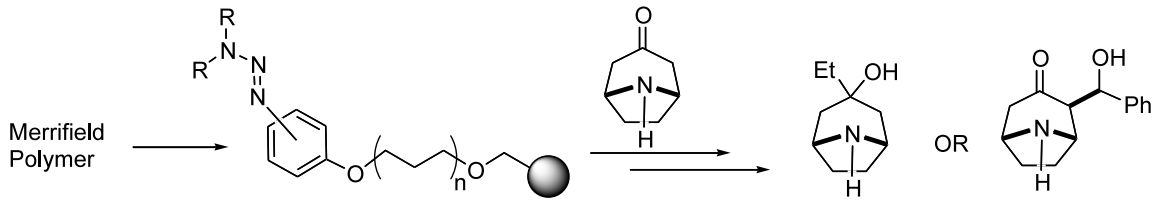
Synthesis of polymeric supports with spacer-modified triazene linkers: aldol and Grignard reactions of immobilized nortropinone

Tetrahedron Letters 44 (2003) 2441

Ryszard Lazny* and Aneta Nodzewska

Institute of Chemistry, University of Bialystok, Al. Pilsudskiego 11/4, 15-443 Bialystok, Poland

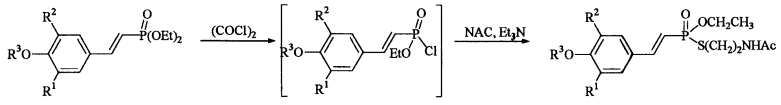


Synthesis of phosphonocinnamic thioesters, substrate analogues of cinnamoyl-CoA reductase, a key enzyme in the lignification process

Tetrahedron Letters 44 (2003) 2445

Caroline Lapeyre, Florence Bedos-Belval, Hubert Duran,* Michel Baltas and Liliane Gorrichon

SPCMIB, UMR CNRS 5068, Université Paul Sabatier, 118 route de Narbonne, 31062 Toulouse, France



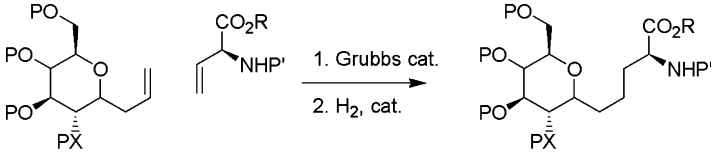
Short, stereoselective synthesis of *C*-glycosyl asparagines via an olefin cross-metathesis

Tetrahedron Letters 44 (2003) 2449

Ernest G. Nolen,* Adam J. Kurish, Kelli A. Wong and Michael D. Orlando

Department of Chemistry, Colgate University, Hamilton, NY 13346, USA

The Grubbs second generation ruthenium catalyst was used for olefin cross-metathesis leading to α- and β-*C*-glycosyl asparagines.



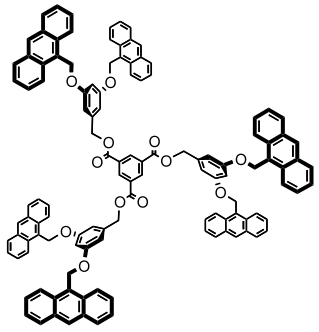
Synthesis and photoluminescence study of anthracene based dendrimer and dendron

Tetrahedron Letters 44 (2003) 2455

Masaki Takahashi,[a,*] Tomoya Odagi,[b] Hiroko Tomita,[a] Tatsuo Oshikawa[a] and Mitsuji Yamashita[a]

[a]*Department of Materials Science and Chemical Engineering, Faculty of Engineering, Shizuoka University, 3-5-1 Johoku, Hamamatsu, Shizuoka 432-8561, Japan*
[b]*Graduate School of Science and Engineering, Shizuoka University, 3-5-1 Johoku, Hamamatsu, Shizuoka 432-8561, Japan*

A new type of polyaromatic dendrimer composed of six anthracene groups was synthesized. A synthetic procedure and photoluminescence properties of the dendrimer are reported.



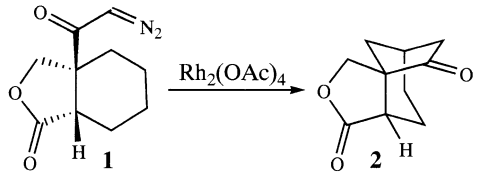
Tetrahedron Letters 44 (2003) 2459

Synthesis of functionalized bicyclo[3.2.1]octan-6-ones for diterpenoids: allylsilane directed Pummerer reaction: insertion reactions of diazoketones

Philip Magnus,* Trevor Rainey and Vince Lynch

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

Treatment of **1** with $Rh_2(OAc)_4$ (cat.) gave **2**.



