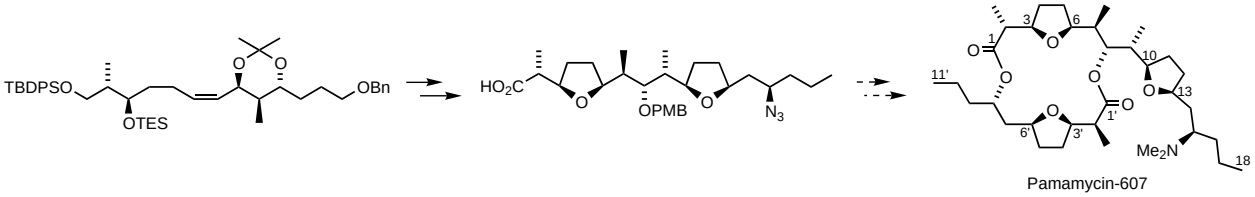
A stereocontrolled synthetic route to the C1–C18 subunit of pamamycin-607

Tetrahedron Letters 43 (2002) 3613

Sung Ho Kang* and Joon Won Jeong

Center for Molecular Design and Synthesis, Department of Chemistry, School of Molecular Science (BK21), Korea Advanced Institute of Science and Technology, Daejeon 305-701, South Korea

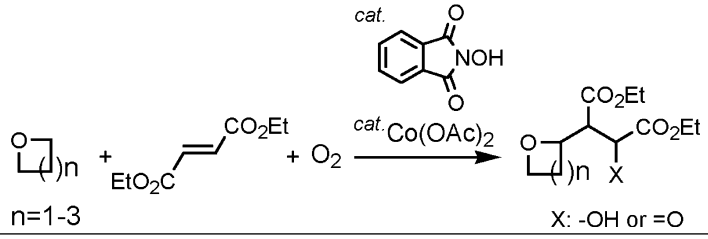


Radical addition of ethers to alkenes under dioxygen catalyzed by *N*-hydroxyphthalimide (NHPI)/$Co(OAc)_2$

Tetrahedron Letters 43 (2002) 3617

Kazutaka Hirano, Satoshi Sakaguchi and Yasutaka Ishii*

Department of Applied Chemistry, Faculty of Engineering & High Technology Research Center, Kansai University, Suita, Osaka 564-8680, Japan

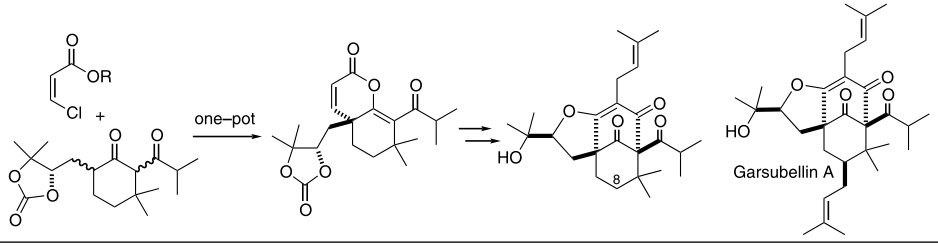


Studies toward the total synthesis of garsubellin A: synthesis of 8-deprenyl-garsubellin A

Tetrahedron Letters 43 (2002) 3621

Hiroyuki Usuda, Motomu Kanai and Masakatsu Shibasaki*

Graduate School of Pharmaceutical Sciences, The University of Tokyo, Hongo, Bunkyo-ku, Tokyo 113-0033, Japan

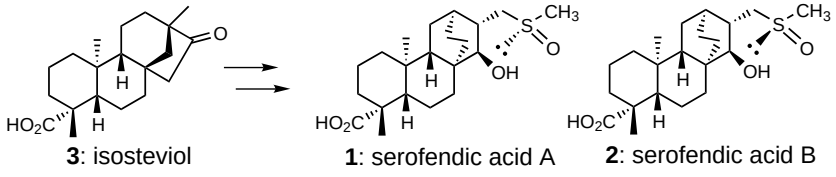


Synthesis and absolute configuration of serofendic acids

Tetrahedron Letters 43 (2002) 3625

Taro Terauchi,[a,*] Naoki Asai,[a] Masahiro Yonaga,[a] Toshiaki Kume,[b] Akinori Akaike[b] and Hachiro Sugimoto[a]

[a]*Tsukuba Research Laboratories, Eisai Co. Ltd, Tsukuba-shi 300-2635, Japan*
[b]*Department of Pharmacology, Graduate School of Pharmaceutical Sciences, Kyoto University, Kyoto 606-8501, Japan*



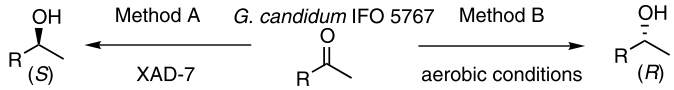
Asymmetric synthesis of both enantiomers of secondary alcohols by reduction with a single microbe

Tetrahedron Letters 43 (2002) 3629

Kaoru Nakamura,[a,*] Keishi Takenaka,[a] Mikio Fujii[b] and Yoshiteru Ida[b]

[a]*Institute for Chemical Research, Kyoto University, Uji, Kyoto 611-0011, Japan*
[b]*School of Pharmaceutical Science, Showa University, 1-5-8 Hatanodai, Shinagawa-ku, Tokyo 142-8555, Japan*

Both enantiomers of arylethanol were prepared enantioselectively by reduction with a single microbe.

