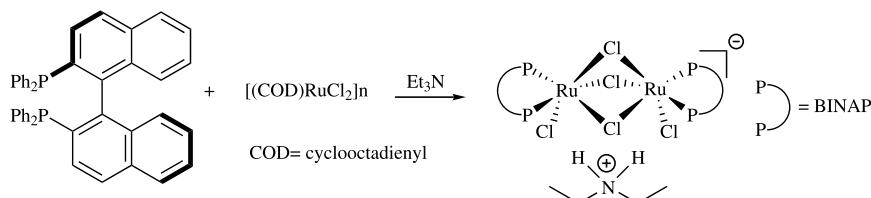


Assignment of the structure of a Ru(II)–BINAP catalyst

Tetrahedron: Asymmetry 14 (2003) 3427

Lisa DiMichele,* Steven A. King and Alan W. Douglas

Department of Process Research, Merck Research Laboratories, Rahway, NJ 07065, USA



The synthesis of S 18986, a chiral AMPA receptor modulator, via catalytic asymmetric hydrogenation

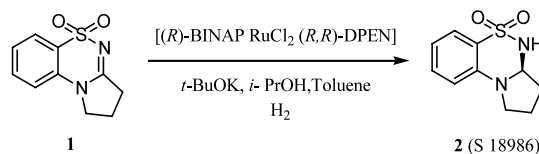
Tetrahedron: Asymmetry 14 (2003) 3431

Christopher J. Cobley,^a Elsa Foucher,^b Jean-Pierre Lecouve,^b Ian C. Lennon,^{a,*} James A. Ramsden^{a,*} and Gilles Thomino^b

^aDowpharma, Chiretech Technology Ltd., A Subsidiary of The Dow Chemical Company, Unit 321 Cambridge Science Park, Milton Road, Cambridge CB4 0WG, UK

^bOril Industrie, 13 rue Auguste Desgenétais, BP17-76210, Bolbec, France

A highly efficient asymmetric hydrogenation of the dihydropyrrolobenzothiadiazine dioxide **1** is described.

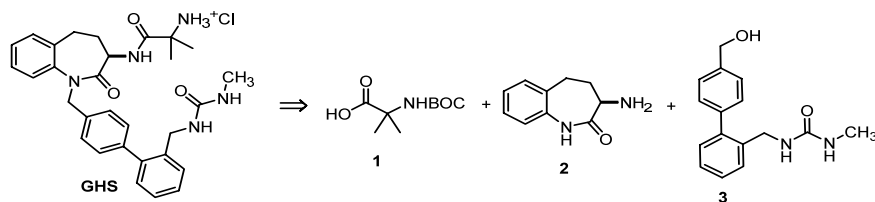


A convergent asymmetric synthesis of a growth hormone secretagogue

Tetrahedron: Asymmetry 14 (2003) 3435

Nan Zheng,* Joseph D. Armstrong, III,* Kan K. Eng, Jennifer Keller, Tom Liu, Robert Purick, Joseph Lynch, Frederick W. Hartner and R. P. Volante

Department of Process Research, Merck Research Laboratories, PO Box 2000, Rahway, NJ 07065, USA

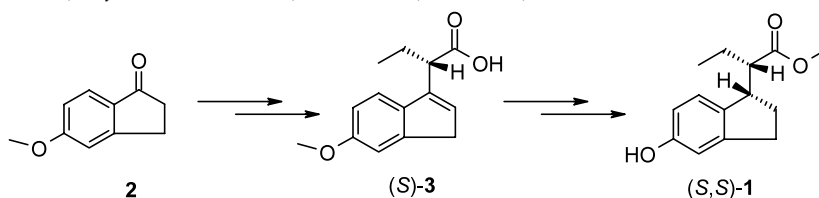


An efficient enantioselective synthesis of an indane acetic acid derivative: methyl (2S)-2-[(1S)-5-hydroxy-2,3-dihydro-1H-inden-1-yl]butanoate

Tetrahedron: Asymmetry 14 (2003) 3447

Mingbao Zhang,* Lei Zhu and Xin Ma

Department of Chemistry Research, Bayer Research Center, West Haven, CT 06516, USA