Tetrahedron Letters 44 (2003) 2463

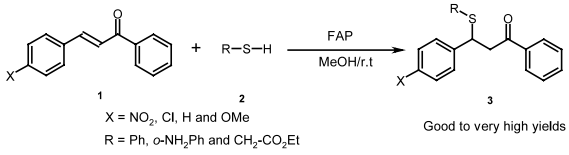
Fluorapatite: efficient catalyst for the Michael addition

Mohamed Zahouily,[a,*] Younes Abrouki,[a] Ahmed Rayadh,[a] Saïd Sebti,[b] Hamid Dhimane[c] and Marc David[c]

[a]*Laboratoire de Synthèse Organique et Traitement de l'Information, UFR de Chimie Appliquée, Université Hassan II, Faculté des Sciences et Techniques, BP 146, 20650 Mohammadia, Morocco*

[b]*Laboratoire de Chimie Organique Appliquée et Catalyse, Université Hassan II, Faculté des Sciences Ben M'Sik, BP 7955, 20702 Casablanca, Morocco*

[c]*Laboratoire de Chimie et Biochimie Pharmacologiques et Toxicologiques, UMR 8601, Université René Descartes (Paris 5), 45 rue des Saints-Pères, 75270 Paris Cedex 06, France*



Tetrahedron Letters 44 (2003) 2467

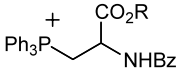
NMR enantiodifferentiation of triphenylphosphonium salts by chiral hexacoordinated phosphate anions

Virginie Hebbe,[a] Anne Londez,[a] Catherine Goujon-Ginglinger,[a] Franck Meyer,[b] Jacques Uziel,[b] Sylvain Jugé[c,*] and Jérôme Lacour[a,*]

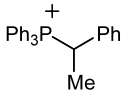
[a]*Département de Chimie Organique, Université de Genève, quai Ernest Ansermet 30, CH-1211 Genève-4, Switzerland*

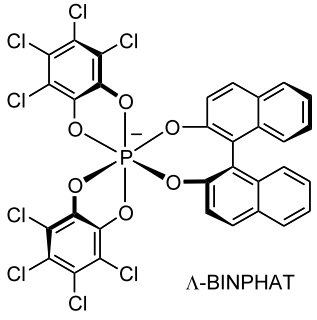
[b]*Université de Cergy-Pontoise, SOSCO UMR 8123, 5 mail Gay Lussac, F-95031 Cergy-Pontoise, France*

[c]*Université de Bourgogne, LSEO UMR 5632, 6 Bd Gabriel, F-21000 Dijon, France*



R = H, Me





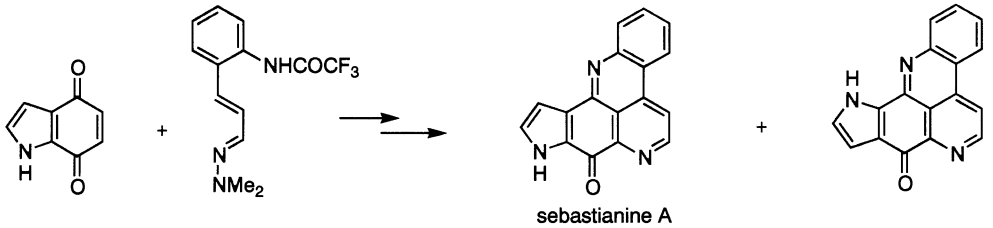
BINPHAT—rather than TRISPHAT—anion is an efficient NMR (^1H and ^{31}P) chiral shift reagent for chiral triphenylphosphonium salts.

Tetrahedron Letters 44 (2003) 2473

Total synthesis of the marine pyridoacridine alkaloid sebastianine A

Laurent Legentil, Jean Bastide and Evelyne Delfourne*

Centre de Phytopharmacie, UMR-CNRS 5054, Université de Perpignan, 52 Avenue de Villeneuve, 66860 Perpignan Cedex, France



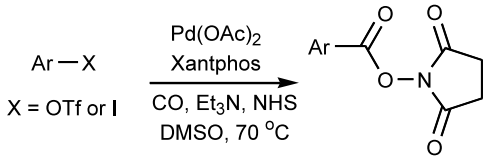
Tetrahedron Letters 44 (2003) 2477

Preparation of *N*-hydroxysuccinimido esters via palladium-catalyzed carbonylation of aryl triflates and halides

Rongliang Lou,* Melissa VanAlstine, Xufeng Sun and Mark P. Wentland*

Department of Chemistry, Rensselaer Polytechnic Institute, 110 8th Street, Troy, NY 12180, USA

N-hydroxysuccinimido esters of aromatic carboxylic acids (a.k.a. active esters) can be made using a potentially general, one-step procedure via Pd-catalyzed carbonylation of an aryl triflate or aryl iodide with CO and *N*- hydroxysuccinimide (NHS).



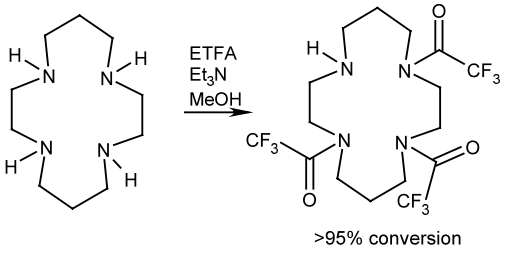
Tetrahedron Letters 44 (2003) 2481

Facile N-1 protection of cyclam, cyclen and 1,4,7-triazacyclononane

Wen Yang,* Christen M. Giandomenico, Michael Sartori and Dennis A. Moore

AnorMED, Inc. 200 20353 64th Ave, Langley, British Columbia, Canada V2Y 1N5

A non-stoichiometrically controlled, high yielding method for the tri-protection of cyclam/cyclen is described.
This method is also effective for the di-protection of 1,4,7-triazacyclononane.