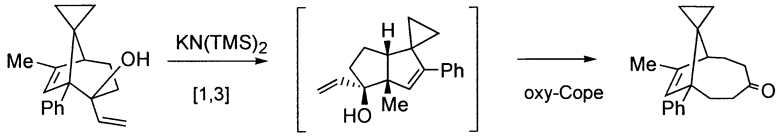


Synthetic study of bicyclo[5.2.1]dec-8-en-4-ones based on tandem anionic [1,3] and oxy-Cope rearrangements of 2-vinylbicyclo-[3.2.1]oct-6-en-2-ols

Tetrahedron Letters 43 (2002) 3633

Hiroki Hashimoto,[a] Toshihiro Jin,[a] Michinori Karikomi,[a] Katsura Seki,[b,*] Kazuo Haga[a] and Tadao Uyehara[a]

[a]*Department of Applied Chemistry, Faculty of Engineering, Utsunomiya University, Utsunomiya 321-8585, Japan*
[b]*Center for Instrumental Analysis, Utsunomiya University, Utsunomiya 321-8585, Japan*

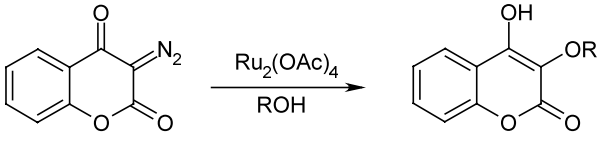


Diruthenium(II,II) tetrakis(acetate) as a catalyst of choice for intermolecular insertion of stabilized diazocompounds into O–H bonds

Tetrahedron Letters 43 (2002) 3637

Sergio Cenini,[a] Giancarlo Cravotto,[b] Giovanni B. Giovenzana,[c] Giovanni Palmisano,[d,*] Andrea Penoni[a] and Stefano Tollari[d,*]

[a]*Dip. di Chimica Inorganica Metallorganica e Analitica and CNR Center, Via Venezian 21, 20133, Milano, Italy*
[b]*Dip. di Scienza e Tecnologia del Farmaco, Via Giuria 9, 10125 Torino, Italy*
[c]*Dip. di Scienze Chimiche Alimentari Farmaceutiche e Farmacologiche, Via Bovio 6, 28100 Novara, Italy*
[d]*Dip. di Scienze Chimiche, Fisiche e Matematiche, Via Valleggio 11, 22100 Como, Italy*



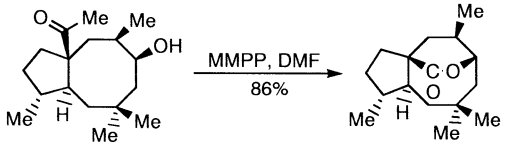
The reaction of the carbenoid generated from 3-diazo-4-hydroxycoumarin with alcohols was run with the title catalyst, obtaining moderate to excellent yields of the corresponding adducts.

Observations on the regioselectivity of some Baeyer–Villiger reactions

Tetrahedron Letters 43 (2002) 3641

Michael Harmata* and Paitoon Rashatasakhon

Department of Chemistry, University of Missouri-Columbia, Columbia, MO 65211, USA



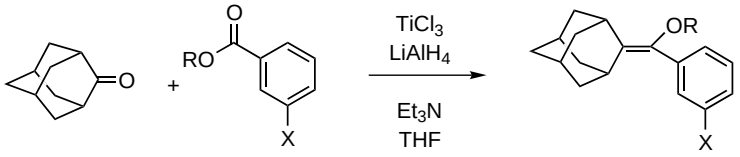
McMurry intermolecular cross-coupling between an ester and a ketone: scope and limitations

Tetrahedron Letters 43 (2002) 3645

Stéphane Sabelle, Jérôme Hydrio, Eric Leclerc, Charles Mioskowski and Pierre-Yves Renard*

Service de Marquage Moléculaire et de Chimie Bioorganique, Bât. 547, DBJC, CEA Saclay, 91191 Gif sur Yvette Cedex, France

Scope and limitations of an unusual McMurry cross-coupling reaction between a benzilic ester and a hindered ketone is described.