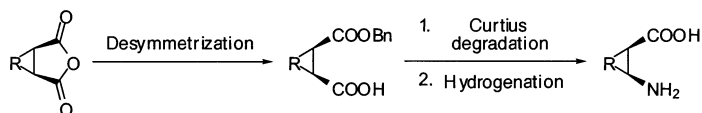


An alkaloid-mediated desymmetrization of *meso*-anhydrides via a nucleophilic ring opening with benzyl alcohol and its application in the synthesis of highly enantiomerically enriched β -amino acids

Tetrahedron: Asymmetry 14 (2003) 3455

Carsten Bolm,^{*} Ingo Schiffrers, Iuliana Atodiressei and Christian P. R. Hackenberger

Institut für Organische Chemie der RWTH Aachen, Professor-Pirlet-Str. 1, D-52056 Aachen, Germany



The development of a practical synthesis of the potent and selective somatostatin sst₃ receptor antagonist [4-(3,4-difluorophenyl)-piperazine-1-yl]-{(4*S*,4*aS*,8*aR*)-2[(*S*)-3-(6-methoxy-pyridin-3-yl)-2-methyl-propyl]-decahydroisoquinoline-4-yl}-methanone (NVP-ACQ090)

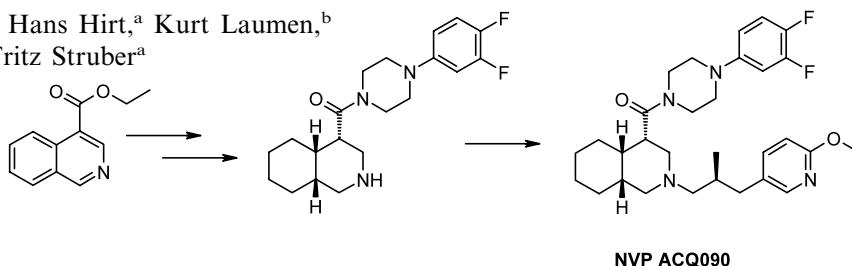
Tetrahedron: Asymmetry 14 (2003) 3469

Markus Bänziger,^{a,*} Jacques Cercus,^a Hans Hirt,^a Kurt Laumen,^b Christophe Malan,^c Felix Spindler,^c Fritz Struber^a and Thomas Troxler^{b,*}

^aChemical & Analytical Development, Novartis Pharma AG, CH-4002 Basel, Switzerland

^bPreclinical Research Department, Novartis Pharma AG, CH-4002 Basel, Switzerland

^cSolvias AG Catalysis Development, CH-4002 Basel, Switzerland



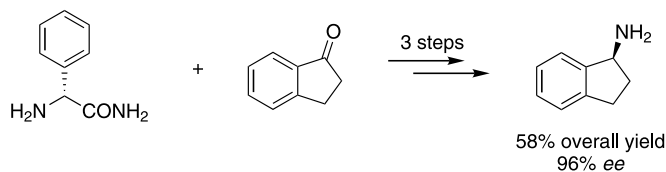
(*S*)-1-Aminoindane: synthesis by chirality transfer using (*R*)-phenylglycine amide as chiral auxiliary

Tetrahedron: Asymmetry 14 (2003) 3479

Patrick G. H. Uiterweerd,^a Marcel van der Sluis,^a Bernard Kaptein,^b Ben de Lange,^b Richard M. Kellogg^a and Quirinus B. Broxterman^{b,*}

^aSyncom B.V., Kadijk 3, 9747 AT Groningen, The Netherlands

^bDSM Pharma Chemicals—Advanced Synthesis and Catalysis, PO Box 18, 6160 MD Geleen, The Netherlands

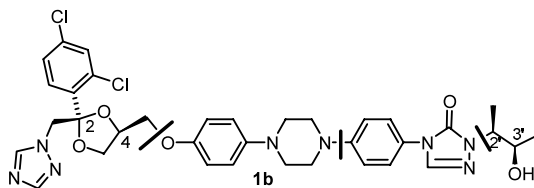


Total synthesis of (2*R*,4*S*,2'*S*,3'*R*)-hydroxyitraconazole: implementations of a recycle protocol and a mild and safe phase-transfer reagent for preparation of the key chiral units

