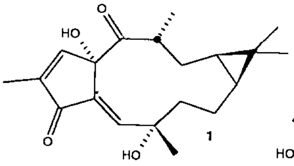
GRAPHICAL ABSTRACTS

Tetrahedron Lett. 27, 5675 (1986)

ISOLATION AND STRUCTURE DETERMINATION OF TWO NOVEL LATHYRANES FROM *JATROPHA CURCUS*

W. Naengchomnong and Y. Thebtaranonth*
Dept. of Chemistry, Faculty of Science,
Mahidol U., Bangkok 10400, THAILAND
P. Wiriyachitra, Dept. of Chemistry,
Prince of Songkla U., Haad Yai, THAILAND
K.T. Okamoto and J. Clardy*
Dept. of Chemistry, Baker Laboratory,
Cornell U., Ithaca, NY 14853-1301 USA

Lathyranes A (1) and B (2) have been isolated from *J. curcus*.



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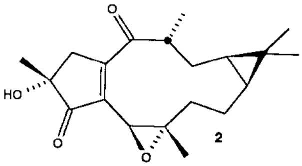


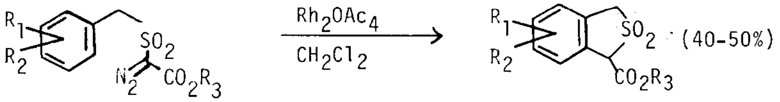
2

Tetrahedron Lett. 27, 5679 (1986)

INTRAMOLECULAR RHODIUM CARBENOID INSERTIONS INTO AROMATIC C-H BONDS. PREPARATION OF 1-CARBOALKOXY-1,3-DIHYDROBENZO[b]THIOPHENE 2,2-DIOXIDES.

Michael Hrytsak, Nola Etkin, and Tony Durst*
Ottawa Carleton Chemistry Institute, Department of Chemistry, University of Ottawa, Ottawa, Ontario, CANADA. K1N 6N5

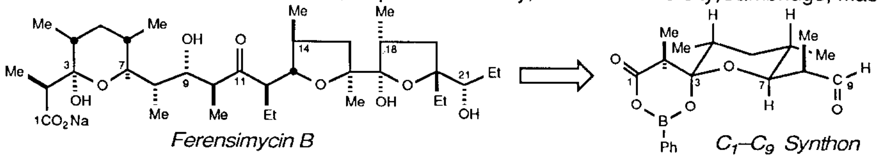
Rhodium acetate catalyzed decomposition of various α-diazo-β-phenylmethane sulfonyl esters resulted in the formation of the title compounds in modest yields.



Tetrahedron Lett. 27, 5683 (1986)

STUDIES DIRECTED TOWARD THE SYNTHESIS OF LYSOCELLIN CLASS POLYETHER CLASS ANTIBIOTICS. THE ASYMMETRIC SYNTHESIS OF THE C_1–C_9 FERENSIMYCIN SYNTHON

David A. Evans, * Richard P. Polniaszek, Dept. of Chemistry, Harvard University, Cambridge, Mass. 02138 USA



Ferensimycin B

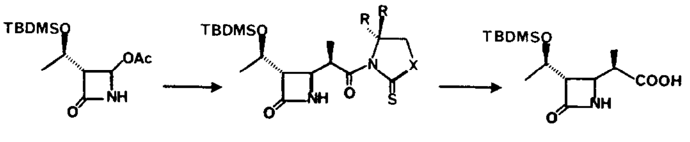
C_1–C_9 Synthon

The asymmetric synthesis of the C_1–C_9 ferensimycin synthon exploiting chiral enolate methodology is described.

Tetrahedron Lett. 27, 5687 (1986)

SIMPLE AND HIGHLY DIASTEREOSELECTIVE SYNTHESIS OF A 1β-METHYLCARBAPENEM KEY INTERMEDIATE INVOLVING DIVALENT TIN ENOLATES.