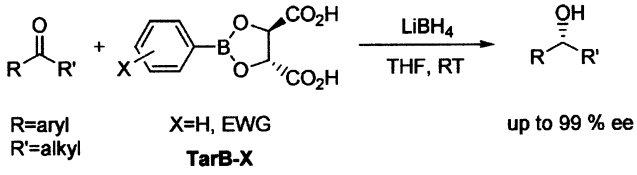


Enantioselective reduction of aryl ketones using $LiBH_4$ and TarB-X: a chiral Lewis acid

Tetrahedron Letters 43 (2002) 3649

Jeff T. Suri, Truong Vu, Arturo Hernandez, Julie Congdon and Bakthan Singaram*

Department of Chemistry and Biochemistry, University of California, Santa Cruz, 1156 High Street, Santa Cruz, CA 95064, USA



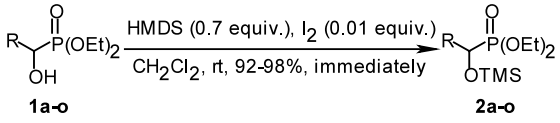
A high yielding preparation of α-trimethylsilyloxyphosphonates by silylation of α-hydroxyphosphonates with HMDS catalyzed by iodine

Tetrahedron Letters 43 (2002) 3653

Habib Firouzabadi,* Nasser Iranpoor* and Sara Sobhani

Department of Chemistry, Shiraz University, Shiraz 71454, Iran

A general, versatile, high yielding and convenient procedure for the immediate conversion of various α-hydroxyphosphonates to α-trimethylsilyloxyphosphonates under neutral conditions using HMDS in the presence of a catalytic amount of iodine is described.

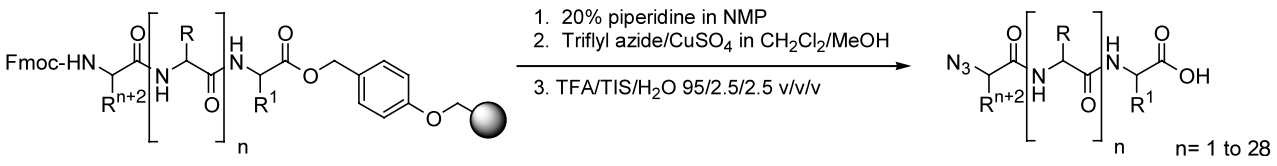


A convenient synthesis of azido peptides by post-assembly diazo transfer on the solid phase applicable to large peptides

Tetrahedron Letters 43 (2002) 3657

Dirk T. S. Rijkers, H. H. Ricardo van Vugt, Hans J. F. Jacobs and Rob M. J. Liskamp*

Department of Medicinal Chemistry, Utrecht Institute for Pharmaceutical Sciences, Faculty of Pharmaceutical Sciences, Utrecht University, PO Box 80082, 3508 TB Utrecht, The Netherlands

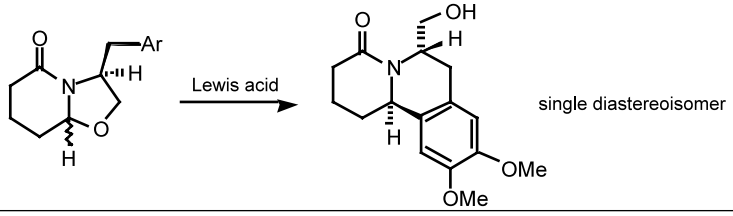


Stereoselective synthesis of isoquinoline derivatives from bicyclic lactam templates

Tetrahedron Letters 43 (2002) 3661

Steven M. Allin,[a,*] Darshan G. Vaidya,[a] Stella L. James,[a] James E. Allard,[a] Timothy A. D. Smith,[a] Vickie McKee[a] and William P. Martin[b]

[a]*Department of Chemistry, Loughborough University, Loughborough, Leicester LE11 3TU, UK*
[b]*Synthetic Chemistry, GlaxoSmithKline Pharmaceuticals, Harlow, Essex CM19 5AW, UK*



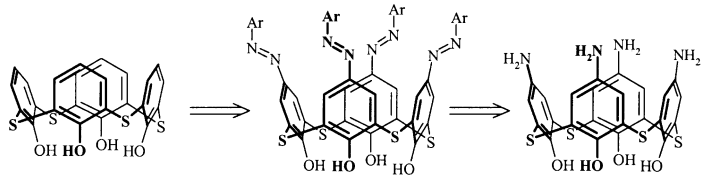
Diazo coupling: an alternative method for the upper rim amination of thiacalix[4]arenes

Tetrahedron Letters 43 (2002) 3665

Pavel Lhoták,* Jiri Morávek and Ivan Stibor

Department of Organic Chemistry, Institute of Chemical Technology, Technická 5, 166 28 Prague 6, Czech Republic

The direct nitration of thiacalix[4]arene is not possible due to concomitant oxidation of the sulphur bridges. Alternatively, thiacalixarene reacts smoothly with diazonium salts to form tetrasubstituted azo derivatives that can be reduced to give upper rim amino-substituted thiacalixarene derivatives.



