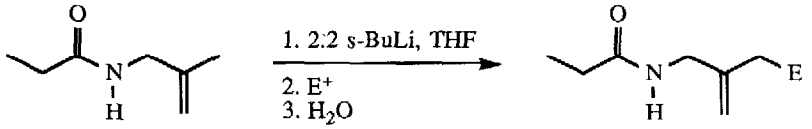
GRAPHICAL ABSTRACTS

Tetrahedron Lett. 30, 2029 (1989)

REMOTE LITHIATION OF *N*-METHALLYL AMIDES

Dale J. Kempf
Pharmaceutical Products Division, Abbott Laboratories, Abbott Park, IL 60064

Metalation of *N*-methallyl amides occurs at nitrogen and at the remote methyl group. Further treatment with electrophiles gives rise to γ-substituted derivatives.

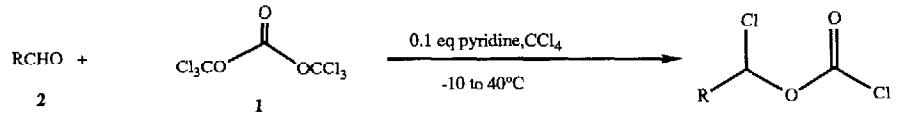


Tetrahedron Lett. 30, 2033 (1989)

TRICHLOROMETHYL CARBONATE AS A PRACTICAL PHOSGENE SOURCE: APPLICATION TO THE SYNTHESIS OF α-CHLORO CHLOROFORMATES

Michael J. Coghlan* and Blake A. Caley
Lilly Research Laboratories, A Division of Eli Lilly and Co., Greenfield, Indiana 46140

Summary: Trichloromethyl carbonate **1** is used as a phosgene equivalent in the preparation of α-chloro chloroformates. This stable, crystalline reagent smoothly delivers products **3** in good yields under mild conditions.

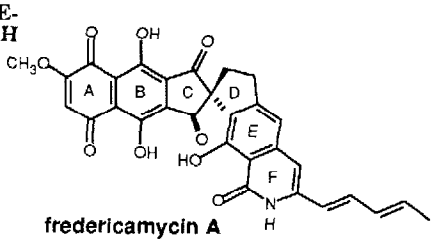


Tetrahedron Lett. 30, 2037 (1989)

STUDIES ON THE TOTAL SYNTHESIS OF FREDERICAMYCIN A: DEVELOPMENT OF AN INTERMOLECULAR ALKYNE-CHROMIUM CARBENE COMPLEX CYCLIZATION APPROACH TO THE ABCDE RING SYSTEM

Dale L. Boger* and Irina C. Jacobson
Departments of Chemistry and Medicinal Chemistry
Purdue University, West Lafayette, Indiana, 47907, USA

The development of a synthetic approach to the fredericamycin A ABCDE ring system based on a regiospecific intermolecular alkyne-chromium carbene complex cyclization is detailed.



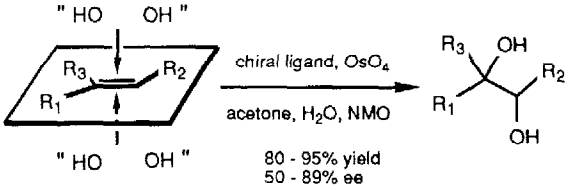
fredericamycin A

Tetrahedron Lett. 30, 2041 (1989)

DOCUMENTING THE SCOPE OF THE CATALYTIC ASYMMETRIC DIHYDROXYLATION

B. Bhushan Lohray, Thomas H. Kalantar, B. Moon Kim, Christine Y. Park
Tomoyuki Shibata, John S. M. Wai, and K. Barry Sharpless
Department of Chemistry, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139

A wide variety of functionalized and unfunctionalized olefins are efficiently converted to the corresponding cis vicinal diols in moderate to good enantiomeric excess via "slow addition" enhanced catalytic asymmetric osmylation process

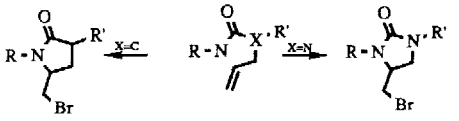


Tetrahedron Lett.30,2045(1989)

HALOCYCLIZATIONS: THE CYCLIZATION OF HETEROCYCLIC OLEFINIC AMIDES AND UREAS

T.W. Balko, R.S. Brinkmeyer*, and N.H. Terando
Lilly Research Laboratories, Eli Lilly and Co., Greenfield, Indiana 46140

Studies of the halocyclization of olefinic amides and ureas were undertaken and demonstrated cyclization on nitrogen depended on the substituent on the amide nitrogen.

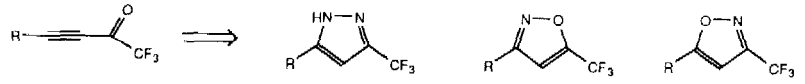


Tetrahedron Lett.30,2049(1989)

AN EFFICIENT METHOD FOR THE SYNTHESIS OF TRIFLUOROMETHYL SUBSTITUTED HETEROCYCLES

Russell J. Linderman* and Kirollos S. Kirollos, Department of Chemistry, North Carolina State University, Raleigh, NC 27695

Trifluoromethyl substituted pyrazoles and isoxazoles have been prepared regiospecifically from trifluoracetyl acetylenes

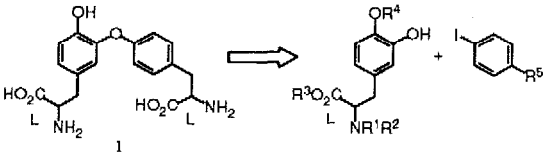


Tetrahedron Lett.30,2053(1989)

SYNTHESIS OF L,L-ISODITYROSINE

Dale L. Boger* and Daniel Yohannnes
Departments of Chemistry and Medicinal Chemistry, Purdue University, W. Lafayette, Indiana 47907 USA

A study of the development of reaction conditions for implementation of an activated Ullmann diaryl ether condensation reaction that may be conducted without amino acid racemization and that has proven suitable for the incorporation of a selectively protected catechol is described and its application to the synthesis of LL-isodityrosine (1) is detailed.



1

Tetrahedron Lett.30,2057(1989)

SYNTHESIS OF 5-SUBSTITUTED NUCLEOSIDES VIA THE REGIOSELECTIVE LITHIATION OF 2'-DEOXY-3',5'-BIS-O-[(1,1-DIMETHYLETHYL)DIMETHYLSILYL]-URIDINE

Robert W. Armstrong*, Saaket Gupta, and Fayelle Whelihan
Department of Chemistry and Biochemistry, University of California, Los Angeles, CA 90024