Robert Déziel* and Denis Favreau
Chemical Process Development, Bristol-Myers Pharmaceutical Research and Development Division, Candiac, Quebec Canada J5R 1J1

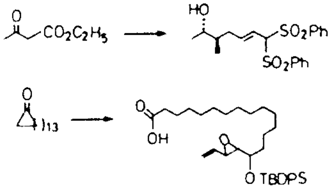


Tetrahedron Lett. 27,5691(1986)

A SYNTHETIC APPROACH TO POLYENE MACROLIDES, SYNTHESIS OF THE BUILDING BLOCKS

Barry M. Trost*, Jeffrey T. Hane, and Peter Metz
Department of Chemistry, University of Wisconsin, Madison, WI 53706

An asymmetric synthesis of the building blocks for polyene macrolides from ethyl acetoacetate and cyclopentadecanone.

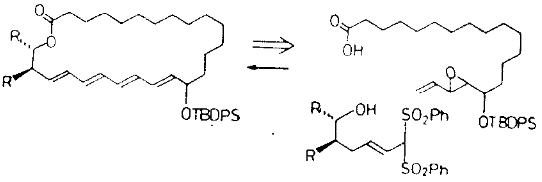


Tetrahedron Lett. 27,5695(1986)

A SYNTHETIC APPROACH TO POLYENE MACROLIDES. MACROLIDE AND POLYENE GENERATION

Barry M. Trost*, Jeffrey T. Hane, and Peter Metz
Department of Chemistry, University of Wisconsin, Madison, Wisconsin 53706

A novel palladium catalyst facilitates macrocyclization and effects a double elimination to a tetraene macrolide.

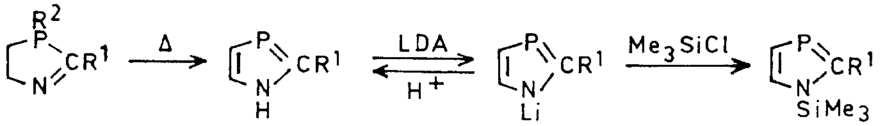


Tetrahedron Lett. 27,5699(1986)

1H-1,3-AZAPHOSPHOLE - NEUE PHOSPHAAROMATEN

J.Heinicke
Sektion Chemie der Martin-Luther-Universität Halle, DDR-4050 Halle(S.)

1H-1,3-Azaphospholes are synthesized by pyrolysis of 1,3-azaphospholines-1. Their properties, N-metallation, n.m.r. and u.v. data are described.

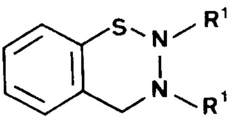


Tetrahedron Lett. 27,5703(1986)

CYCLOADDITION REACTIONS OF BENZOTHIETE AND HETERO DIENOPHILES FOR THE SYNTHESIS OF HETEROCYCLIC SYSTEMS

Dominic Jacob, Hans-Peter Niedermann and Herbert Meier*
Insitut für Organishce Chemie der Universität Mainz, J.-J. Becherweg 18 - 22, D-6500 Mainz 1

Cycloaddition reactions of benzothiete with dienophiles containing a NN-, NO- or CO-double bond lead in good yields to novel or scarcely known heterocyclic systems.



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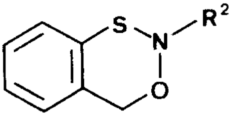

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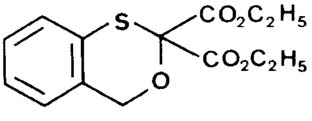


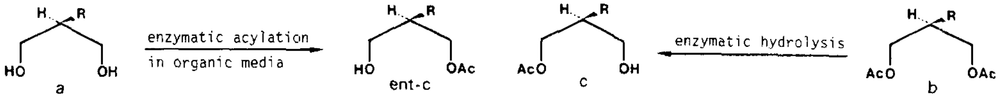
9

Tetrahedron Lett.27,5707(1986)

SYNTHESIS OF BOTH ENANTIOMERIC FORMS OF 2-SUBSTITUTED 1,3-PROPANEDIOL MONOACETATES STARTING FROM A COMMON CHIRAL PRECURSOR, USING ENZYMATIC TRANSFORMATIONS IN AQUEOUS AND IN ORGANIC MEDIA

G. M. Ramos Tombo*, H.-P. Schär, X. Fernàndez i Busquets and O. Ghisalba
Central Research Laboratories of CIBA-GEIGY AG., Postfach CH-4002 Basel, Switzerland.