Tetrahedron: Asymmetry 14 (2003) 3487

Gerald J. Tanoury,^{*} Robert Hett, H. Scott Wilkinson, Stephen A. Wald and Chris H. Senanayake^{*}

Department of Process Research and Development, Sepracor Inc., 33 Locke Drive, Marlborough, MA 01752, USA

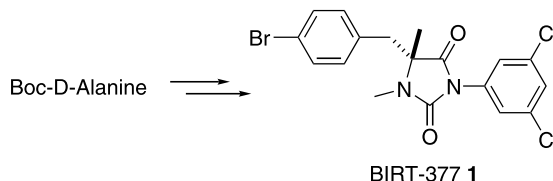


Practical synthesis of a cell adhesion inhibitor by self-regeneration of stereocenters

Tetrahedron: Asymmetry 14 (2003) 3495

Nathan K. Yee,^{a,*} Laurence J. Nummy, Rogelio P. Frutos, Jinhua J. Song, Elio Napolitano, Denis P. Byrne, Paul-James Jones and Vittorio Farina

Department of Chemical Development, Boehringer Ingelheim Pharmaceuticals, Inc., 900 Ridgebury Road, PO Box 368, Ridgefield, CT 06877-0368, USA



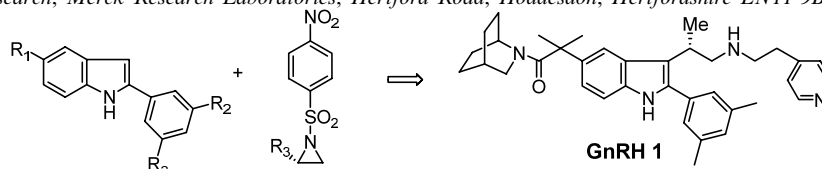
Enantiospecific and regioselective opening of 2-alkyl nosylaziridines by indoles mediated by boron trifluoride. Application to a practical synthesis of a GnRH antagonist

Tetrahedron: Asymmetry 14 (2003) 3503

Roger N. Farr,^{a,*} Ramon J. Alabaster,^b John Y. L. Chung,^a Bridgette Craig,^a John S. Edwards,^b Andrew W. Gibson,^b Guo-Jie Ho,^a Guy R. Humphrey,^a Simon A. Johnson^b and E. J. J. Grabowski^a

^aDepartment of Process Research, Merck Research Laboratories, Rahway, NJ 07065-0900, USA

^bDepartment of Process Research, Merck Research Laboratories, Hertford Road, Hoddesdon, Hertfordshire EN11 9BU, UK



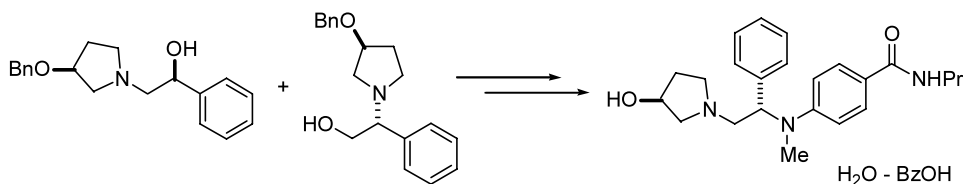
Efficient synthesis of the κ -opioid receptor agonist CJ-15,161: four stereospecific inversions at a single aziridinium stereogenic center

Tetrahedron: Asymmetry 14 (2003) 3517

Michel Couturier,^{a,*} John L. Tucker,^a Brian M. Andresen,^a Keith M. DeVries,^a Brian C. Vanderplas^a and Fumitaka Ito^b

^aChemical Research & Development, Pfizer Inc., Eastern Point Road, Groton, CT 06340, USA

