

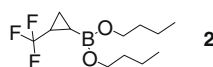
Tetrahedron Letters Vol. 51, No. 7, 2010

Contents

COMMUNICATIONS

Dibutyl 2-(trifluoromethyl)cyclopropylboronate as a useful (trifluoromethyl) cyclopropyl donor: application to antagonists of TRPV1 pp 1009–1011

Matthew A. J. Duncion^{*}, Leticia Ayala, Carl Kaub, Satyanarayana Janagani, William T. Edwards, Nina Orike, Krithika Ramamoorthy, John Kincaid, Michael G. Kelly

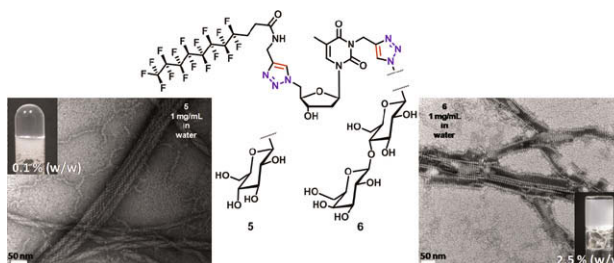


Compound 2 can act as a (trifluoromethyl)cyclopropyl donor by participation in a Suzuki reaction.



Glycosyl-nucleoside fluorinated amphiphiles as components of nanostructured hydrogels pp 1012–1015

Guilhem Godeau, Christophe Brun, H el ene Arnion, Cathy Staedel, Philippe Barth el emy^{*}

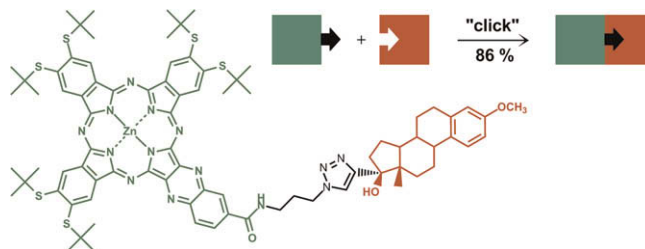


Glycosyl-nucleoside lipids (GNLs) were previously described as a new supramolecular tool for nucleic acids delivery. Here we describe new glycosyl-nucleoside amphiphiles featuring fluorinated hydrophobic chains (GNFs). These non-toxic fluorocarbon amphiphiles self-assemble into supramolecular structures capable of stabilizing hydrogels.



A phthalocyanine–mestranol conjugate for photodynamic therapy prepared via click chemistry pp 1016–1018

Veronika Novakova, Petr Zimcik^{*}, Miroslav Miletin, Kamil Kopecky, Jana Ivincov a



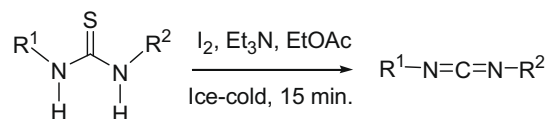
A photodynamic highly active phthalocyanine bearing an azide group is prepared and successfully conjugated with mestranol via click chemistry. Singlet oxygen and fluorescence quantum yields of the final conjugate are determined.



A greener synthetic protocol for the preparation of carbodiimide

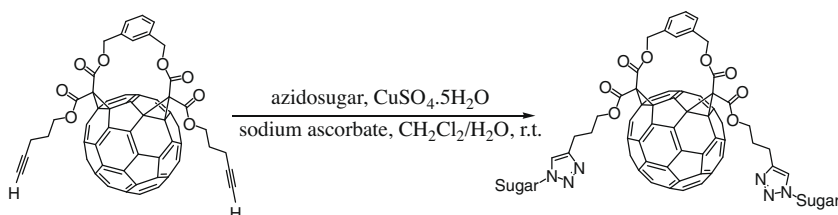
pp 1019–1021

Abdur Rezzak Ali, Harisadhan Ghosh, Bhisma K. Patel *

**'Click' chemistry as a tool for the facile synthesis of fullerene glycoconjugate derivatives**

pp 1022–1025

Guilherme Rocha Pereira, Leandro José Santos, Inácio Luduvico, Rosemeire Brondi Alves, Rossimiriam Pereira de Freitas *

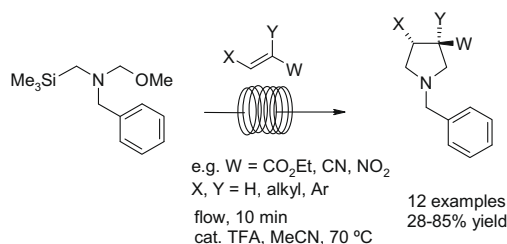


C_{60} derivative bearing terminal alkyne functional group has been used as a building block under copper-catalyzed azide-alkyne cycloaddition conditions to produce a series of fullerene glycoconjugate derivatives.