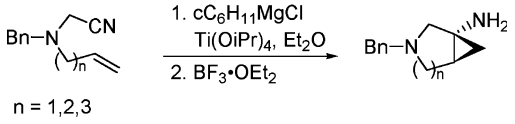


Tetrahedron Letters 44 (2003) 2485

Titanium-mediated synthesis of bicyclic cyclopropylamines from unsaturated nitriles

Christophe Laroche, Philippe Bertus* and Jan Szymoniak*

UMR 6519-Réactions Sélectives et Applications, CNRS-Université de Reims Champagne-Ardenne, UFR Sciences, BP 1039, 51687 Reims Cedex 2, France

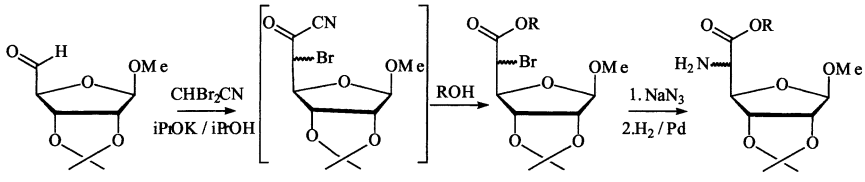


Tetrahedron Letters 44 (2003) 2489

A concise synthesis of glycosyl-α-amino acid derivatives via homologation of dialdoses into bromo uronic acids and esters

Claude Grison,* Stéphane Dumarçay and Philippe Coutrot

Institut Nancéien de Chimie Moléculaire, FR CNRS 1742, Laboratoire de Chimie Organique Biomoléculaire, UMR CNRS 7565, Université Henri Poincaré, Nancy I, BP 239, 54506 Vandoeuvre-lès-Nancy Cédex, France



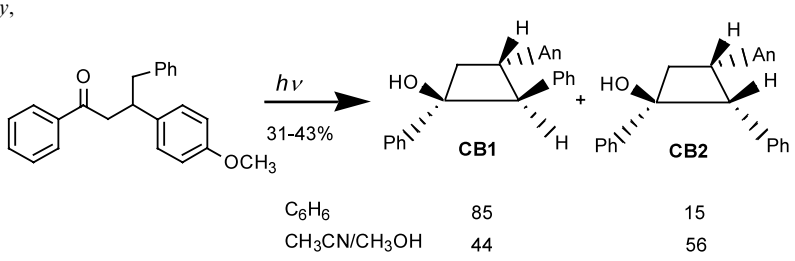
Tetrahedron Letters 44 (2003) 2493

Norrish Type II photoreactivity of β-anisylalkanophenones and solvent effects on stereoselective Yang cyclization

Jarugu Narasimha Moorthy* and Prasenjit Mal

Department of Chemistry, Indian Institute of Technology, Kanpur-208 016, India

Photoexcitation of β-anisylalkanophenones leads to Norrish Type II reactions to afford cyclobutanols **CB1** and **CB2** stereoselectively in moderate yields (31–43%). The composition of the cyclobutanols is dramatically influenced by solvent.



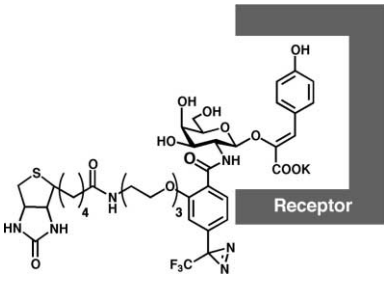
Tetrahedron Letters 44 (2003) 2497

Synthesis of a novel bioactive photoaffinity probe based on a leaf-movement factor with potential high binding affinity to its receptor molecule

Tomohiko Fujii, Takanori Sugimoto, Shosuke Yamamura and Minoru Ueda*

Laboratory of Natural Products, Department of Chemistry, Faculty of Science and Technology, Keio University, Hiyoshi, Yokohama 223-8522, Japan

We developed novel photoaffinity probe (**1**) for the detection of receptor molecule. Probe **1** bearing photolabeling group on the 2′-position of the glycon moiety, which is near the potential binding site of the molecule with its receptor.



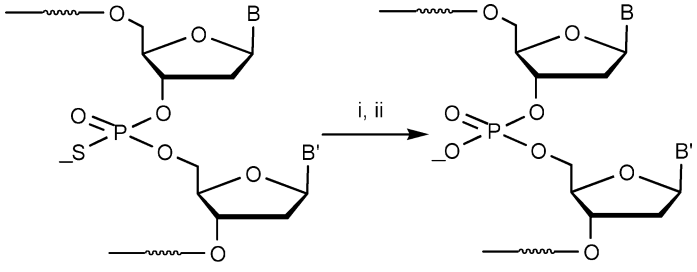
Tetrahedron Letters 44 (2003) 2501

An approach to the desulfurization of oligonucleotide phosphorothioates

Colin B. Reese* and Hongbin Yan

Department of Chemistry, King's College London, Strand, London WC2R 2LS, UK

(i) $BrCH_2CN$, $PhNMe_2$, MeCN; (ii) *E*-2-nitrobenzaldoxime, N^1,N^1,N^3,N^3-tetramethylguanidine, MeCN ($+CH_2Cl_2$).