^bPfizer Global Research and Development, Pfizer Inc., Nagoya, Japan



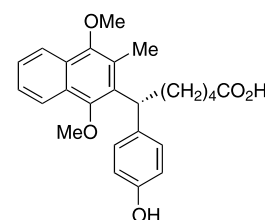
Practical synthesis of (R)-(+)-6-(1,4-dimethoxy-3-methyl-2-naphthyl)-6-(4-hydroxyphenyl)hexanoic acid: a key intermediate for a therapeutic drug for neurodegenerative diseases

Tetrahedron: Asymmetry 14 (2003) 3525

Tatsuya Ito,^{a,*} Tomomi Ikemoto,^a Toru Yamano,^b Yukio Mizuno^a and Kiminori Tomimatsu^a

^aChemical Development Laboratories, Takeda Chemical Industries, Ltd., 2-17-85 Jusohommachi, Yodogawa-ku, Osaka 532-8686, Japan

^bMedicinal Chemistry Research Laboratories, Takeda Chemical Industries, Ltd., 2-17-85 Jusohommachi, Yodogawa-ku, Osaka 532-8686, Japan



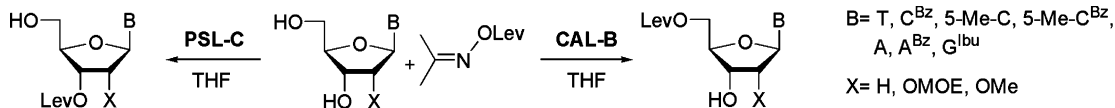
Novel enzymatic synthesis of levulinyl protected nucleosides useful for solution phase synthesis of oligonucleotides

Tetrahedron: Asymmetry 14 (2003) 3533

Javier García,^a Susana Fernández,^a Miguel Ferrero,^a Yogesh S. Sanghvi^{b,*} and Vicente Gotor^{a,*}

^aDepartamento de Química Orgánica e Inorgánica, Facultad de Química, Universidad de Oviedo, 33071 Oviedo, Spain

^bDevelopment Chemistry, Isis Pharmaceuticals, 2292 Faraday Avenue, Carlsbad, CA 92008, USA

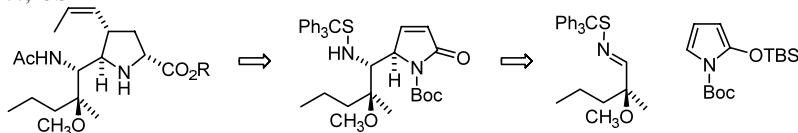


A highly diastereoselective vinylogous Mannich condensation and 1,4-conjugate addition of (Z)-propenyl cuprate in the synthesis of an influenza neuraminidase inhibitor

Tetrahedron: Asymmetry 14 (2003) 3541

David M. Barnes, Lakshmi Bhagavatula, John DeMattei, Ashok Gupta, David R. Hill, Sukumar Manna, Maureen A. McLaughlin, Paul Nichols, Ramiya Premchandran, Michael W. Rasmussen, Zhenping Tian and Steven J. Wittenberger*

Abbott Laboratories, Global Pharmaceutical Research and Development, Process Research and Development, 1401 Sheridan Road, North Chicago, IL 60064-4000, USA

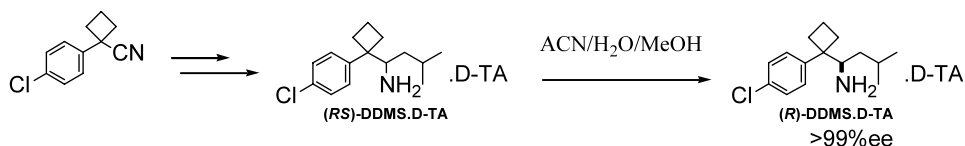


New resolution approach for large-scale preparation of enantiopure didesmethylsibutramine (DDMS)

Tetrahedron: Asymmetry 14 (2003) 3553

Zhengxu Han,* Dhileepkumar Krishnamurthy, Q. Kevin Fang, Stephen A. Wald and Chris H. Senanayake*

Chemical Research and Development, Sepracor Inc., 84 Waterford Drive, Marlborough, MA 0175, USA