[3+2] Dipolar cycloadditions of an unstabilised azomethine ylide under continuous flow conditions

pp 1026–1029

Mark Grafton, Andrew C. Mansfield, M. Jonathan Fray *

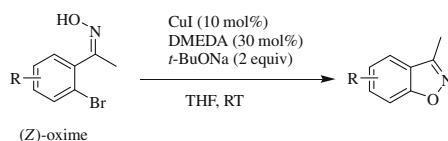


Under continuous flow conditions an azomethine ylide precursor reacts with 12 electron-deficient alkenes to give the corresponding pyrrolidines. The most reactive and therefore hazardous dipolarophiles give the best yields.

Copper-catalyzed cyclization of Z-oximes into 3-methyl-1,2-benzisoxazoles

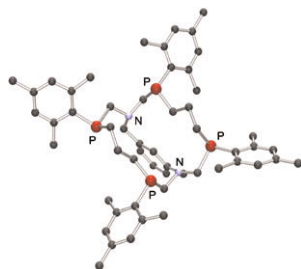
pp 1030–1033

Sandra Udd, Reija Jokela, Robert Franzén, Jan Tois *

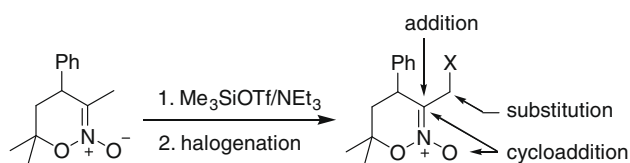


The first example of stereoselective self-assembly of a cryptand containing four asymmetric intracyclic phosphane groups

pp 1034–1037

Roman N. Naumov^{*}, Artem V. Kozlov, Kirill B. Kanunnikov, Santiago Gómez-Ruiz, Evamarie Hey-Hawkins, Shamil K. Latypov, Andrey A. Karasik, Oleg G. Sinyashin**Synthesis and reactions of 3-halomethyl-substituted oxazine N-oxides**

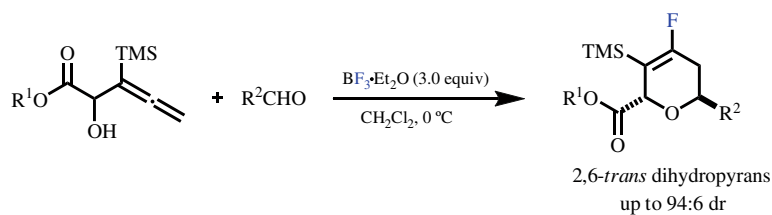
pp 1038–1040

Andrey A. Mikhaylov, Alexander D. Dilman^{*}, Roman A. Kunetsky, Yulia A. Khomutova, Marina I. Struchkova, Alexander A. Korlyukov, Sema L. Ioffe^{*}, Vladimir A. Tartakovsky

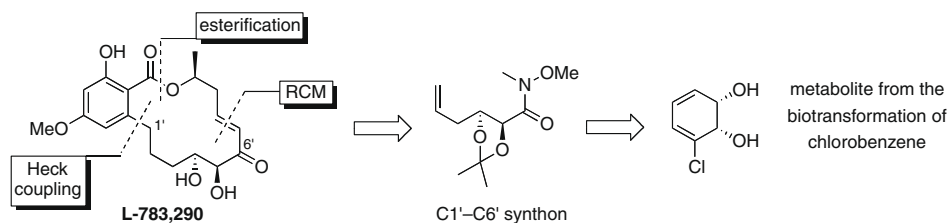
3-Halomethyl-1,2-oxazine-N-oxides (halogen = Cl, Br, I) are prepared and undergo reactions typical of cyclic six-membered nitronates.

