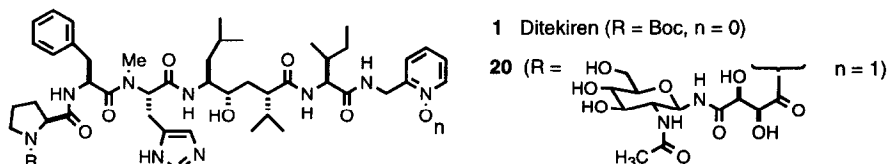


GRAPHICAL ABSTRACTS

Appraisal of a Glycopeptide Cloaking Strategy for a Therapeutic Oligopeptide: Glycopeptide Analogs of the Renin Inhibitor Ditekiren.

Allen W. Harrison, Jed F. Fisher,* David M. Guido, Sally J. Couch, Judy A. Lawson, Dorothy M. Sutter, Mark V. Williams, Garry L. DeGraaf, John E. Rogers, Donald T. Pals, Donald W. DuCharme

BioMed. Chem. 1994, 2, 1339



N-terminus *N*-linked glycopeptide derivatives of **1**, exemplified by **20**, exhibit significantly increased hypotensive activity relative to **1** in a human renin-infused rat assay. This activity increase extends over a range of different β -linked D-pyranose saccharide and linker structures.

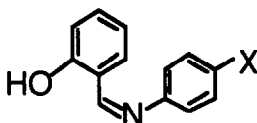
POTENTIAL RADIOPROTECTIVE AGENTS. 4.

SCHIFF BASES, Robert T. Blickenstaff, Shailaga

Reddy, and Robert Witt, VA Medical Center and IU School of Medicine, and Kenny B. Lipkowitz, IUPUI, Indianapolis, Indiana, 46202

Abstract: Schiff bases of substituted anilines were synthesized and tested as radioprotective agents in mice.

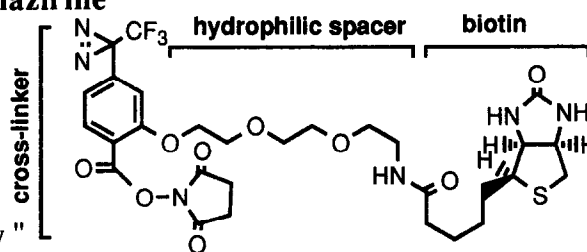
BioMed. Chem. 1994, 2, 1363



A Novel Biotinylated Heterobifunctional Cross-Linking Reagent Bearing An Aromatic Diazirine

Y. Hatanaka,* M. Hashimoto,^a Y. Kanaoka^b
^aRes. Inst. for Wakan-Yaku, Toyama Medical and Pharmaceutical Univ., Sugitani 2630, Toyama, 930-01 JAPAN; ^b Fac. of Pharmaceutical Sci., Hokkaido Univ.; ^c Toyama Women's Coll.

"A new cross-linker for specific manipulation of labeled components by avidin-biotin technology"



BioMed. Chem. 1994, 2, 1367

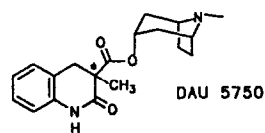
SYNTHESIS, ABSOLUTE CONFIGURATION, CONFORMATIONAL ANALYSIS AND BINDING AFFINITY PROPERTIES OF ENANTIOMERIC FORMS OF DAU 5750, A NOVEL M1-M3 MUSCARINIC RECEPTOR ANTAGONIST

M. Turconi¹, A. Gozzo^{1*}, G. Schiavi¹, G. Fronza², A. Mele², P. Bravo²

¹Departments of Medicinal Chemistry and Biochemistry, Boehringer Ingelheim Italia S.p.A., via Serio 15, I-20139 Milan, Italy

²Dipartimento di Chimica, CNR-Centro Studio Sostanze Organiche Naturali, Politecnico, via Mancinelli 7, I-20131 Milan, Italy

Compd.	Kd, nM		
	M1	M2	M3
DAU 5750 (racem.)	26	1066	140
8-(R)-(-)	530	20000	2100
8-(S)-(+)	19	670	80

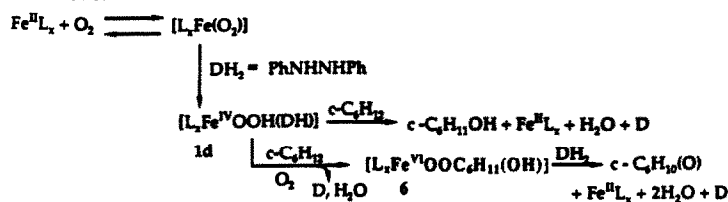


BioMed. Chem. 1994, 2, 1375

BioMed. Chem. 1994, 2, 1385

Donald T. Sawyer,* Xiu Liu, Chad Redman and Bethsheba Chong
Department of Chemistry, Texas A&M University, College Station, Texas 77743

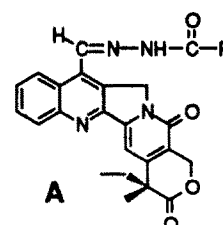
Brief: Iron(II) complexes ($\text{Fe}^{\text{II}}\text{L}_x$) in combination with reductants (DH_2) catalytically activate O_2 for the hydroxylation and ketonization of saturated hydrocarbons.