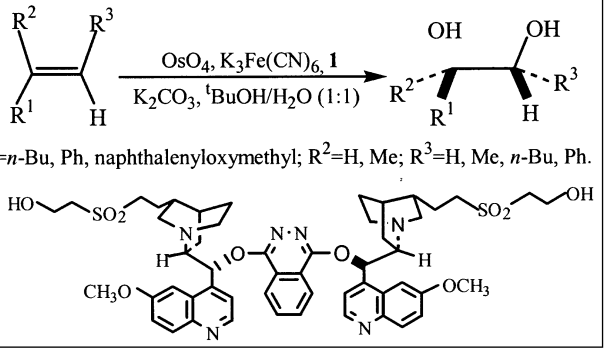
A free ligand for the asymmetric dihydroxylation of olefins utilizing one-phase catalysis and two-phase separation

Tetrahedron Letters 43 (2002) 3669

Yong-Qing Kuang, Sheng-Yong Zhang,* Ru Jiang and Ling-Ling Wei

Department of Chemistry, Fourth Military Medical University, Xi'an 710032, China

Ligand **1** was applied to homogeneous asymmetric dihydroxylation of olefins in place of soluble polymer-supported ligands, affording chiral diols in 82–93% yields and 89–99% ee values.



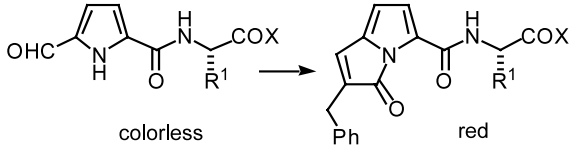
An amino acid *N*-derivatising group that can be coloured on demand

Tetrahedron Letters 43 (2002) 3673

Andrew D. Abell,* Derek C. Martyn, Barnaby C. H. May and Brent K. Nabbs

Department of Chemistry, University of Canterbury, Christchurch, New Zealand

A method is presented whereby an amino acid is reacted with 5-formyl-1*H*-pyrrole-2-carboxylic acid to give an *N*-derivatised tag that has a latent ability to be coloured.



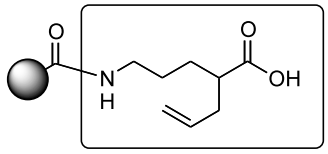
Tetrahedron Letters 43 (2002) 3677

2-(3-Aminopropyl)-4-pentenoic acid as a bio-compatible/cleavable linker for solid-phase organic synthesis

Mao-Jun Guo* and Laszlo Varady

Applications Development, ArQule Inc., 19 Presidential Way, Woburn, MA 01801, USA

2-(3-Aminopropyl)-4-pentenoic acid lithium salt (**1**) was prepared and used as a bio-compatible, cleavable linker in solid-phase organic synthesis. The products were released from solid-phase through cycloelimination.



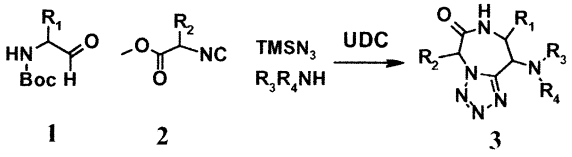
Tetrahedron Letters 43 (2002) 3681

Short solution phase preparation of fused azepine-tetrazoles via a UDC (Ugi/de-Boc/cyclize) strategy

Thomas Nixey, Michael Kelly, David Semin and Christopher Hulme*

Department of Small Molecule Drug Discovery, AMGEN Inc., One AMGEN Center Drive, Thousand Oaks, CA 91320, USA

This letter reveals a novel application of the TMSN3 modified Ugi reaction for the solution phase synthesis of fused azepine-tetrazole libraries.

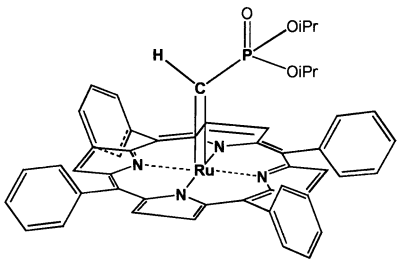


Tetrahedron Letters 43 (2002) 3685

Cyclopropyl phosphonate ester synthesis catalyzed by ruthenium porphyrins: first characterization of a phosphonate carbene complex

Gérard Simonneaux,[a,*] Frédéric De Montigny,[a] Christine Paul-Roth,[a,b] Mihaela Gulea[c] and Serge Masson[c]

[a]*Laboratoire de Chimie Organométallique et Biologique, UMR CNRS 6509, Université de Rennes 1, 35042 Rennes cedex, France*
[b]*Groupe de Recherche en Chimie et Métallurgie, I.N.S.A. 35043 Rennes Cedex, France*
[c]*Laboratoire de Chimie Moléculaire et Thio-organique, UMR CNRS 6507, Université de Caen et ISMRA, F-14050 Caen, France*

