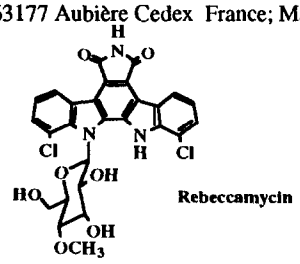
INDOLOCARBAZOLE PROTEIN KINASE C INHIBITORS FROM REBECCAMYCIN.

BioMed. Chem. **1994**, *2*, 73

Serge FABRE, Michelle PRUDHOMME*, Martine SANCELME Université Blaise Pascal, Laboratoire de Chimie Organique Biologique, URA 485, 63177 Aubière Cedex France; Maryse RAPP Unité INSERM U71, Rue Montalembert, 63005 Clermont-Ferrand, France.



Rebeccamycin

Structural modifications of Rebeccamycin, an antitumor antibiotic without activity against protein kinase C, are described. The inhibitory potencies of the derivatives against this enzyme are presented.

BioMed. Chem. **1994**, *2*, 79

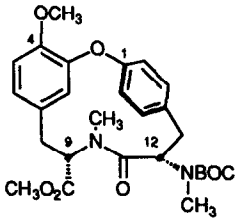
Expression of Mouse Galβ1,4GlcNAc α2,6-Sialyltransferase in an Insoluble Form in *Escherichia coli* and Partial Renaturation

Toshiro Hamamoto, Young-Choon Lee, Nobuyuki Kurosawa, Takashi Nakaoka, Naoya Kojima and Shuichi Tsuji
Glyco Molecular Biology, Frontier Research Program, The Institute of Physical and Chemical Research (RIKEN), 2-1 Hirosawa, Wako, Saitama 351-01, JAPAN

Mouse Galβ1,4GlcNAc α2,6-sialyltransferase was produced in an insoluble form in *Escherichia coli*, solubilized in 8M urea and renatured. The substrate specificity and kinetic parameters, except for the specific activity, of the renatured enzyme were similar to those of the enzyme obtained from rat.

BioMed. Chem. **1994**, *2*, 85

Design, Synthesis and Evaluation of Bouvardin, Deoxybouvardin and RA-I - XI-V Pharmacophore Analogs, Dale L. Boger* and Michael A. Patane, *Department of Chemistry, The Scripps Research Institute, 10666 North Torrey Pines Road, La Jolla, California 92037,* Qing Jin and Paul A. Kitos, *Department of Biochemistry, The University of Kansas, Lawrence, Kansas 66045*



The synthesis and in vitro cytotoxic evaluation of a key set of cycloisodityrosine subunit analogs of deoxybouvardin and RA-VII are detailed and constitute a complete investigation of the natural product pharmacophore.

RATIONAL DESIGN OF HIGH AFFINITY TACHYKININ NK_2 RECEPTOR ANTAGONISTS

BioMed. Chem. **1994**, *2*, 101

S. Boyle, S. Guard, J. Hodgson, D.C. Horwell, W. Howson*, J. Hughes, A. McKnight, K. Martin, M.C. Pritchard, K.J. Watling, G.N. Woodruff. *Parke-Davis Neuroscience Research Centre Addenbrookes Hospital Site, Hills Road, Cambridge CB2 2QB, U.K.* The rational discovery of a selective, high affinity (K_i= 1.4 nM) NK_2 receptor antagonist (**19**) from Leu-Met-Gln-Trp-Phe-GlyNH_2 (**8c**) is described using a general strategy for peptoid design.

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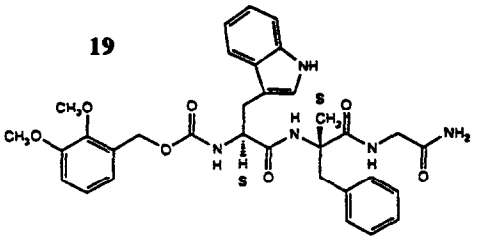
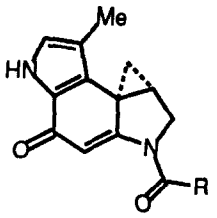


BioMed. Chem. **1994**, *2*, 115

Molecular Basis for Sequence Selective DNA Alkylation by (+)- and *ent*-(-)-CC-1065 and Related Agents: Alkylation Site Models that Accommodate the Offset AT-rich Adenine N3 Alkylation Selectivity, Dale L. Boger,* Douglas S. Johnson, Weiya Yun and Christine M. Tarby, *Department of Chemistry, The Scripps Research Institute, 10666 North Torrey Pines Road, La Jolla, California 92037.*



A detailed evaluation of the DNA alkylation selectivity of (+)-CC-1065, *ent*-(-)-CC-1065 and a series of aborted and extended analogs possessing the CPI alkylation subunit is detailed and the refinement of a model that accommodates the offset AT-rich adenine N3 alkylation selectivity of the enantiomeric agents is presented.

BioMed. Chem. **1994**, *2*, 137

Antitumor Agents — CLI. Bis(helenalinyl)Glutarate and Bis(Isoalantodiol-B) Glutarate, Potent Inhibitors of Human DNA Topoisomerase II

Chung-Hsiung Chen,[†] Li-Ming Yang,[†] Thomas Tung-Ying Lee,[†,‡] Ya-Ching Shen,[†] De-Cheng Zhang,[†] De-Ji Pan,[†] Andrew T. McPhail,[#] Donald R. McPhail,[#] Su-Yin Liu,[§] De-Hua Li,[§] Yung-Chi Cheng,[§] and Kuo-Hsiung Lee[†,*]

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Abstract — Evaluation of a number of cytotoxic antitumor sesquiterpene lactones and their derivatives has led to the discovery of bis(helenalinyl)glutarate (**4**) and bis(isoalantodiol-B)glutarate (**10**) as potent inhibitors of human-derived topoisomerase II. Unlike etoposide, which inhibits by preventing the DNA rejoining process, compounds **4** and **10** inhibit topoisomerase II without causing DNA breakage. The structure-activity relationships of **4**, **10**, and related compounds are discussed.