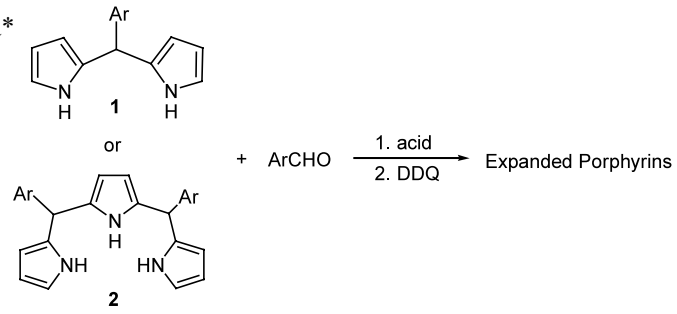
Tetrahedron Letters 44 (2003) 2505

Ring size selective synthesis of *meso*-aryl expanded porphyrins

Ryuichiro Taniguchi, Soji Shimizu, Masaaki Suzuki, Ji-Young Shin, Hiroyuki Furuta and Atsuhiro Osuka*

Department of Chemistry, Graduate School of Science, Kyoto University, Sakyo-ku, Kyoto 606-8502, Japan

meso-Aryl expanded porphyrins were prepared in a ring size selective manner from methanesulfonic acid-catalyzed reaction of dipyrromethane and tri-pyrromethane with aryl aldehydes.



Tetrahedron Letters 44 (2003) 2509

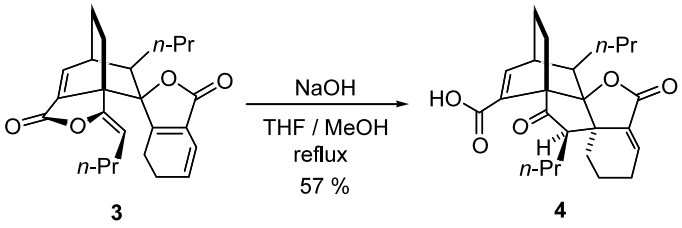
Base-catalyzed intramolecular condensation of tokinolide B

Beatriz Quiroz-García,[a] Liliana Hernández,[a] Rubén A. Toscano,[a] Olov Sterner[b,*] and Guillermo Delgado[a,*]

[a]*Instituto de Química de la Universidad Nacional Autónoma de México, Circuito Exterior, Ciudad Universitaria, Coyoacán 04510 México, D. F., Mexico*

[b]*Department of Organic and Bioorganic Chemistry, Lund University, PO Box 124, SE 221 00 Lund, Sweden*

The new pentacyclic compound **4** was obtained as the result of the intramolecular condensation of the natural dimeric phthalide, tokinolide B (**3**), in basic media.

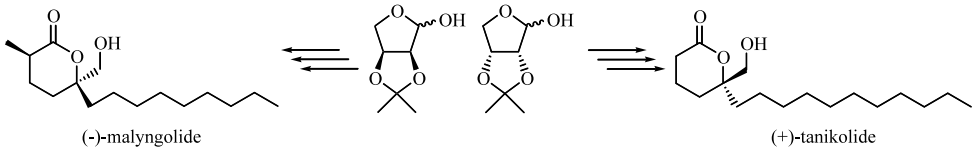


Tetrahedron Letters 44 (2003) 2513

D- and L-Erythrose as sources of chiral quaternary carbon centers. Total synthesis of (−)-malyngolide and (+)-tanikolide

Alexandros E. Koumbis,* Kyriaki M. Dieti, Myrofora G. Vikentiou and John K. Gallos

Department of Chemistry, Aristotle University of Thessaloniki, Thessaloniki 541 24, Greece



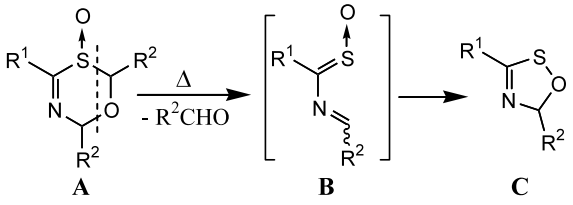
Tetrahedron Letters 44 (2003) 2517

Novel generation and ring closure of 1,3-thiaza-1,3-butadiene *S*-oxides through thermal cycloreversion of 6*H*-1,3,5-oxathiazine *S*-oxides

Kazuaki Shimada,* Islam Md. Rafiqul, Masanobu Sato, Shigenobu Aoyagi and Yuji Takikawa

Department of Chemical Engineering, Faculty of Engineering, Iwate University, Morioka, Iwate 020-8551, Japan

Thermal cycloreversion of 6*H*-1,3,5-oxathiazine *S*-oxides **A** afforded 5*H*-1,2,4-oxathiazoles **C** via generation of novel 1,3-thiaza-1,3-butadiene *S*-oxides **B**.