A direct entry to both enantiomeric forms c and ent-c, based on enzyme catalyzed transformations of prochiral compounds of type a and b is described. The catalysts used are carboxyl esterase preparations obtained from crude porcine pancreas lipase.

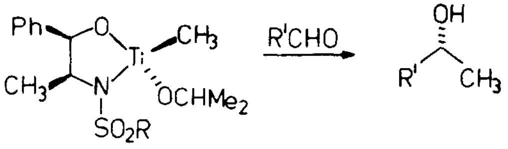


Tetrahedron Lett.27,5711(1986)

ENANTIOSELECTIVE ADDITION OF CHIRALLY MODIFIED METHYL-TITANIUM REAGENTS TO AROMATIC ALDEHYDES

M.T. Reetz*, T. Kükenhöhner and P. Weinig
Fachbereich Chemie der Universität,
Hans-Meerwein-Straße, 3550 Marburg, FRG

The oligomeric form of 2 reacts enantioselectively with aromatic aldehydes to form 3 having ee ~ 90%.



2 3

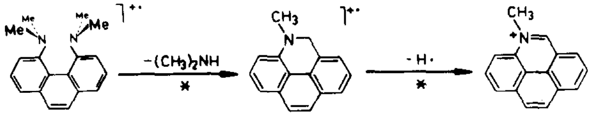
Tetrahedron Lett.27,5715(1986)

INTRAMOLECULAR CYCLISATION OF 'PROTON SPONGES' UNDER ELECTRON IMPACT

M. Rentzea, T. Saupe and H. A. Staab
Abt. Organische Chemie, Max-Planck-Institut, D-6900 Heidelberg

Crowded bis(dimethylamino)arenes show specific proximity effects in mass spectra: 1 by hydrogen migration, intramolecular cyclisation and aromatisation forms N-methyl thebenidinium ion.

1

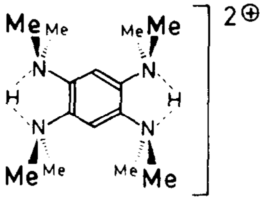


Tetrahedron Lett.27,5719(1986)

PROTONATION OF 1,2,4,5-TETRAKIS(DIMETHYLAMINO)BENZENE

H. A. Staab, K. Elbl and C. Krieger
Abt. Organische Chemie, Max-Planck-Institut,
D-6900 Heidelberg

Protonation of 1,2,4,5-tetrakis(dimethylamino)benzene yields only the diprotonated dication the molecular structure of which is discussed on the basis of X-ray structure analysis.

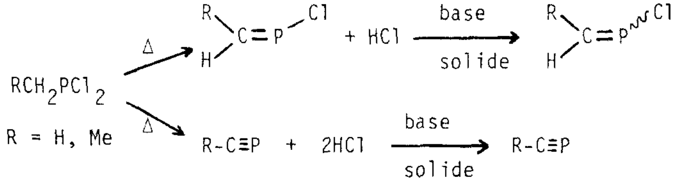


Tetrahedron Lett. 27,5723(1986)

UNHINDERED PHOSPHAALKENES AND PHOSPHAALKYNES IN STABLE CONDITION FROM A VACUUM MULTISTEP SEQUENCE.

Bruno PELLERIN, Jean-Marc DENIS,[+] Jacques PERROCHEAU and Robert CARRIE,
Université de Rennes I, Campus de Beaulieu, 35042 Rennes Cedex, France.

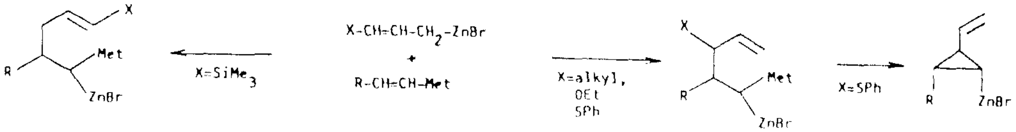
Unsaturated reactive phosphines are obtained in stable condition using a vacuum multistep sequence (FVT/GSR) and fully characterized by ^{1}H, ^{13}C and ^{31}P NMR spectroscopy.



