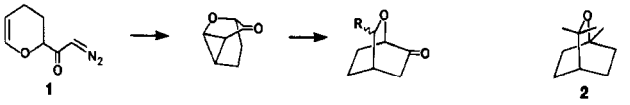
Tet.Lett.,27,19,2075 (1986)

FORMATION OF REACTIVE TRICYCLIC INTERMEDIATES VIA THE INTRAMOLECULAR CYCLOPROPANATION OF DIHYDROPYRANS. SYNTHESIS OF EUCALYPTOL.

Julian Adams* and Michel Belley
Merck Frosst Canada Inc., P.O. Box 1005, Pointe Claire-Dorval, Québec, Canada, H9R 4P8

The synthesis of tricyclic ketone (1) was achieved by an intramolecular cyclopropanation reaction. The reactive tricyclic compound could be regiospecifically opened to produce [2.2.2] oxa-bicyclic ketones. This applied in a synthesis of eucalyptol (2).



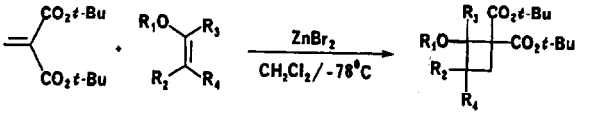
1 2

Tet.Lett.,27,19,2083 (1986)

INTERCEPTION OF [2+2] CYCLOADDUCTS IN THE ZINC BROMIDE MEDIATED REACTION OF DI-TERT-BUTYL METHYLENE MALONATE WITH SIMPLE ENOL ETHERS

Marsha R. Baar, Paloma Ballesteros, and Bryan W. Roberts*
Department of Chemistry, University of Pennsylvania, Philadelphia, PA 19104-6323

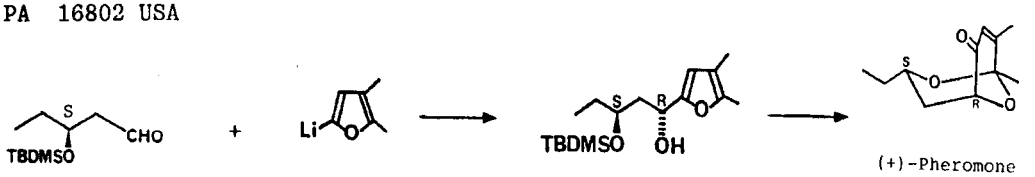
Di-tert-butyl methylenemalonate combines efficiently with simple enol ethers at -78°C in the presence of zinc bromide to give [2+2] cycloadducts.



Tet.Lett.,27,19,2091 (1986)

Total Synthesis of the (+)-Pheromone of the Male Swift Moth Hepialus Hecta L.

Philip DeShong,* M. -T. Lin, and J. J. Perez
Department of Chemistry, The Pennsylvania State University, University Park, PA 16802 USA



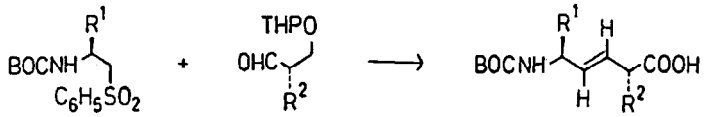
(+)-Pheromone

Tet.Lett.,27,19,2095 (1986)

A STEREOCONTROLLED SYNTHESIS OF TRANS-ALKENE ISOSTERES OF DIPEPTIDES

Andreas Spaltenstein, Philip A. Carpino, Fumio Miyake, and Paul B. Hopkins*
Department of Chemistry, University of Washington, Seattle, WA 98195

A general synthetic route to trans-alkene isosteres of protected dipeptides is reported.



Tet.Lett.,27,19,2099 (1986)

β-TRIMETHYLSILYLETHANESULFONYL CHLORIDE (SES-Cl): A NEW REAGENT FOR PROTECTION OF AMINES

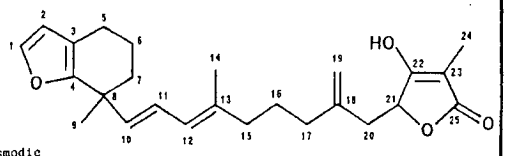
Steven M. Weinreb,* Donald M. Demko, and Thomas A. Lessen
Department of Chemistry, The Pennsylvania State University, University Park, PA 16802 USA
James P. Demers, Ortho Pharmaceutical Corporation, Raritan, NJ 08869 USA

The title compound, easily prepared in two steps from vinyl trimethylsilane, is a useful reagent for the protection of primary and secondary amines as their sulfonamides, which are cleaved by fluoride ion.