**Highly stereocontrolled synthesis of fluorinated 2,6-trans dihydropyrans via Prins cyclization**

pp 1041–1043

Hai-Qing Luo, Xu-Hong Hu, Teck-Peng Loh^{*}**A chemoenzymatic and enantioselective total synthesis of the resorcylic acid lactone L-783,290, the trans-isomer of L-783,277**

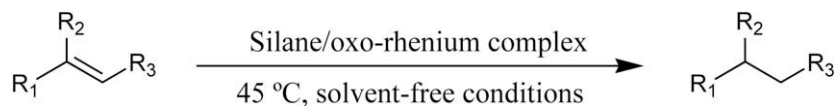
pp 1044–1047

Andrew Lin, Anthony C. Willis, Martin G. Banwell^{*}

A novel method for the reduction of alkenes using the system silane/oxo-rhenium complexes

pp 1048–1051

Rita G. de Noronha, Carlos C. Romão, Ana C. Fernandes *

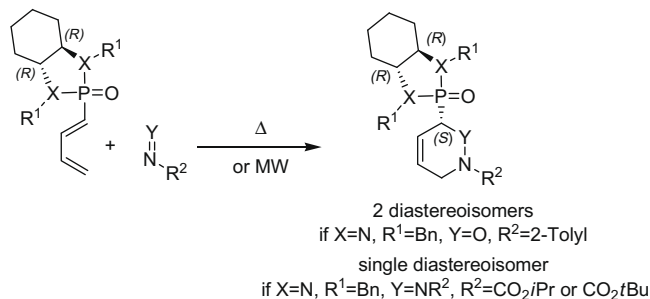


The system silane/oxo-rhenium complexes proved to be very efficient for the reduction of mono- and disubstituted alkenes.

Novel chiral 1-phosphono-1,3-butadiene for asymmetric hetero Diels–Alder cycloadditions with nitroso and azodicarboxylate dienophiles

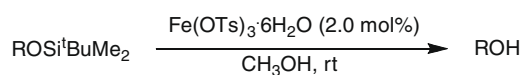
pp 1052–1055

Jean-Christophe Monbaliu, Bernard Tinant, Daniel Peeters, Jacqueline Marchand-Brynaert *

**A mild and chemoselective method for the deprotection of *tert*-butyldimethylsilyl (TBDMS) ethers using iron(III) tosylate as a catalyst**

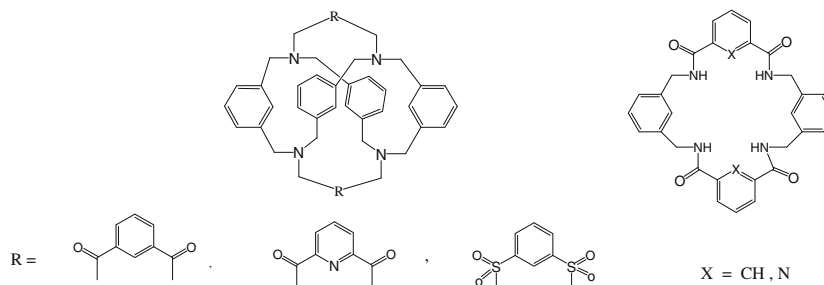
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Jason M. Bothwell, Veronica V. Angeles, James P. Carolan, Margaret E. Olson, Ram S. Mohan *

**Synthesis, characterization and complexation studies of some novel cyclophane amides and sulfonamides**

pp 1059–1063

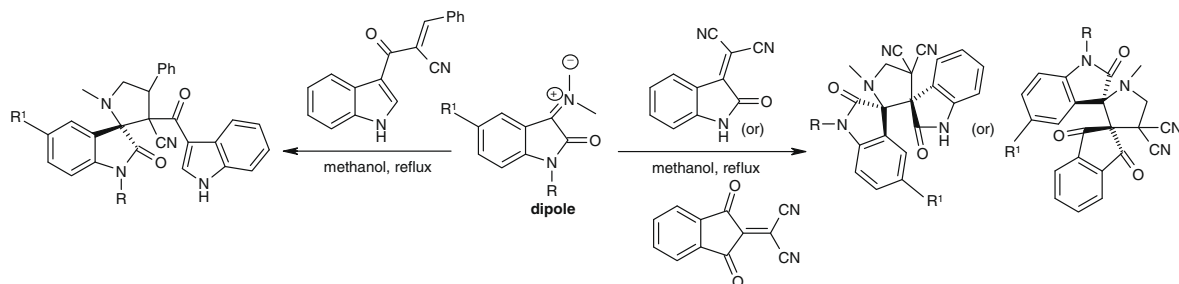
Perumal Rajakumar *, Ramar Padmanabhan



An expedient approach for the synthesis of dispiropyrrolidine bisoxindoles, spiroopyrrolidine oxindoles and spiroindane-1,3-diones through 1,3-dipolar cycloaddition reactions