Tetrahedron Lett. 27,5727(1986)

DIASTEREOSELECTIVE ADDITION OF FUNCTIONALIZED ALLYLIC ZINC BROMIDES TO ALKENYL ORGANOMETALLICS. Part 5.

P. Knochel* and J.F. Normant
Université P. et M. Curie, tour 44-45, 4 place Jussieu F-75252 Paris Cédex 05

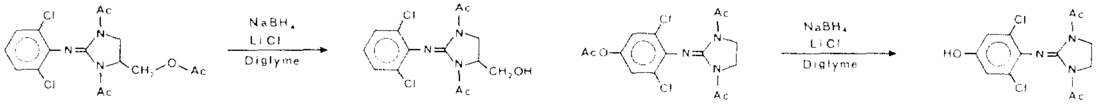


Met = MgBr or Li ; R = Hexyl

Tetrahedron Lett. 27,5731(1986)

THE USE OF LITHIUM BOROHYDRIDE FOR DEPROTECTING ACETYLATED ALCOHOLS AND PHENOLS IN THE PRESENCE OF N-ACETYLATED GUANIDINES

Didier HUBER[a], Gérard LECLERC[+a], Guy ANDERMANN[b]
[a]Institut de Pharmacologie, Laboratoire de Pharmacochimie, 11 rue Humann
67000 Strasbourg and [b]Laboratoires ALCON-POS, 68240 Kaysersberg, France.



Ib

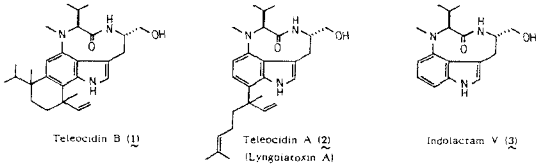
IIb

Tetrahedron Lett. 27,5735(1986)

SYNTHETIC STUDIES ON TELEOCIDIN IV. AN EFFICIENT SYNTHESIS OF (-)-INDOLACTAM V

Shin-ichi Nakatsuka,* Toshiya Masuda, Kunisaku Sakai, and Toshio Goto
Faculty of Agriculture, Nagoya University, Chikusa, Nagoya 464, Japan

An efficient synthesis of (-)-indolactam V was achieved starting from L-tryptophan.



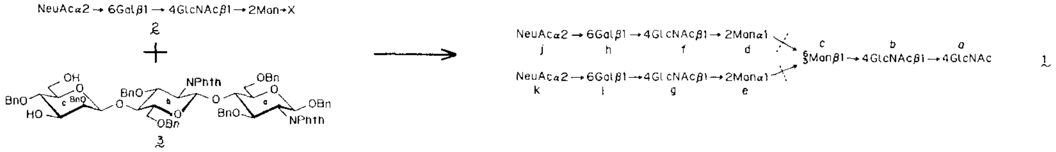
Teleocidin B (1)   Teleocidin A (2) (Lyngbiatoxin A)   Indolactam V (3)

TOTAL SYNTHESIS OF A UNDECASACCHARIDE: A TYPICAL CARBOHYDRATE SEQUENCE FOR THE COMPLEX TYPE OF GLYCAN CHAINS OF A GLYCOPROTEIN

Tetrahedron Lett. 27, 5739 (1986)

Tomoya Ogawa, Mamoru Sugimoto, Tooru Kitajima, Khalid Khan Sadozai, and Tomoo Nukada
RIKEN (The Institute of Physical and Chemical Research), Wako-shi, Saitama, 351-01, Japan

Total synthesis of undecasaccharide 1 of complex type of glycans of a glycoprotein was achieved by employing a glycosyl donor 2 and a glycosyl acceptor 3.