Tet.Lett.,27,19,2113 (1986)

HIPPOSPONGIN, A NOVEL FURANOSESTERTERPENE POSSESSING ANTISPASMODIC ACTIVITY FROM THE OKINAWAN MARINE SPONGE HIPPOSPONGIA SP.

Jun'ichi Kobayashi*, Yasushi Ohizumi, Hideshi Nakamura
Mitsubishi-Kasei Institute of Life Sciences,
11 Minamiooya, Machida, Tokyo 194, Japan
and
Yoshimasa Hirata
Faculty of Pharmacy, Meijo University, Nagoya 468, Japan



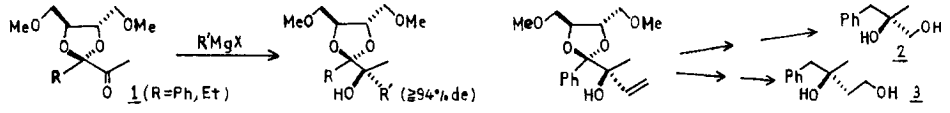
A novel furanosesterterpene, hippospongin, possessing antispasmodic activity has been isolated from the Okinawan marine sponge Hippospongia sp.

Tet.Lett.,27,19,2117 (1986)

DIASTEREOSELECTIVE NUCLEOPHILIC ADDITION TO CHIRAL OPEN-CHAIN α-KETOACETALS: SYNTHESIS OF (R)- AND (S)-MEVALOLACTONE

Yasumitsu Tamura,* Tomoko Ko, Hiroshi Kondo, Hirokazu Annoura, Masahiro Fuji,
Ritsuko Takeuchi, Hiromichi Fujioka
Faculty of Pharmaceutical Sciences, Osaka University, 1-6, Yamada-oka, Suita, Osaka 565 Japan

Highly diastereoselective addition of Grignard reagents to α-ketoacetals(1) and the syntheses of the key intermediates(2,3) for (R)- and (S)-mevalolactone are described.

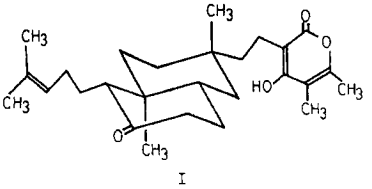


Tet.Lett.,27,19,2121 (1986)

ISOLATION AND STRUCTURE OF PYCNOPHORIN, A NOVEL DITERPENE α-PYRONE WITH ANTIMICROBIAL ACTIVITY, PRODUCED BY PHYTOPATHOGENIC MACROPHOMA KUWATSUKAI

Takeshi Sassa, Hideyuki Kato and Hiroko Kajiura+
Department of Agricultural Chemistry, Yamagata University, Tsuruoka 997, Japan
+National Institute for Basic Biology, Okazaki 444, Japan

Pycnophorin isolated from the full-grown mycelia bearing pycnidia of M. kuwatsukai was determined as a novel diterpene α-pyrone shown as I.

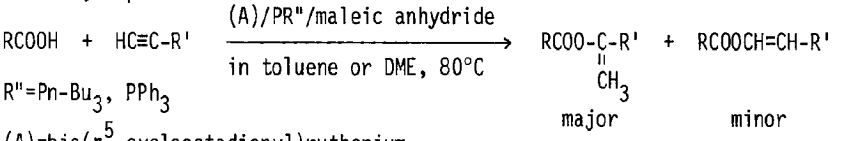


I

Tet.Lett.,27,19,2125 (1986)

RUTHENIUM COMPLEX CATALYZED SELECTIVE ADDITION OF CARBOXYLIC ACIDS TO ACETYLENES GIVING ENOL ESTERS

Take-aki Mitsudo,* Yoji Hori, Yasushi Yamakawa, and Yoshihisa Watanabe*
Department of Hydrocarbon Chemistry, Faculty of Engineering, Kyoto University, Sakyo-ku, Kyoto 606, Japan