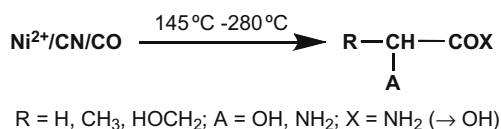
pp 1064–1068

Neelakandan Vidhya Lakshmi, Prakasam Thirumurugan, Paramasivan T. Perumal *

**Synthesis of α -amino and α -hydroxy acids under volcanic conditions: implications for the origin of life**

pp 1069–1071

Claudia Huber, Wolfgang Eisenreich, Günter Wächtershäuser *

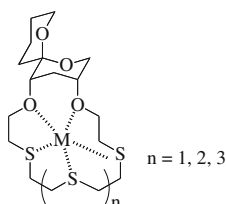


Facile synthesis of α -hydroxy and α -amino acids is observed at temperatures from 145 to 280 °C with catalytic Ni²⁺, with cyano ligands as source for C and N, and with CO as a reductant and as a source for C. Implications for the problem of the origin of life are discussed.

Metal binding studies using spiroacetal thiocrown ethers

pp 1072–1074

Marica Nikac, Margaret A. Brimble *, Robyn L. Crumbie, Trevor D. Bailey

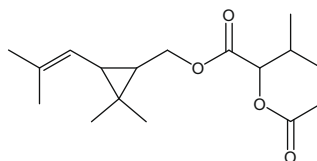


The binding ability of three spiroacetal thiocrown ethers with Li⁺, Na⁺, K⁺, Cs⁺, Co²⁺, Cd²⁺, Ag⁺ and Pb²⁺ is reported.

Chrysanthemyl 2-acetoxy-3-methylbutanoate: the sex pheromone of the citrophilous mealybug, *Pseudococcus calceolariae*

pp 1075–1078

Ashraf M. El-Sayed *, C. Rikard Unelius, Andrew Twidle, Vanessa Mitchell, Lee-Anne Manning, Lyn Cole, David M. Suckling, M. Fernanda Flores, Tania Zaviezo, Jan Bergmann

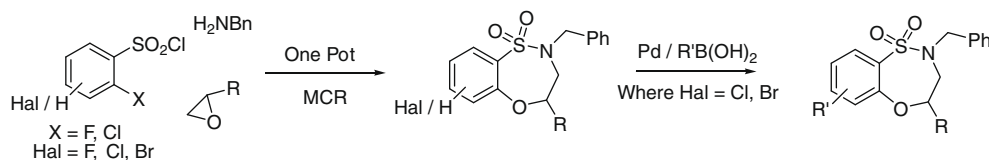


The sex pheromone of the citrophilous mealybug is identified from the headspace volatiles of virgin females as [2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropyl]methyl 2-acetoxy-3-methylbutanoate based on GC-MS analysis, derivatization procedures and field-trapping experiments with the synthetic compound.

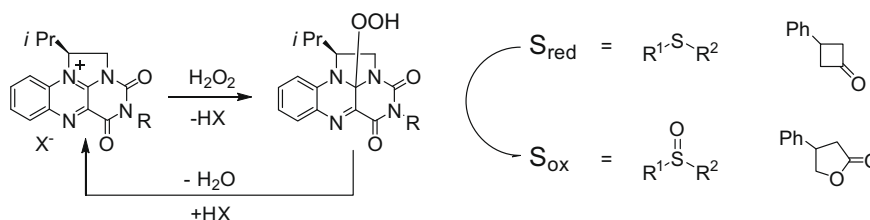


Synthesis of novel benzoxathiazepine-1,1-dioxides by means of a one-pot multicomponent reaction

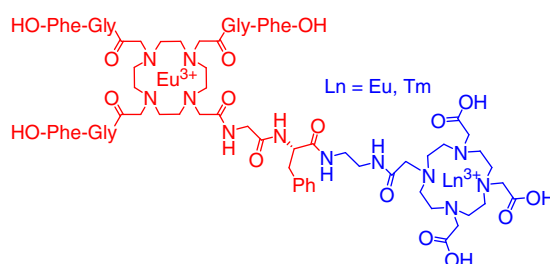
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Ed Cleator^{*}, Carl A. Baxter, Michael O'Hagan, Timothy J. C. O'Riordan, Faye J. Sheen, Gavin W. Stewart
 N^1, N^{10} -Ethylene-bridged flavinium salts derived from L-valinol: synthesis and catalytic activity in H_2O_2 oxidations