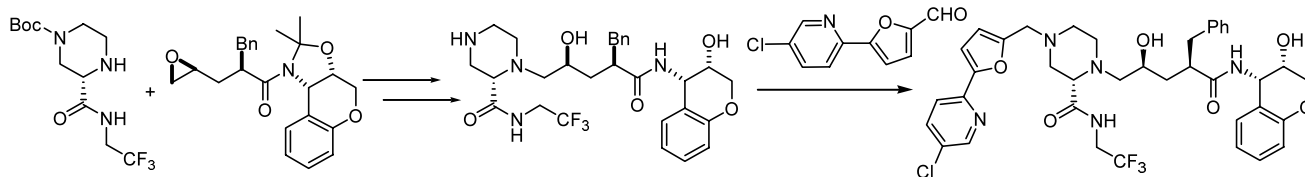
Total synthesis of a second generation HIV protease inhibitor

Tetrahedron: Asymmetry 14 (2003) 3557

Donald R. Gauthier, Jr.,^{a,*} Norihiro Ikemoto,^a Fred J. Fleitz,^a Ronald H. Szumigala, Jr.,^a Dan Petrillo,^a Jinchu Liu,^a Robert A. Reamer,^a Joseph D. Armstrong, III,^a Peter M. Yehl,^b Naijun Wu^b and R. P. Volante^a

^aMerck Research Labs, Department of Process Research, Rahway, NJ, 07065, USA

^bMerck Research Labs, Department of Analytical Research, Rahway, NJ, 07065, USA



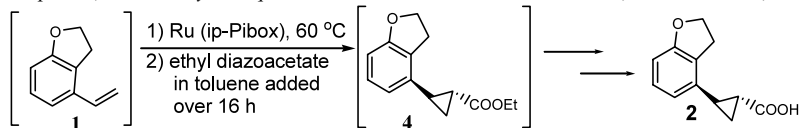
A pilot-scale synthesis of (1*R*)-trans-2-(2,3-dihydro-4-benzofuranyl)cyclopropanecarboxylic acid: a practical application of asymmetric cyclopropanation using a styrene as a limiting reagent

Tetrahedron: Asymmetry 14 (2003) 3569

James H. Simpson,^a Jollie Godfrey,^b Rita Fox,^b Atul Kotnis,^a David Kacsur,^a Jason Hamm,^a Michael Totelben,^a Victor Rosso,^a Richard Mueller,^a Edward Delaney^a and Rajendra P. Deshpande^{a,*}

^aProcess Research and Development, Bristol-Myers Squibb Pharmaceutical Research Institute, One Squibb Dr., PO Box 191, New Brunswick, NJ 08903, USA

^bProcess Research and Development, Bristol-Myers Squibb Pharmaceutical Research Institute, PO Box 4000, Princeton, NJ 08543, USA

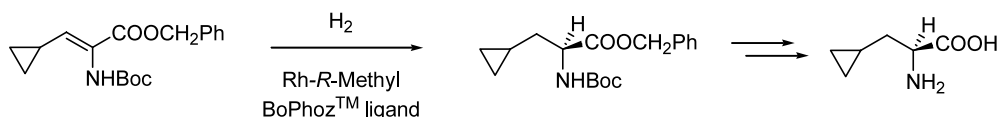


The preparation of enantiomerically pure cyclopropylalanine

Tetrahedron: Asymmetry 14 (2003) 3575

Neil W. Boaz,* Sheryl D. Debenham, Shannon E. Large and Mary K. Moore

Research Laboratories, Eastman Chemical Company, PO Box 1972, Kingsport, TN 37662, USA



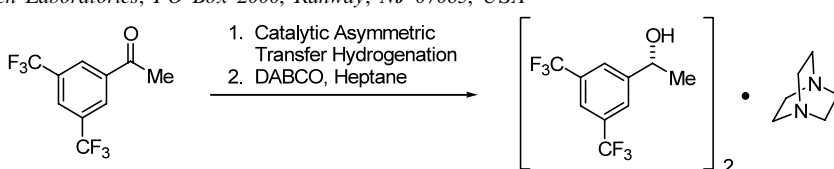
Scalable, efficient process for the synthesis of (*R*)-3,5-bistrifluoromethylphenyl ethanol via catalytic asymmetric transfer hydrogenation and isolation as a DABCO inclusion complex