DISTANNOXANE-CATALYZED CLEAVAGE OF ACETALS AND SILYL ETHERS

Tetrahedron Lett. 27, 5743 (1986)

Junzo Otera* and Hitosi Nozaki
Department of Applied Chemistry, Okayama University of Science, Rida-cho, Okayama 700, Japan

Various protecting groups are removed by distannoxane catalysts under mild conditions.

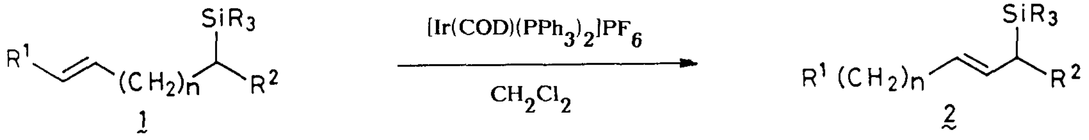
$$\mathrm{ROR'} \longrightarrow \mathrm{ROH} \quad (\mathrm{R'} = \mathrm{THP\ and\ SiR_3})$$

$$\mathrm{RR'C(OR'')_2} \longrightarrow \mathrm{RR'CO}$$

REGIOCONTROLLED SYNTHESIS OF ALLYLSILANES BY MEANS OF RHODIUM(I) OR IRIDIUM(I) CATALYZED ISOMERIZATION OF OLEFINS

Tetrahedron Lett. 27, 5747 (1986)

Isamu Matsuda,* Tomohisa Kato, Susumu Sato, and Yusuke Izumi
Department of Synthetic Chemistry, Faculty of Engineering, Nagoya University, Nagoya 464, JAPAN

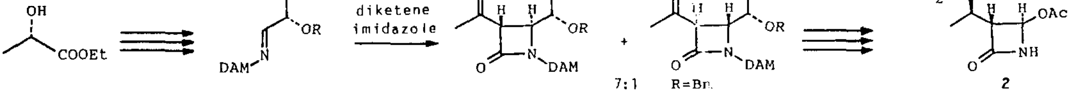


A NOVEL SYNTHESIS OF (3*R*,4*R*)-4-ACETOXY-3-[(*R*)-*t*-BUTYLDIMETHYLSILYLOXY)ETHYL]-2-AZETIDINONE, THE VERSATILE KEY INTERMEDIATE OF CARBAPENEM SYNTHESIS, FROM (*S*)-ETHYL LACTATE

Tetrahedron Lett. 27, 5751 (1986)

Yoshio Ito, Takeo Kawabata, and Shiro Terashima*
Sagami Chemical Research Center, Nishi-Ohnuma, Sagamihara, Kanagawa 229, Japan

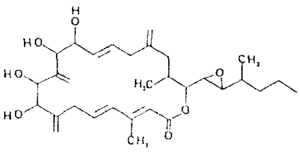
A highly efficient synthesis of the title compound (2) was accomplished employing the addition of diketene to chiral imine as a key stereoselective reaction.



Tetrahedron Lett.27,5755(1986)

AMPHIDINOLIDE-A, A NOVEL ANTINEOPLASTIC MACROLIDE FROM THE MARINE DINOFLAGELLATE *AMPHIDINIUM* SP.

Jun'ichi Kobayashi*[a], Masami Ishibashi[a], Hideshi Nakamura,[a] Yasushi Ohizumi[a], Terufumi Yamasu[b], Takuma Sasaki[c] and Yoshimasa Hirata[d]
[a]Mitsubishi-Kasei Institute of Life Sciences, 11 Minamiooya, Machida, Tokyo 194, Japan
[b]Division of General Education, University of the Ryukyus, Nishihara, Okinawa 903-01, Japan
[c]National Cancer Center Research Institute, Tsukiji, Chuo-ku, Tokyo 104, Japan
[d]Faculty of Pharmacy, Meijo University, Tempaku, Nagoya 468, Japan

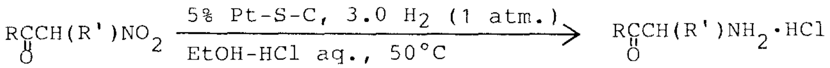


A novel macrolide, amphidinolide-A possessing antineoplastic activity has been isolated from the marine dinoflagellate *Amphidinium* sp.