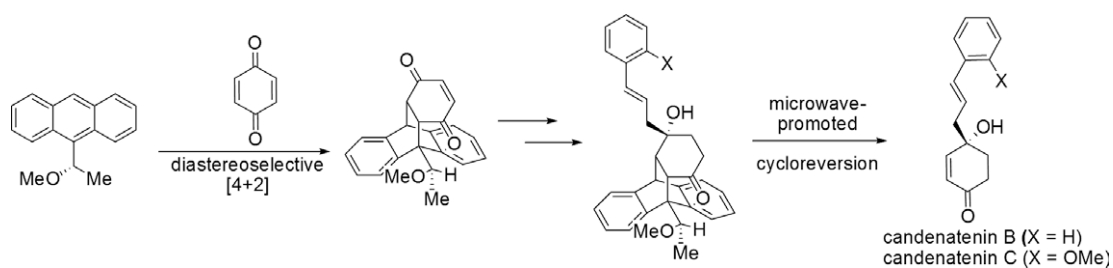
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Jiří Žurek, Radek Cibulka^{*}, Hana Dvořáková, Jiří Svoboda
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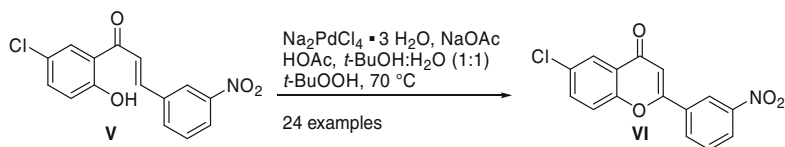
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Amanda L. Jones, Xiang Liu, John K. Snyder^{*}

A two step synthesis of BzR/GABAergic active flavones via a Wacker-related oxidation

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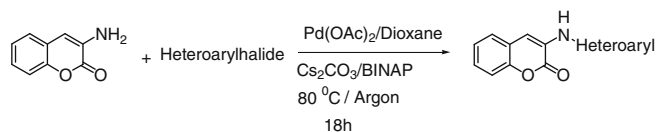
Michael Lorenz, M. Shahjahan Kabir, James M. Cook *



Synthesis of biologically potent new 3-(heteroaryl)aminocoumarin derivatives via Buchwald–Hartwig C–N coupling

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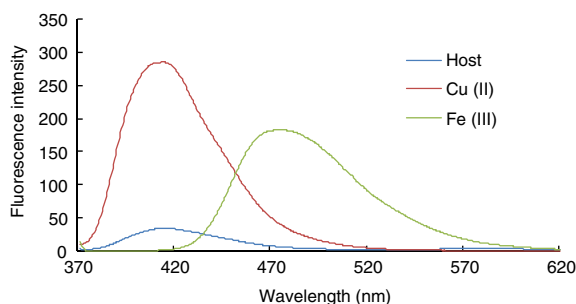
Asish R. Das *, Arunima Medda, Raghunath Singha



A benzimidazole-based single molecular multianalyte fluorescent probe for the simultaneous analysis of Cu²⁺ and Fe³⁺

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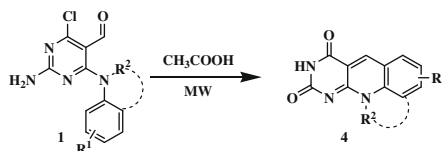
Doo Youn Lee, Narinder Singh, Doo Ok Jang *



A straightforward synthesis of pyrimido[4,5-*b*]quinoline derivatives assisted by microwave irradiation

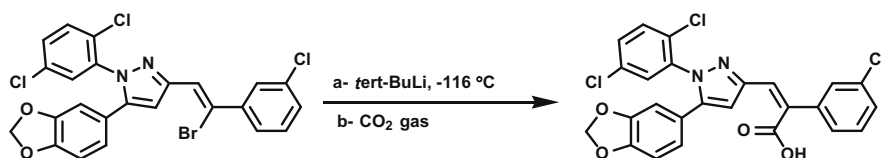
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Jairo Quiroga *, Jorge Trilleras, Braulio Insuasty, Rodrigo Abonía, Manuel Nogueras *, Antonio Marchal, Justo Cobo



Carboxylation reaction of a highly functionalized vinylic anion: a case of unexpected stability and reactivity

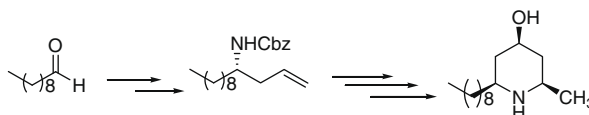
pp 1110–1113

Laurent Gomez ^{*}, Jiejun Wu, Neelakandha S. Mani, Sudip Basu, Josef Moravek, J. Guy Breitenbucher

Attempts to prepare JNJ 26273364, a highly functionalized pyrazole-based CCK₁ receptor antagonist, using a carboxylation reaction led to a series of unexpected results. This work demonstrated the unique reactivity and stability of the highly functionalized Z-alkene functionality present around the pyrazole.