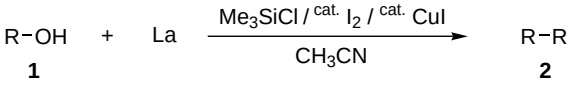


Tetrahedron Letters 43 (2002) 3689

Lanthanum metal-assisted deoxygenative coupling of alcohols

Toshiki Nishino, Yutaka Nishiyama* and Noboru Sonoda*

Department of Applied Chemistry, Faculty of Engineering, Kansai University, Suita, Osaka 564-8680, Japan



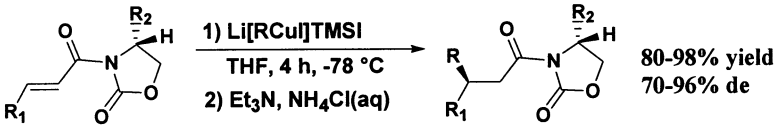
Tetrahedron Letters 43 (2002) 3693

Asymmetric conjugate additions of TMSI promoted monoorganocuprate reagents, Li[RCuI], to various *N*-enoyl oxazolidinones

Patrick Pollock, Jesse Dambacher, Robert Anness and Mikael Bergdahl*

Department of Chemistry, San Diego State University, San Diego, CA 92182-1030, USA

TMSI activated conjugate additions gave high yields (80–98%) and reversed major diastereomer (70–96%) compared to the conventional copper(I)-promoted additions of Grignard reagents.

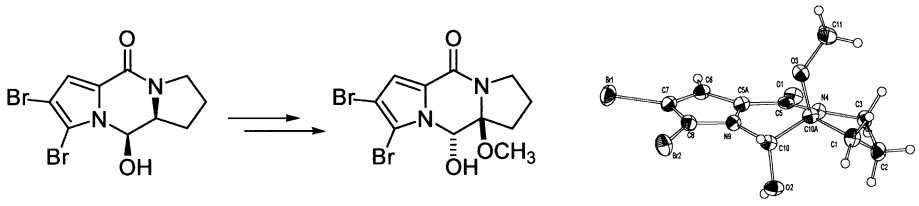


Tetrahedron Letters 43 (2002) 3699

Synthesis of the dipyrrolopyrazinone core of dibromophakellstatin and related marine alkaloids

Delphine E. N. Jacquot, Holger Hoffmann, Kurt Polborn and Thomas Lindel*

Department Chemie der Universität, Butenandtstr. 5-13, D-81377 München, Germany



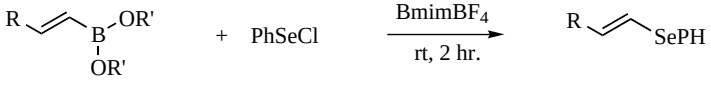
Tetrahedron Letters 43 (2002) 3703

Preparation of (*Z*)- and (*E*)-vinyl selenides utilizing vinylboronic acids and vinylboronic esters in ionic liquids

George W. Kabalka* and Bollu Venkataiah

Departments of Chemistry and Radiology, The University of Tennessee, Knoxville, TN 37996-1600, USA

Vinylboronic acids and vinylboronic esters react with phenylselenyl chloride in ionic liquids to generate vinyl selenides stereospecifically.

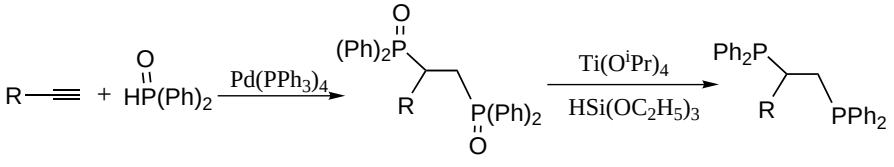


Tetrahedron Letters 43 (2002) 3707

Facile synthesis of chelating bisphosphine oxides and bisphosphines via palladium-catalyzed bishydrophosphinylation reactions

Aberdeen Allen, Jr., Ling Ma and Wenbin Lin*

Department of Chemistry, CB# 3290, University of North Carolina, Chapel Hill, NC 27599, USA

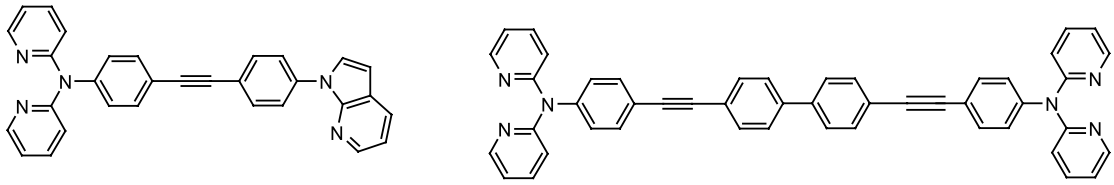


Tetrahedron Letters 43 (2002) 3711

Syntheses and photophysical properties of rigid-rod conjugated compounds based on *N*-7-azaindole and 2,2′-dipyridylamine

