding agents**

pp 3600–3604

John A. Means, Steven Katz, Abhijit Nayek, Rajaneesh Anupam, Jennifer V. Hines and Stephen C. Bergmeier*

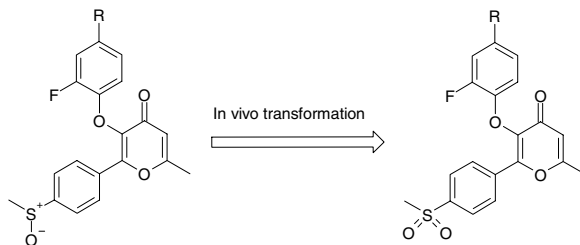


Several oxazolidinone analogs were prepared and examined for binding to two structurally related T box antiterminator model RNAs, AM1A, and AM1A(C11U).

Racemic and chiral sulfoxides as potential prodrugs of 4-pyrone COX-2 inhibitors

pp 3605–3608

Francisco Caturla,* Mercè Amat, Raquel F. Reinoso, Elena Calaf and Graham Warrelew

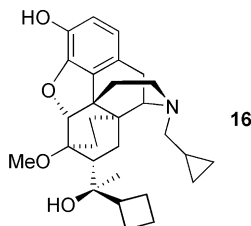


The enantiomeric synthesis and profiling of sulfoxide-based prodrugs of potent COX-2 inhibitors discovered at Almirall are reported.

A highly selective κ -opioid receptor agonist with low addictive potential and dependence liability

pp 3609–3613

Hee Sock Park, Hee Yoon Lee,* Yong Hae Kim,* Jin Kyu Park, Edwin E. Zvartau and Heeseung Lee

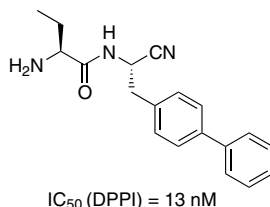


Buprenorphine analogs were synthesized. In the studies of analgesic and addictive effects in mice and [³⁵S]GTPγS binding assay in human brain tissue **16**, was identified as a selective κ -partial agonist lacking abuse potential.



Dipeptidyl nitriles as human dipeptidyl peptidase I inhibitors

pp 3614–3617

Jon Bondebjerg,* Henrik Fuglsang, Kirsten Rosendal Valeur,
John Pedersen and Lars Nærum**OTHER CONTENTS**

Erratum

pp 3618–3619

Summary of instructions to authors

p I

*Corresponding author

①⁺ Supplementary data available via ScienceDirect**COVER**

View of the crystal structure of the DB819-d(CGCGAATTCGCG)₂ complex, looking down the minor groove of the DNA (see Campbell, N.H.; Evans, D.A.; Lee, M.P.H.; Parkinson, G.N.; Neidle, S. *Bioorg. Med. Chem. Lett.* **2006**, 16, 15.). The DB819 molecule is shown in space-filling mode. Visualisation produced with the VMD program. [Humphrey, W.; Dalke, A.; Schulten, K. *J. Mol. Graphics* **1996**, 14, 33.]



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