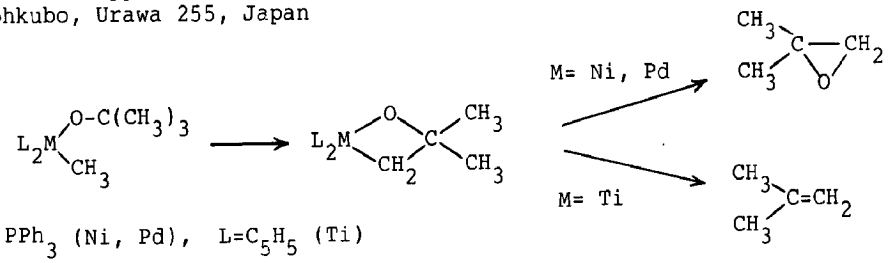
R"=Pn-Bu_3, PPh_3

(A)=bis(η^5-cyclooctadienyl)ruthenium

Tet.Lett.,27,19,2127 (1986)

NOVEL OXIRANE FORMATION VIA 1-METALLA-2-OXACYCLOBUTANES

Akira Miyashita*, Jun-ya Ishida and Hiroyuki Nohira
Department of Applied Chemistry, Saitama University
Shimo-ohkubo, Urawa 255, Japan



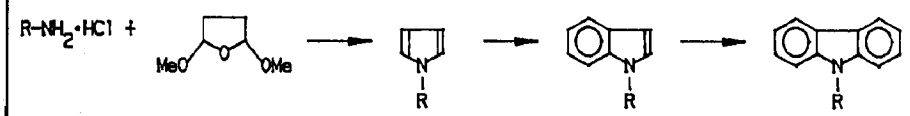
L= PPh_3 (Ni, Pd), L=C_5H_5 (Ti)

Tet.Lett.,27,19,2131 (1986)

THE CONVENIENT AND ONE-POT SYNTHESIS OF N-SUBSTITUTED CARBAZOLE

Choji Kashima, Shigeki Hibi, Tatsuya Maruyama, and Yoshimori Omote
Department of Chemistry, University of Tsukuba, Sakura-mura, Niihari-gun, Ibaraki 305, Japan

A synthesis of N-substituted carbazole from alkylamine hydrochloride and 2,5-dimethoxytetrahydrofuran.

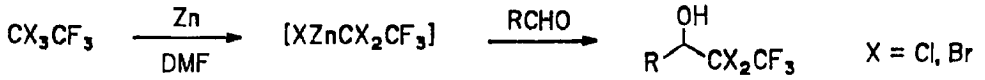


Tet.Lett.,27,19,2135 (1986)

EFFICIENT CARBON-CARBON BOND FORMATION WITH THERMALLY STABLE 1,1-DIHALO-2,2,2-TRIFLUOROETHYLZINC REAGENT

Makoto Fujita, Tomoe Morita, and Tamejiro Hiyama*
Sagami Chemical Research Center, 4-4-1 Nishiohnuma, Sagamihara, Kanagawa 229, Japan

Aldehyde addition of thermally stable zinc carbenoid, CF_3CX_2ZnX, prepared from CF_3CX_3.

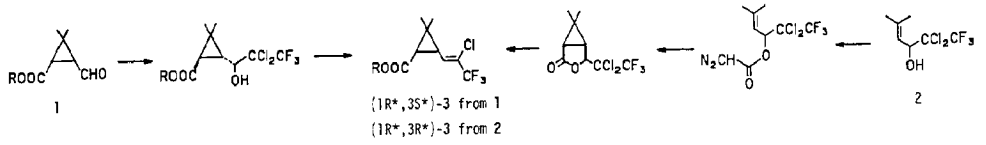


Tet.Lett.,27,19,2139 (1986)

PRACTICAL AND STEREOCONTROLLED SYNTHESES OF BOTH (1R*,3S*)- AND (1R*,3R*)-3-(2-CHLORO-3,3,3-TRIFLUORO-1-PROPENYL)-2,2-DIMETHYLCYCLOPROPANECARBOXYLATES

Makoto Fujita, Tamejiro Hiyama,* and Kiyosi Kondo
Sagami Chemical Research Center, 4-4-1 Nishiohnuma, Sagamihara, Kanagawa 229, Japan

Stereocontrolled synthesis of both (1R*,3S*)- and (1R*,3R*)-3, highly potent pyrethroid, via aldehyde adducts of CF_3CX_2ZnX.