Tetrahedron Lett.27,5759(1986)

SYNTHESIS OF α-AMINO KETONE HYDROCHLORIDES VIA CHEMOSELECTIVE HYDROGENATION OF α-NITRO KETONES

Rui Tamura*, Daihei Oda, and Hiroshi Kurokawa
Department of Chemistry, The National Defense Academy, Yokosuka,239 Japan



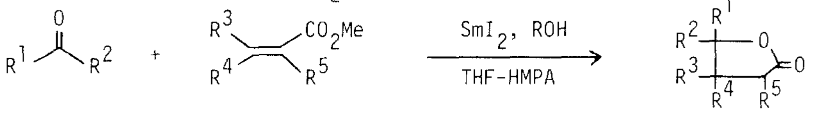
$$R\underset{\overset{\|}{O}}{C}CH(R')NO_2 \xrightarrow[\text{EtOH-HCl aq., 50°C}]{\text{5\% Pt-S-C, 3.0 } H_2 \text{ (1 atm.)}} R\underset{\overset{\|}{O}}{C}CH(R')NH_2\cdot HCl$$

Tetrahedron Lett.27,5763(1986)

SmI_2-INDUCED REDUCTIVE CROSS-COUPLING OF CARBONYL COMPOUNDS WITH α,β-UNSATURATED ESTERS

Kenji Otsubo, Junji Inanaga,* and Masaru Yamaguchi
Department of Chemistry, Kyushu University 33, Hakozaki, Higashi-ku, Fukuoka 812, Japan

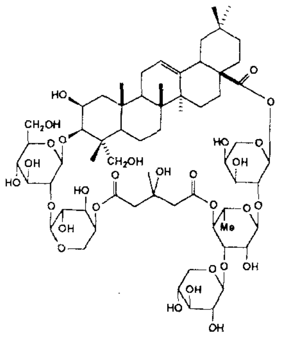
A rapid and mild one-step synthesis of γ-lactones from carbonyl compounds and α,β-unsaturated esters by utilizing SmI_2-THF-HMPA reduction system.



Tetrahedron Lett.27,5765(1986)

Structural Study of Tubeimoside I, A Constituent of Tu-bei-mu.

F.-h. Kong, D.-y. Zhu, R.-s. Xu, Z.-c. Fu, L.-y. Zhou, T. Iwashita, and H. Komura



The structure of a new triterpene glycoside, Tubeimoside I, isolated from Chinese falk medicine Tu-bei-mu was determined as shown here.
Full assignment of the C-13 NMR signals of Tubeimoside I was obtained.

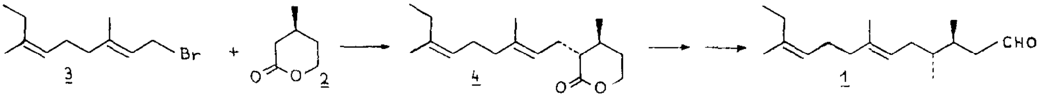
Tetrahedron Lett. 27, 5769 (1986)

A CONVENIENT SYNTHETIC ROUTE TO (+)-FARANAL: THE TRAIL PHEROMONE OF PHARAOH'S ANT

L. Poppe[a], L. Novák[a], P. Kolonits[a], Á. Bata[b] and Cs. Szántay[a,c]*

[a]Inst. for Org. Chem., Technical Univ. Budapest, H-1521, Gellért tér 4.; [b]Dep. of Biochem. and Food Techn., Technical Univ., Budapest, H-1521, Pf. 91; [c]Centr. Res. Inst. for Chem., Budapest H-1525, Pf. 17.

Abstract: (+)-Faranal 1 was prepared stereo- and enantioselectively.



Tetrahedron Lett. 27, 5773 (1986)

HOMOLYTIC SUBSTITUTION AT CARBON CENTRE: SYNTHESIS OF BENZYL SULPHONES

B.D. Gupta, Manoj Kumar, Indira Das and M. Roy
Department of Chemistry, Indian Institute of Technology, Kanpur 208016, India

Synthesis of benzyl sulphones from benzyl cobaloximes by S_H2 process