Youngjin Kang and Suning Wang*

Department of Chemistry, Queen's University, Kingston, Ontario, Canada K7L 3N6

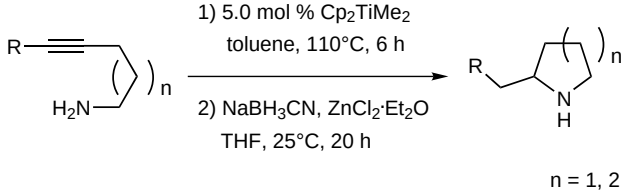


Tetrahedron Letters 43 (2002) 3715

The Cp_2TiMe_2-catalyzed intramolecular hydroamination/cyclization of aminoalkynes

Igor Bytschkov and Sven Doye*

Institut für Organische Chemie, Universität Hannover, Schneiderberg 1B, D-30167 Hannover, Germany

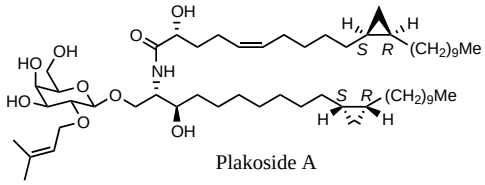


Tetrahedron Letters 43 (2002) 3719

Determination of the absolute configuration at the two cyclopropane moieties of plakoside A, an immunosuppressive marine galactosphingolipid

Kenji Mori,[a,*] Takuya Tashiro,[b] Kazuaki Akasaka,[c] Hiroshi Ohrui[c] and Ernesto Fattorusso[d]

[a]*Insect Pheromone and Traps Division, Fuji Flavor Co., Ltd, Midorigaoka 3-5-8, Hamura-City, Tokyo 205-8503, Japan*
[b]*Department of Chemistry, Science University of Tokyo, Kagurazaka 1-3, Shinjuku-ku, Tokyo 162-8601, Japan*
[c]*Division of Applied Life Science, Graduate School of Agricultural Science, Tohoku University, Tsutsumidori-Amamiyamachi, Aoba-ku, Sendai 981-8555, Japan*
[d]*Dipartimento di Chimica delle Sostanze Naturali, Università di Napoli, Via Domenico Montesano 49, 80131 Napoli, Italy*



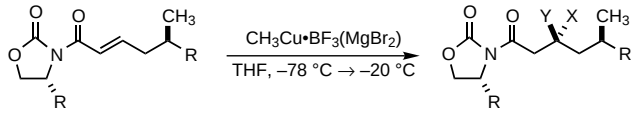
Plakoside A

Tetrahedron Letters 43 (2002) 3723

Stereoselective synthesis of *syn*- and *anti*-1,3- and 1,2-dimethyl arrays via asymmetric conjugate additions

David R. Williams,* William S. Kissel, Jie Jack Li and Richard J. Mullins

Department of Chemistry, Indiana University, 800 East Kirkwood Avenue, Bloomington, IN 47405-7102, USA

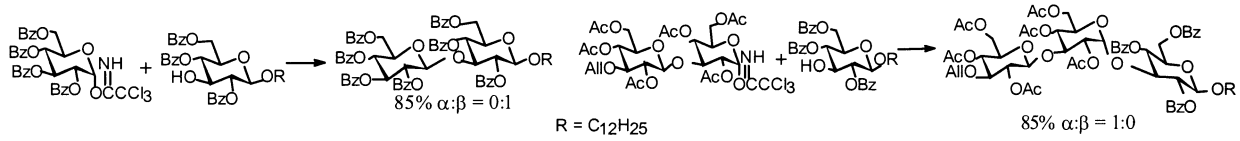


Tetrahedron Letters 43 (2002) 3729

Pure α-linked products can be obtained in high yields in glycosylation with glucosyl trichloroacetimidate donors with a C2 ester capable of neighboring group participation

Ying Zeng, Jun Ning* and Fanzuo Kong*

Research Center for Eco-Environmental Sciences, Academia Sinica, PO Box 2871, Beijing 100085, PR China



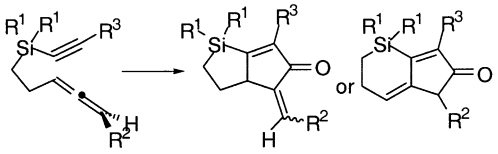
Tetrahedron Letters 43 (2002) 3735

A silicon-tethered allenic Pauson–Khand reaction

Kay M. Brummond,[a,b,*] Peter C. Sill,[a,b] Brenden Rickards[b] and Steven J. Geib[a]