1

(1R*,3S*)-3 from 1

(1R*,3R*)-3 from 2

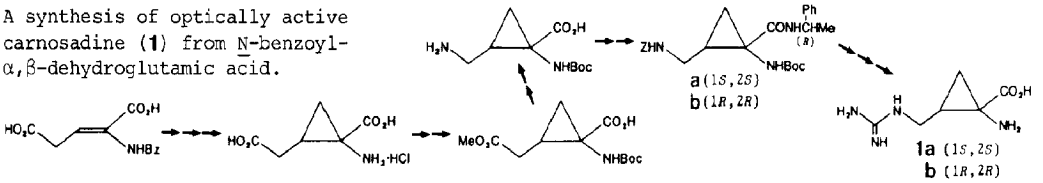
2

Tet.Lett.,27,19,2143 (1986)

SYNTHESIS AND STEREOCHEMISTRY OF CARNOSADINE, A NEW CYCLOPROPYL AMINO ACID FROM RED ALGA GRATELOUPIA CARNOSA

Tateaki Wakamiya, Yoshiaki Oda, Hiroshi Fujita, and Tetsuo Shiba
Faculty of Science, Osaka University, Toyonaka, Osaka 560, Japan

A synthesis of optically active carnosadine (**1**) from N-benzoyl-α,β-dehydroglutamic acid.

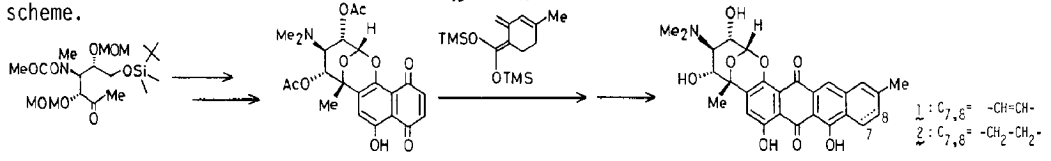


Tet.Lett.,27,19,2145 (1986)

TOTAL SYNTHESES OF (+)-NOGARENE AND (+)-7,8-DIHYDRONOGARENE

M. Kawasaki, F. Matsuda, and S. Terashima
Sagami Chemical Research Center, Nishi-Ohnuma, Sagamihara, Kanagawa 229, Japan

Total syntheses of the title compounds (1 and 2) were accomplished by the following synthetic scheme.

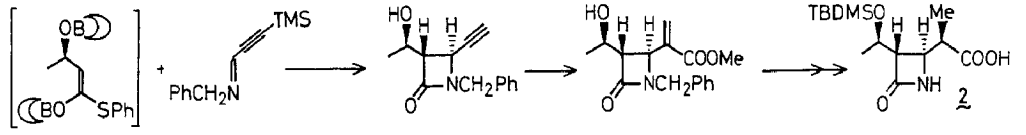


Tet.Lett.,27,19,2149 (1986)

SIMPLE, STEREOCONTROLLED SYNTHESIS OF 1β-METHYLCARBAPENEM ANTIBIOTICS FROM 3(R)-HYDROXYBUTYRIC ACID

Takamasa Iimori and Masakatsu Shibasaki*
Sagami Chemical Research Center, Nishi-Ohnuma, Sagamihara, Kanagawa 229, Japan

A stereocontrolled synthesis of the key intermediate **2** for 1β-methylcarbapenem antibiotics employing a vinyloxyborane-imine condensation as a key step.

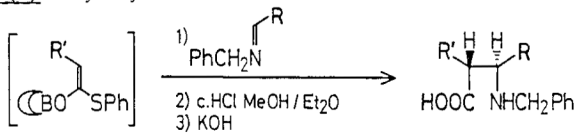


Tet.Lett.,27,19,2153 (1986)

ON THE STREOCHEMICAL COURSE OF VINYLOXYBORANE-IMINE CONDENSATION-THE STEREOSELECTIVE FORMATION OF THREO β-AMINO ACID DERIVATIVES-

Takamasa Iimori, Yasuko Ishida, and Masakatsu Shibasaki*
Sagami Chemical Research Center, Nishi-Ohnuma, Sagamihara, Kanagawa 229, Japan

Condensation of Z(O)-vinyloxyborane with imines.