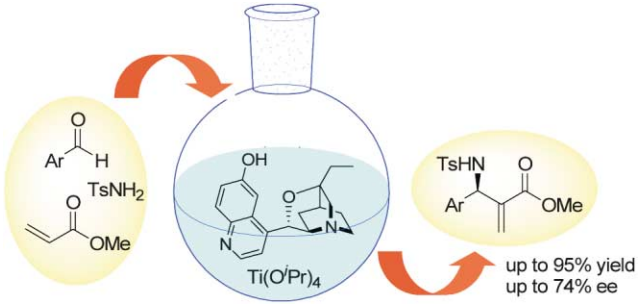


Tetrahedron Letters 44 (2003) 2521

Chiral quinuclidine-based amine catalysts for the asymmetric one-pot, three-component aza-Baylis–Hillman reaction

Daniela Balan and Hans Adolfsson*

Department of Organic Chemistry, Stockholm University, SE-10691 Stockholm, Sweden



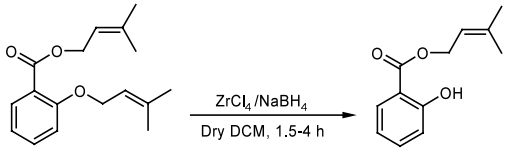
Tetrahedron Letters 44 (2003) 2525

Highly efficient and chemoselective cleavage of prenyl ethers using $ZrCl_4/NaBH_4$

K. Suresh Babu, B. China Raju, P. V. Srinivas and J. Madhusudana Rao*

Natural Products Laboratory, Organic Chemistry Division-1, Indian Institute of Chemical Technology, Hyderabad 500 007, India

An efficient and chemoselective cleavage of prenyl ethers in the presence of several other ether and ester functionalities using $ZrCl_4/NaBH_4$ in high yield is described.



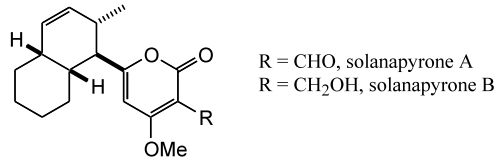
Tetrahedron Letters 44 (2003) 2529

Synthesis of (±)-solanapyrones A and B

Barry Lygo,[a,*] Mohamed Bhatia,[b] Jason W.B. Cooke[c] and David J. Hirst[a]

[a]*School of Chemistry, University of Nottingham, Nottingham NG7 2RD, UK*
[b]*Department of Chemistry, University of Salford, Salford M5 4WT, UK*
[c]*GlaxoSmithKline, Gunnels Wood Road, Stevenage, Herts SG1 2NY, UK*

Application of an *exo*-selective intramolecular Diels–Alder reaction to the synthesis of solanapyrones A and B is reported.

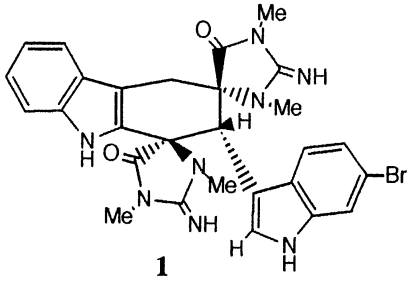


Tetrahedron Letters 44 (2003) 2533

Three novel bis(indole) alkaloids from a stony coral, *Tubastraea* sp.

Tetsuo Iwagawa,[a,*] Miho Miyazaki,[a] Hiroaki Okamura,[a] Munehiro Nakatani,[a] Matsumi Doe[b] and Kaoru Takemura[c]

[a]*Department of Chemistry and Bioscience, Faculty of Science, Kagoshima University, 1-21-35 Kagoshima 890, Japan*
[b]*Analytical Division, Graduate School of Science, Osaka City University, 3-3-7 Sugimoto, Sumiyoshi-ku, Osaka 558-5858, Japan*
[c]*Sankei Kagaku Co., Ltd Nan-ei 2-9, Kagoshima 891-0122, Japan*



1

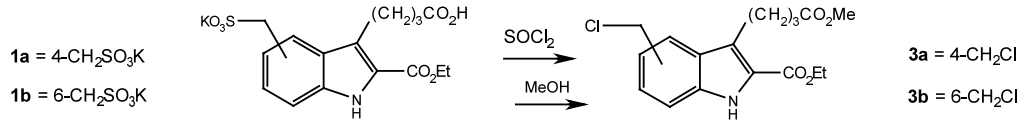
Tetrahedron Letters 44 (2003) 2537

A facile synthesis of 4- and 6-chloromethyl-1*H*-indole-2-carboxylates: replacement of a sulfonic acid functionality by chlorine

Béla Pete[a,*] and Gyula Parlagh[b]

[a]*Research Group of the Hungarian Academy of Sciences, Department of Organic Chemical Technology, Technical University of Budapest, H-1521 Budapest, Hungary*
[b]*Department of Physical Chemistry, Technical University of Budapest, H-1521 Budapest, Hungary*

4- and 6-(Chloromethyl)indoles were prepared from indole-4- and 6-methanesulfonic acids, respectively, by replacement of the sulfonic acid group with chlorine. The (chloromethyl)indoles undergo facile nucleophilic substitution reactions.

