BioMed. Chem. 1993, 1, 77

Syntheses and Biological Activities of Chemically Stable Prostacyclin
Mimics with cis-Bicyclo[4,3,0]nonene Ring System: The Novel Homoisocarbacyclin Analogues
Sen-ichi Narita. Atsuo Takahashi. Tsuyoshi Aoki. Hiroyasu Sato. Shoji Satoh. Shin-ichi Yamada.
Michiko Kudo, Takaji Yamaguchi, Kentaro Kogi and Masakatsu Shibasaki
Fukushima Research Laboratories, TOA EIYO Ltd., 1 Tanaka, Yuno, lizaka, Fukushima 960-02, Japan

b Faculty of Pharmaceutical Sciences, The University of Tokyo, 7-3-1 Hongo, Bunkyo-ku, Tokyo 113, Japan

Conformationally Constrained Analogues of Diacylglycerol (DAG)-II.

BioMed. Chem. 1993, 1, 119

Differential Interaction of δ -Latones and γ -Lactones with Protein Kinase C (PK-C) J. Lee, V. E. Marquez, 1* P. M. Blumberg, 2 K. W. Krausz 2 and M. G. Kazanietz 2

¹Laboratory of Medicinal Chemistry, Developmental Therapeutics Program, Division of Cancer Treatment and Molecular Mechanisms of Tumor Promotion Section; and ²Laboaratory of Cellular Carcinogenesis and Tumor Promotion, National Cancer Institute, National Institutes of Health, Bethesda, Maryland 20892

Starting with L- or D-tri-O-acetylglucal, the corresponding L- and D-isomers of 4-O-tetradecanoyl-2,3-dideoxyglucono-1,5-lactone (2a and 2b) were synthesized as rigid diacylglycerol (DAG) analogues

R = CH₂(CH₂)₁₂.

RCOO RCOO

1a (3R.45)-L

16 (35,4R)-D

24 (4R.35)-L 25 (4S,5R)-D

IRON(III)/HYDROPEROXIDE (FENTON REAGENT)-INDUCED ACTIVATION OF DIOXYGEN FOR (A) THE DIRECT KETONIZATION OF METHYLENIC CARBON AND (B) THE DIOXYGENATION OF CIS-STILBENE

Chan Kang, Chad Redman, Veronica Cepak, and Donald T. Sawyer*

Department of Chemistry, Texas A&M University, College Station, Texas 77843.

BioMed. Chem. 1993, 1, 125

BioMed. Chem. 1993, 1, 141

Two Step Single Primer Mediated Polymerase Chain Reaction. Application to Cloning of Putative Mouse, β -Galactoside α 2,6-Sialyltransferase cDNA

T. Hamamoto, M. Kawasaki, N. Kurosawa, T. Nakaoka, Y.-C. Lee and S. Tsuji Glyco Molecular Biology, Frontier Research Program, The Institute of Physical and Chemical Research (RIKEN), Wako, Saitama 351-01, Japan

Single primer mediated PCR is a method to amplify a particular DNA fragment beyond its known sequence region. It employs only one primer for the reaction. Compared to other PCR methods to amplify an adjacent sequence of known DNA fragment.

X-Neu5Ac: A Novel Substrate for Chromogenic Assay of Neuraminidase Activity in Bacterial Expression Systems

BioMed. Chem. 1993, 1, 147

I. Fujii,* Y. Iwabuchi, T. Teshima, T. Shiba and M. Kikuchi Protein Engineering Research Institute, 6-2-3 Furuedai, Suita. Osaka 565, Japan

Simplified model for hydrolysis of chromogenic substrate 1. The hydrolysis product 2 undergoes rapid aerobic oxidation to form indigo blue pigment 3.

β-Lactamase Inhibitors Derived from N-Tosyloxy-β-Lactams

BioMed. Chem. 1993, 1, 151

M. Teng and M. J. Miller*

Department of Chemistry and Biochemistry, University of Notre Dame, Notre Dame, IN 46556

T. I. Nicas,* J. Grissom-Arnold and R. D. G. Cooper

Lilly Research Laboratories, Eli Lilly and Company, Lilly Corporate Center, Indianapolis, IN 46285

Electrophilic N-tosyloxy- β -lactams, N-tosyloxy-4-phenyl-2-azetidinone (2b) and N-tosyloxy-3-(S)-phthalimido-4-(S)-2-azetidinone (2c), are described. These agents are novel potent β -lactamase inhibitors.

Enzymatic Resolution of Racemic 1,2:5,6-di-O-Cyclohexylidene and 1,2:3,4-di-O-Cyclohexylidene-myo-Inositol

BioMed. Chem. 1993, 1, 155

L. Ling, X. Li, Y. Watanabe, T. Akiyama and S. Ozaki*

Department of Applied Chemistry, Faculty of Engineering, Ehime University, Matsuyama 790, Japan

Enzyme-catalyzed regio- and enantioselective esterification of racemic 1,2:5,6-di-O-cyclohexylidene- and 1,2:3,4-di-O-cyclohexylidene-myo-inositol, which are key intermediates for syntheses of various naturally occurring myo-inositol phosphate derivatives, proceeded exclusively in organic solvent to give optically pure materials and selectively protected products in gram scale.