SYNTHESIS OF NOVEL WATER-SOLUBLE 7-(AMINOACYLHYDRAZONO)-FORMYL CAMPTOTHECINS WITH POTENT INHIBITION OF DNA TOPOISOMERASE II

Hui-Kang Wang,^a Su-Yin Liu,^b Kou-Maou Hwang,^c Glen Taylor, and Kuo-Hsiung Lee^{*,a} ^aNatural Products Laboratory, Division of Medicinal Chemistry and Natural Products, School of Pharmacy, University of North Carolina, Chapel Hill, North Carolina 27599, ^bSintong Pharmaceutical Company, U. S., Hayward, CA 94505; ^cGenelabs Technologies Inc., Redwood City, CA 94063

Abstract: Eighteen new water-soluble 7-(aminoacylhydrazono)-formyl camptothecins with general structure (A) were synthesized and evaluated for their ability to cause protein-linked DNA breaks and to inhibit topoisomerase I activity. The results suggest that the 7 position in the B ring is a suitable location for introducing a polar moiety into camptothecin with enhanced topoisomerase I inhibiting activity.

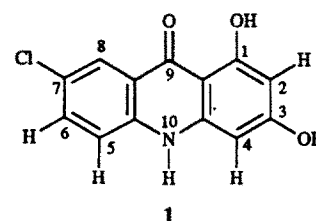


ANTIPROLIFERATIVE ACTIONS OF 7-SUBSTITUTED 1,3-DIHYDROXY-ACRIDONES; POSSIBLE INVOLVEMENT OF DNA TOPOISOMERASE II AND PROTEIN KINASE C AS BIOCHEMICAL TARGETS

Kenneth F. Bastow,^a Masataka Itoigawa,^{b,c} Hiroshi Furukawa,^c Yoshiki Kashiwada,^e
Ibrahim D. Bori,^a Lawrence M. Ballas,^d and Kuo-Hsiung Lee^{a,*}

^aDivision of Medicinal Chemistry and Natural Products, School of Pharmacy, University of North Carolina, Chapel Hill, NC 27599, ^bVisiting Research Scholar, ^cPresent Address: Meijo University, Nagoya, Japan, ^dSphinx Pharmaceuticals Corporation, Durham, NC 27717, ^eNatural Products Laboratory, School of Pharmacy, University of North Carolina, Chapel Hill, NC 27599

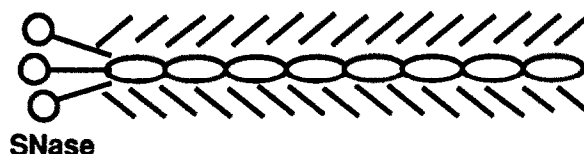
Abstract: 7-Chloro-1,3-dihydroxyacridone (**1**) as an *in vitro* inhibitor of DNA topoisomerase II and Protein Kinase C subtype delta and as a cytostatic/cytotoxic, antiviral agent is reported.



PHAGE DISPLAY OF CATALYTICALLY ACTIVE STAPHYLOCOCCAL NUCLEASE, J. Ku and P.G. Schultz*, *Department of Chemistry, University of California, Berkeley, CA 94720*

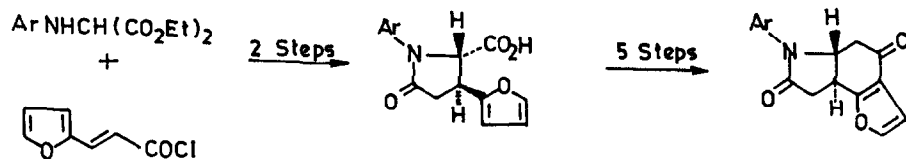
BioMed Chem. 1994, 2, 1413

Abstract: Functional Staphylococcal nuclease (SNase) was fused to the N-terminus of the gene III protein of filamentous phage fd1et.



STRUCTURALLY DESIGNED NOVEL FUROGAMMA LACTAMS AS INHIBITOR FOR BACTERIAL PROPAGATIONS

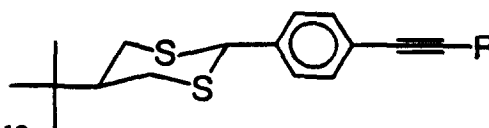
Jayanta K. Ray^{*}, Izhar Sami, Gandhi K. Kar, Bidhan C. Roy, Department of Chemistry, Indian Institute of Technology, Kharagpur 721302 (INDIA); and Nitosh K. Brahma, Department of Chemical Engineering, Indian Institute of Technology, Kharagpur 721302 (INDIA).



Structure-Activity Studies Leading to Potent Chloride Channel Blockers: *5e-tert*-Butyl-2-[4-(substituted-ethynyl)phenyl]-1,3-dithianes

Qing X. Li and John E. Casida

Environmental Chemistry and Toxicology Laboratory,
Dept. of ESPM, University of California, Berkeley, CA 94720-3112



Water-soluble dithianes ($\text{R} = \text{CH}_2\text{OCH}_2\text{CO}_2\text{H}$ or $\text{CH}_2\text{OCH}_2\text{PO}_3\text{H}_2$) block the GABA-gated chloride channel by 50% at 3-8 nM. The potency of 44 analogs is related to the polarizable volume of the R substituent.