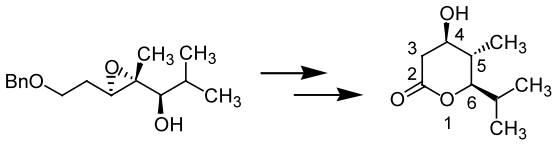


Tetrahedron Letters 44 (2003) 2541

Synthesis of (+)-prelactone B

Tushar K. Chakraborty* and Subhasish Tapadar

Indian Institute of Chemical Technology, Hyderabad 500 007, India



1. prelactone B

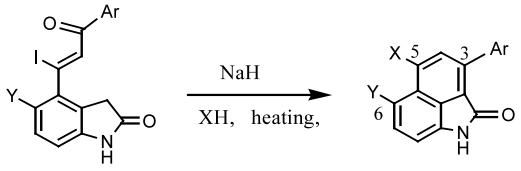
Tetrahedron Letters 44 (2003) 2545

A novel and convenient method for the synthesis of substituted naphthostyrils

Jin-Jun Liu,* Fred Konzelmann and Kin-Chun Luk

Department of Discovery Chemistry, Hoffmann-La Roche Inc., 340 Kingsland Street, Nutley, NJ 07110, USA

Naphthostyrils were synthesized via a base-catalyzed intramolecular cyclization of oxindole precursors through a one-pot reaction. This method allows convenient access to 3,5,6-trisubstituted naphthostyrils which may serve as a new template for CDK2 inhibition.

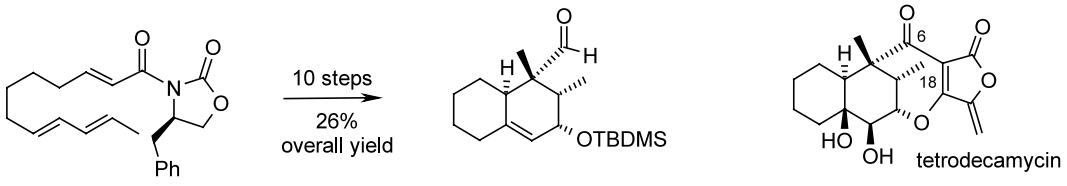


Tetrahedron Letters 44 (2003) 2549

Toward the synthesis of tetrodecamycin: asymmetric synthesis of a direct precursor of the C6–C18 *trans*-decalin portion

Franz F. Paintner,* Gerd Bauschke and Kurt Polborn

Department Pharmazie-Zentrum für Pharmaforschung, Ludwig-Maximilians-Universität München, Butenandtstraße 5-13, Haus C, D-81377 München, Germany

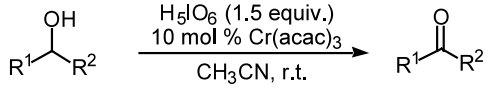


Tetrahedron Letters 44 (2003) 2553

A mild and efficient oxidation of alcohols to aldehydes and ketones with periodic acid catalyzed by chromium(III) acetylacetonate

Liang Xu[b] and Mark L. Trudell[a,*]

[a]*Department of Chemistry, University of New Orleans, New Orleans, LA 70148, USA*
[b]*St Charles Pharmaceuticals, Inc., PO Box 850185, New Orleans, LA 70185, USA*

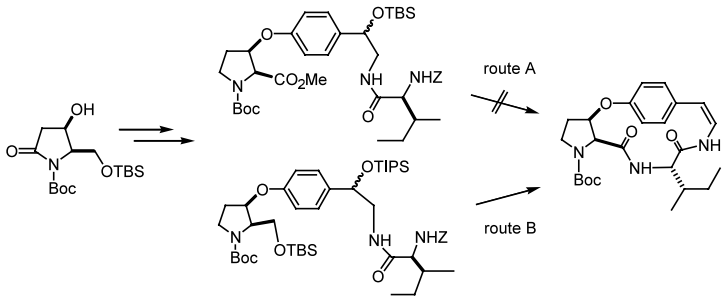


Tetrahedron Letters 44 (2003) 2557

Studies toward a synthesis of C3-epimauritine D: construction of the macrocycle

Young-Ah Kim, Hyo-Nim Shin, Myoung-Soon Park, So-Hye Cho and So-Yeop Han*

Department of Chemistry, Division of Molecular Life Sciences, and Division of Nano Sciences, Ewha Womans University, Seoul 120-750, Republic of Korea



Tetrahedron Letters 44 (2003) 2561

Dehydrative glycosylation of tri-*O*-benzylated 1-hydroxyribofuranose catalyzed by a copper(II) complex

Takeyuki Suzuki, Shoko Watanabe, Taichiro Yamada and Kunio Hiroi*

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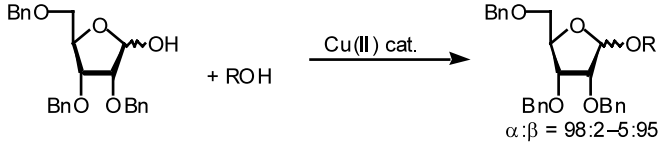
A phosphine/Cu(II) complex catalyzes the dehydrative glycosylation of tri-*O*-benzylated 1-hydroxyribofuranose to give the ribofuranoside with high stereoselectivity.