Tetrahedron: Asymmetry 14 (2003) 3581

Karl B. Hansen,^{a,*} Jennifer R. Chilenski,^a Richard Desmond,^a Paul N. Devine,^a Edward J. J. Grabowski,^a Richard Heid,^a Michele Kubryk,^a David J. Mathre^a and Richard Varsolona^b

^aDepartment of Process Research, Merck Research Laboratories, PO Box 2000, Rahway, NJ 07065, USA

^bDepartment of Analytical Research, Merck Research Laboratories, PO Box 2000, Rahway, NJ 07065, USA



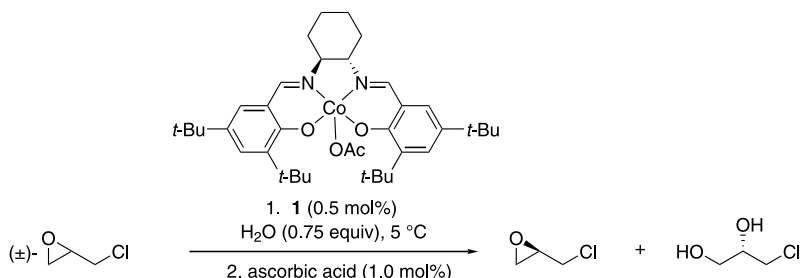
Commercialization of the hydrolytic kinetic resolution of racemic epoxides: toward the economical large-scale production of enantiopure epichlorohydrin

Tetrahedron: Asymmetry 14 (2003) 3589

Jay F. Larrow,^{a,*} Karl E. Hemberger,^a Serge Jasmin,^a Hocine Kabir^b and Phillipe Morel^b

^aRhodia Pharma Solutions, 56 Roland Street, Boston, MA 02129, USA

^bRhodia Pharma Solutions, Centre de Recherches de Lyon, 85 Avenue des Frères Perret, F-69192 St. Fons Cedex, France

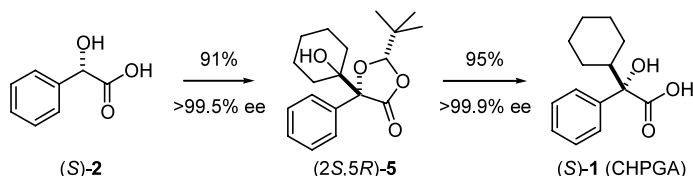


A large-scale asymmetric synthesis of (*S*)-cyclohexylphenyl glycolic acid

Tetrahedron: Asymmetry 14 (2003) 3593

Xiping Su,* Nandkumar N. Bhongle,* Derek Pflum, Hal Butler, Stephen A. Wald, Roger P. Bakale and Chris H. Senanayake*

Chemical Research and Development, Sepracor Inc., 84 Waterford Drive, Marlborough, MA 01752, USA

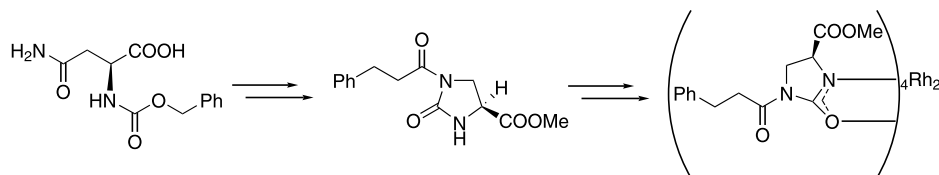


Synthesis of dirhodium(II) tetrakis[methyl 1-(3-phenylpropanoyl)-2-oxaimidazolidine-4(*S*)-carboxylate], Rh₂(4*S*-MPPIM)₄

Tetrahedron: Asymmetry 14 (2003) 3601

Michael P. Doyle* and John T. Colyer

Department of Chemistry, University of Arizona, Tucson, AZ 85721, USA

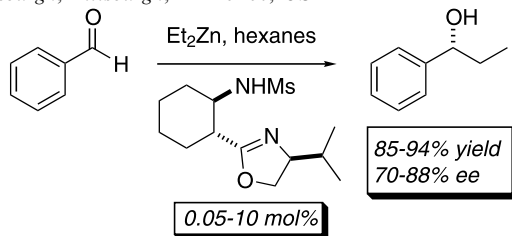


Investigation of ligand loading and asymmetric amplification in CHAOx-catalyzed asymmetric diethylzinc additions