**Stereoselective synthesis of dendrobate alkaloid (+)-241D and its C-4 epimer**

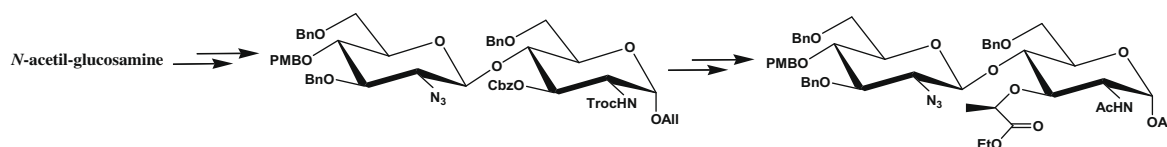
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R. Sateesh Chandra Kumar, G. Venkateswar Reddy, G. Shankaraiah, K. Suresh Babu, J. Madhusudana Rao ^{*}

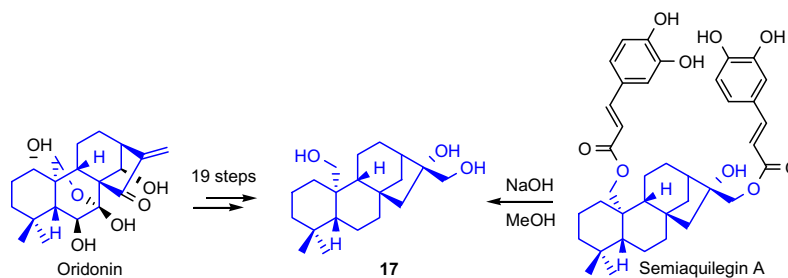
The stereoselective synthesis of an alkaloid (+)-241D and its C-4 epimer is described.

Synthesis of a β -GlcN-(1 \rightarrow 4)-MurNAc building block en route to N-deacetylated peptidoglycan fragments

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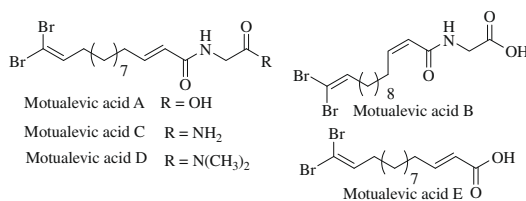
Luigi Cirillo, Emiliano Bedini ^{*}, Antonio Molinaro, Michelangelo Parrilli**Formal synthesis of semiaquilegin A**

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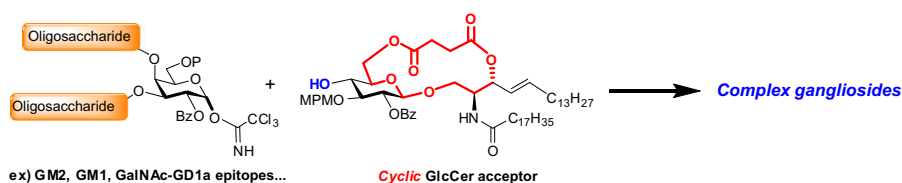
Jing Li, Yong Jiang, Qingjiang Li, Qiang Xiao, Yanxing Jia ^{*}, Pengfei Tu ^{*}

Total synthesis of motualevic acids A–E

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Gangarajula Sudhakar ^{*}, Vilas D. Kadam, Vaddu V. N. Reddy**A cyclic glucosyl ceramide acceptor as a versatile building block for complex ganglioside synthesis**

pp 1126–1130

Kohki Fujikawa, Tomohiro Nohara, Akihiro Imamura, Hiromune Ando, Hideharu Ishida ^{*}, Makoto Kiso ^{*}^{*}Corresponding author

Supplementary data available via ScienceDirect

COVER

A modular synthesis of the resorcylic acid lactone L-783,290 is reported. A readily available metabolite from the whole-cell biotransformation of chlorobenzene is used to prepare a C1'–C6' synthon that is incorporated into the target macrolide using Heck coupling and ring-closing metathesis (RCM) processes.

Tetrahedron Letters **2010**, 51, 1044–1047.

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