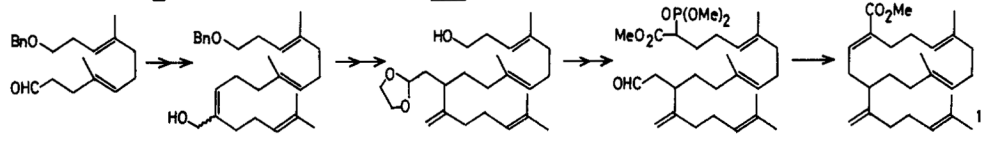


Tet.Lett.,27,19,2157 (1986)

SYNTHESIS OF MACROCYCLIC TERPENOIDS BY INTRAMOLECULAR CYCLIZATION X. TOTAL SYNTHESIS OF METHYL CERIFERATE-I

M. Kodama,* Y. Shiobara, H. Sumitomo, K. Fukuzumi, H. Minami, and Y. Miyamoto
Faculty of Pharmaceutical Sciences, Tokushima Bunri University, Yamashiro-cho, Tokushima 770, Japan

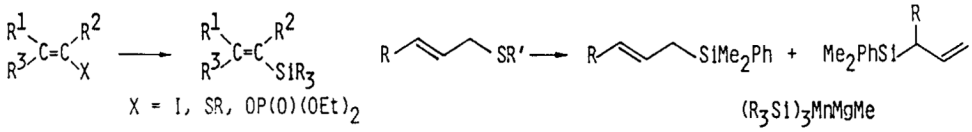
A synthesis of (±)-methyl ceriferate (1) via an intramolecular Wittig reaction.



Tet.Lett.,27,19,2161 (1986)

NEW SYNTHESES OF VINYLSILANES AND ALLYLSILANES BY CROSS-COUPLING OF $(R_3Si)_3MnMgMe$ WITH ALKENYL AND ALLYLIC COMPOUNDS

Keigo Fugami, Koichiro Oshima*, Kiitiro Utimoto, and Hitosi Nozaki
Department of Industrial Chemistry, Kyoto University, Kyoto 606 JAPAN

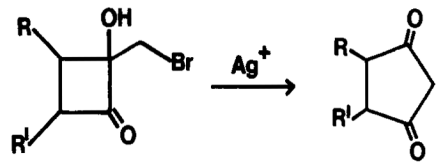


Tet.Lett.,27,19,2167 (1986)

A NEW ROUTE TO CYCLOPENTANE-1,3-DIONES

Neil K Hamer
University Chemical Laboratory, Lensfield Road, Cambridge, CB2 1EW, U.K.

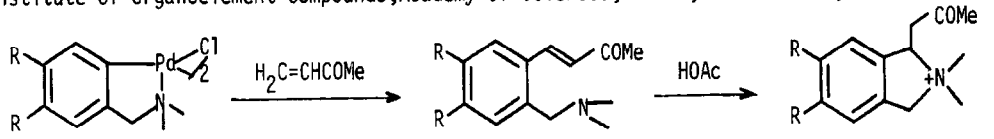
Cyclopentane diones from ring expansion of 2-bromomethyl-2-hydroxycyclobetanones.



Tet.Lett.,27,19,2169 (1986)

AN APPROACH TO ISOINDOLE SKELETON VIA ORTHO-PALLADATION

A.D.Ryabov,I.K.Sakodinskaya,S.N.Dvoryantsev,A.V.Eliseev,
A.K.Yatsimirsky
Department of Chemistry,Moscow State University,119899,Moscow V-234,U.S.S.R.
L.G.Kuz'mina,Yu.T.Struchkov
Institute of Organoelement Compounds,Academy of Sciences,117813,Moscow B-334,U.S.S.R.



Tet.Lett.,27,19,2173 (1986)

A NEW SYNTHETIC APPROACH TO THE BENZAZOLE RING SYSTEM. SYNTHESIS AND ELECTROCYCLIC RING CLOSURE OF DIALKENYL AND ALKENYL-ARYL SUBSTITUTED PYRROLES, IMIDAZOLES AND OXAZOLES

Janusz MOSKAL, Rens van STRALEN, Djurre POSTMA and Albert M. van LEUSEN*
Department of Organic Chemistry, Groningen University, The Netherlands