Tetrahedron: Asymmetry 14 (2003) 3605

Peter Wipf,* Joshua G. Pierce and Xiaodong Wang

Department of Chemistry, University of Pittsburgh, Pittsburgh, PA 15260, USA

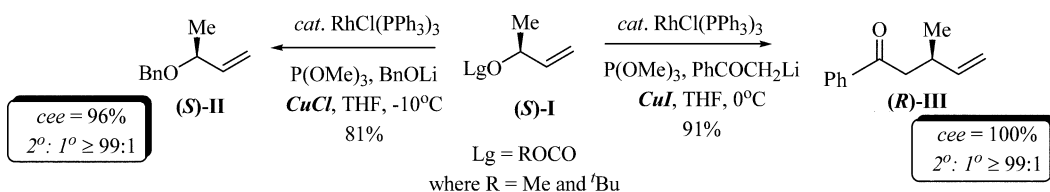


Halide ion effects in the rhodium-catalyzed allylic substitution reaction using copper(I) alkoxides and enolates

Tetrahedron: Asymmetry 14 (2003) 3613

P. Andrew Evans,* David K. Leahy and Laura M. Sliker

Department of Chemistry, 800 E. Kirkwood Ave., Indiana University, Bloomington, IN 47405, USA

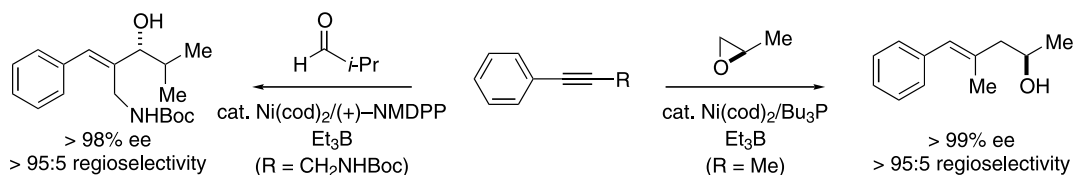


Catalytic reductive carbon–carbon bond-forming reactions of alkynes

Tetrahedron: Asymmetry 14 (2003) 3619

Karen M. Miller, Carmela Molinaro and Timothy F. Jamison*

Massachusetts Institute of Technology, Department of Chemistry, 77 Massachusetts Ave., Cambridge, MA 02139, USA

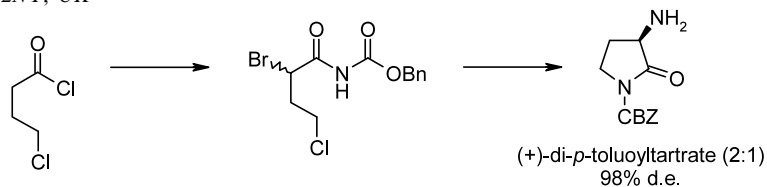


A practical, two-stage preparation of benzyl (3*R*)-3-amino-2-oxo-1-pyrrolidinecarboxylate (2*S*,3*S*)-2,3-bis[(4-methylbenzoyl)-oxy]butanediote (2:1)

Tetrahedron: Asymmetry 14 (2003) 3627

Roger Barrett, Darren M. Caine, Kevin S. Cardwell,* Jason W. B. Cooke, Ron M. Lawrence, Peter Scott and Åsa Sjölin

Chemical Development, GlaxoSmithKline Research & Development, Medicines Research Centre, Gunnels Wood Road, Stevenage, Hertfordshire SG1 2NY, UK



New oligomeric catalyst for the hydrolytic kinetic resolution of terminal epoxides under solvent-free conditions

Tetrahedron: Asymmetry 14 (2003) 3633

David E. White and Eric N. Jacobsen*

Department of Chemistry and Chemical Biology, Harvard University, Cambridge, MA 02138, USA