Tetrahedron Letters 44 (2003) 2565

Rapid cyclopeptide analysis by microwave enhanced Akabori reaction

Birendra N. Pramanik,[a,*] Yao Hain Ing,[a] Ajay K. Bose,[b,*] Li-Kang Zhang,[a] Yan-Hui Liu,[a] Subhendu N. Ganguly[b] and Peter Bartner[a]

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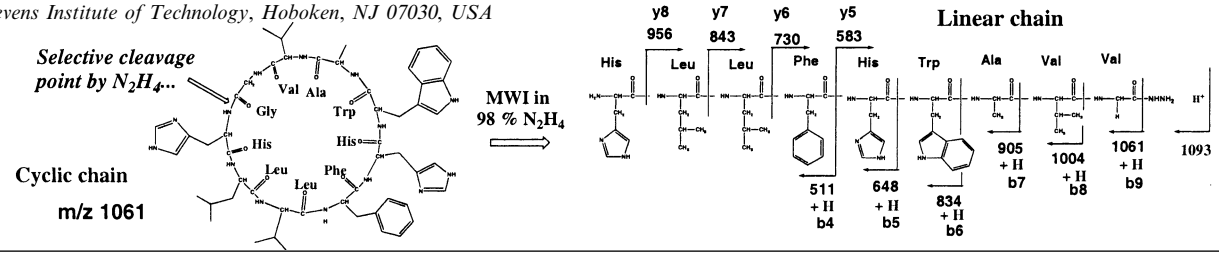
[b]*George Barasch Bioorganic Research Laboratory, Department of Chemistry and Chemical Biology, Stevens Institute of Technology, Hoboken, NJ 07030, USA*

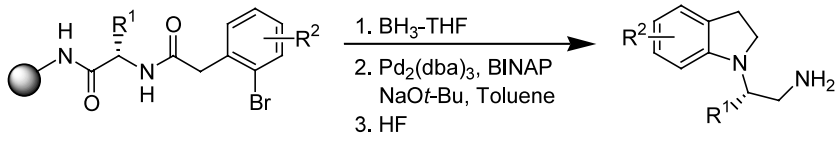


Tetrahedron Letters 44 (2003) 2569

Solid-phase synthesis of indolines via palladium-catalyzed cyclization

Yongping Yu, John M. Ostresh and Richard A. Houghten*

Torrey Pines Institute for Molecular Studies, 3550 General Atomics Court, San Diego, CA 92121, USA

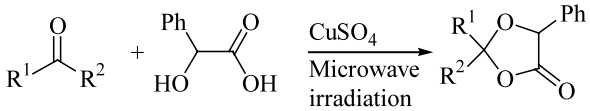


Tetrahedron Letters 44 (2003) 2573

Rapid synthesis of substituted 5-phenyl-1,3-dioxolan-4-ones under microwave-induced solvent-free conditions

Rochelle R. Ferrett, Michael J. Hyde, Kimberly A. Lahti and Timothy L. Friebe*

Department of Chemistry, Eastern Michigan University, Ypsilanti, MI 48197, USA

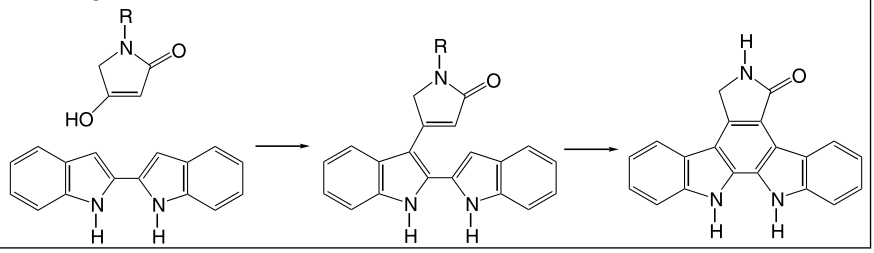


Tetrahedron Letters 44 (2003) 2577

A short synthesis of staurosporinone (K-252c)

Susana P. Gaudêncio, Maria M. M. Santos, Ana M. Lobo* and Sundaresan Prabhakar*

Secção de Química Orgânica Aplicada, Departamento de Química, CQFB-REQUIMTE and SINTOR-UNINOVA, campus Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, Quinta da Torre, 2829 Monte de Caparica, Portugal



Tetrahedron Letters 44 (2003) 2579

A rapid access to chiral alkylidene cyclopentenone prostaglandins involving ring-closing metathesis reaction

Robert Weaving, Emmanuel Roulland, Claude Monneret and Jean-Claude Florent*

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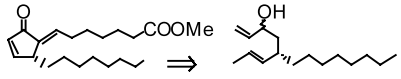
The synthesis of alkylidene cyclopentenone prostaglandins was realized through a sequential Claisen reaction, followed by a ring-closing metathesis reaction.



Tetrahedron Letters 44 (2003) 2583

Triethylborane triggered intermolecular domino Michael–aldol three-component coupling reactions

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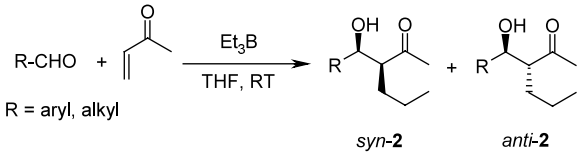
The triethylborane triggered intermolecular domino Michael–aldol reaction is described. Initial triethylborane addition in a Michael fashion to methyl vinyl ketone resulted in a vinylborane which further reacted with an aldehyde to give the aldol product in a one-pot process.