[a]*Department of Chemistry, University of Pittsburgh, Pittsburgh, PA 15206, USA*

[b]*Department of Chemistry, West Virginia University, Morgantown, WV 26506, USA*



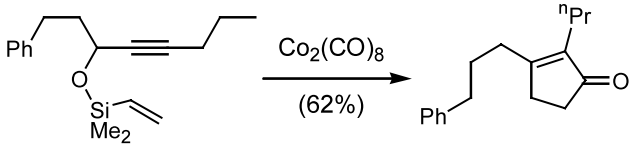
This manuscript describes a silicon-tethered Pauson–Khand reaction and a selective cleavage of the resulting vinyl silane to afford functionalized alkylidene cyclopentenones. We have briefly examined the generality of this reaction and the scope and limitations are reported on. In addition, conversion of the resulting silane to a hydroxyl group is effected using the Tamao–Kumada oxidation protocol for the ultimate application to natural product synthesis. Altering the reactions conditions affords products resulting from a selective reaction with either π-bond of the allene.

Tetrahedron Letters 43 (2002) 3739

Cyclocarbonylation of silicon tethered enynes derived from propargylic alcohols and vinylsilanes: a new reductive Pauson–Khand reaction with a traceless tether

John F. Reichwein, Scott T. Iacono, Mittun C. Patel and Brian L. Pagenkopf*

Department of Chemistry and Biochemistry, The University of Texas at Austin, Austin, TX 78712, USA



Tetrahedron Letters 43 (2002) 3743

Total synthesis of cyclotheonamides E_2 and E_3: application of cyano ylide methodology

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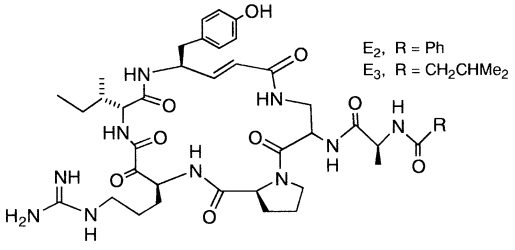
The synthesis of this macrocyclic pentapeptide was accomplished using the cyano ylide method for introducing the α-keto lactam grouping.



Unusual oxidative rearrangement of 1,5-diazadecalin

Tetrahedron Letters 43 (2002) 3747

Xiaolin Li, Zhenrong Xu, Erin F. DiMauro and Marisa C. Kozlowski*

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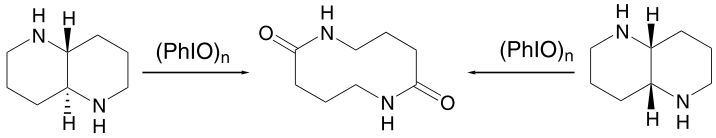
Upon treatment with $(PhIO)_n$ or $PhI(OAc)_2$, 1,5-diaza-*cis*-decalin undergoes oxidation at the more hindered position followed by Grob type fragmentation to yield the ring-expanded bislactam.



A porphyrin-based gelator assembly which is reinforced by peripheral urea groups and chirally twisted by chiral urea additives

Tetrahedron Letters 43 (2002) 3751

Shun-ichi Tamaru, Shin-ya Uchino, Masayuki Takeuchi, Masato Ikeda, Tsukasa Hatano and Seiji Shinkai*

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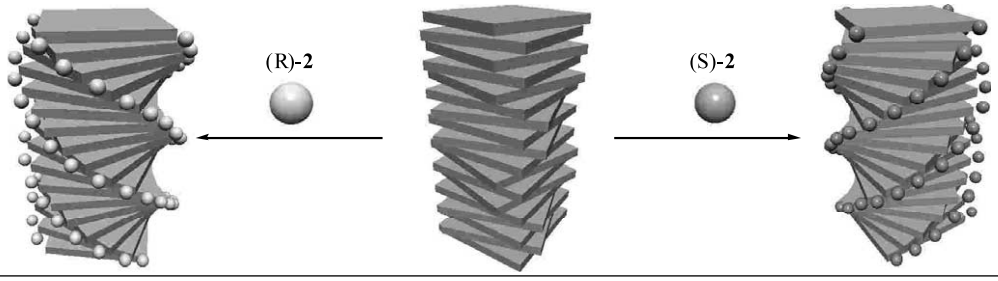
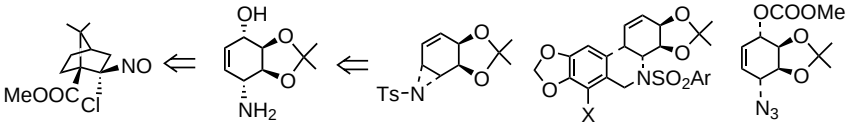


Preparation and conversion of chiral *O*-isopropylidene-protected 4-aminocyclohexenol to various key intermediates toward narcissus alkaloids