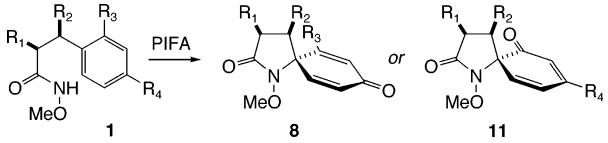
Tetrahedron Letters 44 (2003) 2587

π-Face selective azaspirocyclization of ω-(methoxyphenyl)-*N*-methoxyalkylamides

Duncan J. Wardrop,* Matthew S. Burge, Wenming Zhang and José A. Ortíz

Department of Chemistry, University of Illinois at Chicago, 845 West Taylor Street, Chicago, IL 60607-7061, USA

A novel and efficient strategy for the stereoselective preparation of 1-azaspiranes utlizing a nitrenium ion cyclization is described.

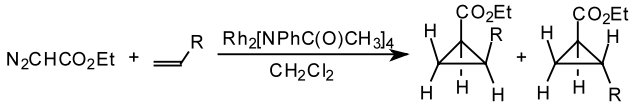


Tetrahedron Letters 44 (2003) 2593

cis-Enhanced cyclopropanation catalysts: reaction chemistry of three isomers of $Rh_2[N(C_6H_5)COCH_3]_4$

Cassandra T. Eagle,* David Farrar, Grant N. Holder, Michelle L. Hatley, Shirley L. Humphrey, Elizabeth V. Olson, Maria Quintos, Joseph Sadighi and Tom Wideman

A. R. Smith Department of Chemistry, Appalachian State University, Boone, NC 28608, USA



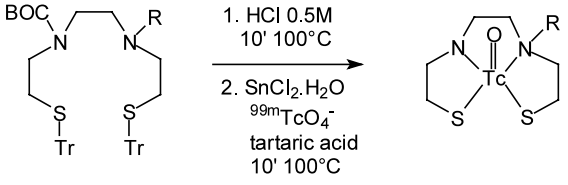
Tetrahedron Letters 44 (2003) 2597

S-Trityl protection of bis-amino bis-thiol (BAT) chelator enables flexible derivatisation and facile labelling with technetium-99m

Bernard J. Cleynhens, Guy M. Bormans, Hubert P. Vanbilloen, Dominique V. Vanderghinste, Davy M. Kieffer, Tjibbe J. de Groot and Alfons M. Verbruggen*

Laboratory for Radiopharmaceutical Chemistry and Nuclear Medicine, University of Leuven, Herestraat 49, B-3000 Leuven, Belgium

Labelling of, *S*,*S*′-bis-trityl-*N*-BOC BAT with technetium-99m.



Tetrahedron Letters 44 (2003) 2601

A new and convergent synthesis for 2,5-diamino-tetrahydropyrimidones

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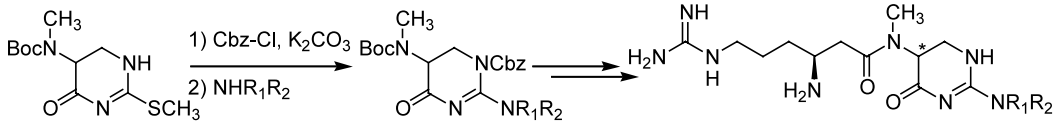
Department of Medicinal Chemistry, Gilead Sciences, Inc., 333 Lakeside Drive, Foster City, CA 94404, USA

TAN1057A/B has shown potent activity against MRSA. A novel and concise route to the synthesis of its heterocycle core 2,5-diamino-5,6-dihydro-1*H*-pyrimidine-4-one is described. This methodology allows the synthesis of an array of TAN-1057A/B analogs with different amine substitutions at the 2-position.



Tetrahedron Letters 44 (2003) 2605

Purine nucleoside synthesis from uridine using immobilised *Enterobacter gergoviae* CECT 875 whole cells

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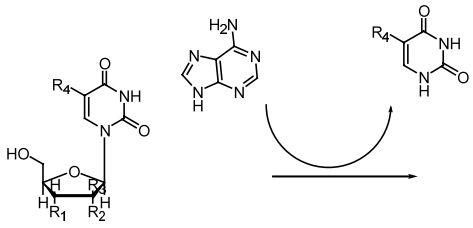

R_1= R_2= OH , R_3 =H, R_4 = H ; Uridine (U)
R_1=OH, R_2=R_3=R_4 = H ; 2'-deoxyuridine (DU)
R_1= R_2 = R_3 = R_4 = H ; 2´,3´-dideoxyuridine (DDU)
R_1 = R_3 = OH; R_3 =H, R_4 = H; Ara uridine (AU)
R_1 = R_2 = OH ; R_3 = H ; R_4 = CH_3 ; 5-methyluridine (MU)

Tetrahedron Letters 44 (2003) 2611

The synthesis of β-lactams via a one-pot Reformatsky reaction of imines promoted by Zn/Cp_2TiCl_2 (cat.)

Lei Chen, Gang Zhao* and Yu Ding*

Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, 345 Lingling lu, Shanghai 200032, PR China