Tetrahedron Letters 43 (2002) 3757

Shanmugham Elango, Ying-Chuan Wang, Chien-Liang Cheng and Tu-Hsin Yan*

Department of Chemistry, National Chung-Hsing University, Taichung 400, Taiwan, Republic of China



Stereoselective reduction and reductive dephosphonylation of β-iminophosphonates

Tetrahedron Letters 43 (2002) 3761

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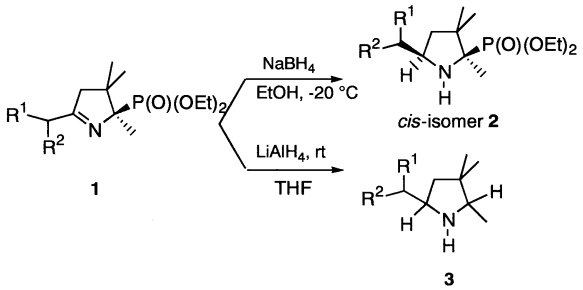
[b]*Structure et Réactivité des Espèces Paramagnétiques, CNRS UMR 6517-Chimie, Biologie et Radicaux Libres, Case 521, Université Aix-Marseille I et III, Centre St-Jérôme, Av. Esc. Normandie-Niemen, 13397 Marseille Cedex 20, France*



Cyclic RGD peptide by ring-closing metathesis

Tetrahedron Letters 43 (2002) 3765

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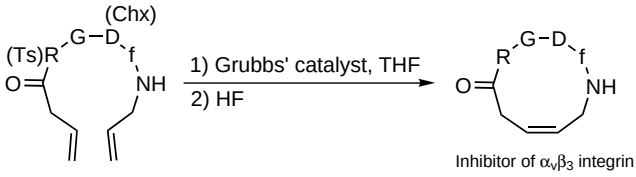
[b]*Laboratoire Franco-Luxembourgeois de recherche biomédicale (CNRS/CRP-Santé), Luxembourg*



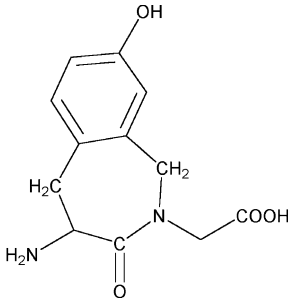
Synthesis of a conformationally constrained tyrosine–glycine dipeptide mimetic: design of a potential substrate of Syk kinase

Tetrahedron Letters 43 (2002) 3769

Paolo Ruzza,* Andrea Calderan, Alessio Osler, Stefano Elardo and Gianfranco Borin

CNR-Biopolymer Research Center, via F. Marzolo, 1-35131 Padova, Italy

Synthesis of the conformationally restricted tyrosine–glycine dipeptide mimetic Hba-Gly and its insertion into PTK peptide substrates.



Carbonyl groups at positions C2 and C3 enhance stereochemical inversion at C7 in norbornane compounds

Tetrahedron Letters 43 (2002) 3773

Malikah N. Jenkins, John J. Nash and Harry Morrison*

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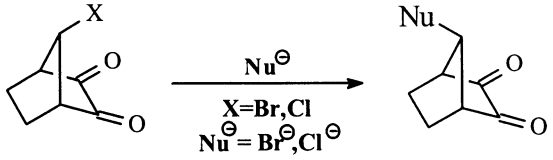

Allylic strain effects on the stereochemistry of the alkylation reaction of mycophenolic acid chiral enolates

Tetrahedron Letters 43 (2002) 3777

Mario Fernández-Zertuche,* Ricardo Robledo-Pérez, Ma. Elena Meza-Aviña and Mario Ordoñez-Palacios

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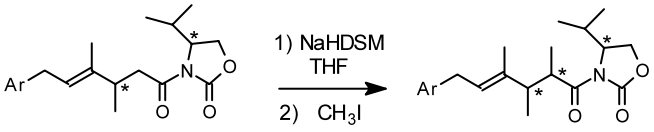
An attempted enantioselective synthesis of all the four individual diastereomers of α,β-dimethylated mycophenolic acid using Evans chiral auxiliaries is reported. The 1,3-allylic strain effect on the enolates used favor the formation of the *syn* acids.



Tetrahedron Letters 43 (2002) 3781

Aryl epoxide–halohydrin transformations: stereochemistry of reactions of aryl epoxides with lithium halide–acetic acid reagent

Jeanne-Marie Bartas-Yacoubou, Nkabuije Maduike, Sampson Kyere, Lanxuan Doan and Dale L. Whalen*

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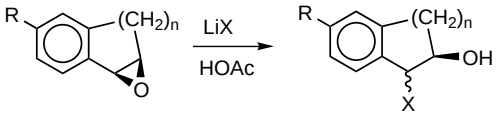

Tetrahedron Letters 43 (2002) 3783

Iodine-catalysed allylation of aldehydes with allyltrimethylsilane

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