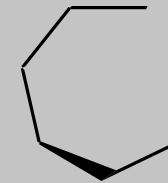


Asymmetric Total Synthesis of (-)-Phaeocaulisin A

D. J. Procter

Phaeocaulisin A, which is a natural product of *C. phaeocaulis* and has been shown to be a potent inhibitor of the enzyme phospholipase C- β . It is a bicyclic compound consisting of a decalin core with a side chain.



Phaeocaulisin A is a bicyclic compound consisting of a decalin core with a side chain. It is a potent inhibitor of the enzyme phospholipase C- β .

Phaeocaulisin A is a bicyclic compound consisting of a decalin core with a side chain. It is a potent inhibitor of the enzyme phospholipase C- β .

The synthesis of Phaeocaulisin A is a complex process involving several steps. It is a potent inhibitor of the enzyme phospholipase C- β .

For more information, see: *J. Am. Chem. Soc.* **2021**, *143*, 3655.

Nat Catal. **2019**, *2*, 211.

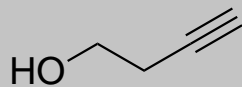
Organomet. Chem., **2016**, *40*, 1. (Review article)

Tomoya Ozaki, Liu Group, Boston College

2022/04/22

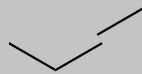
Reheic Anal i

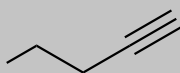




2

0.52 !/g



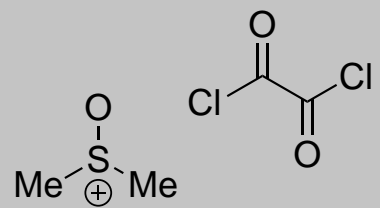


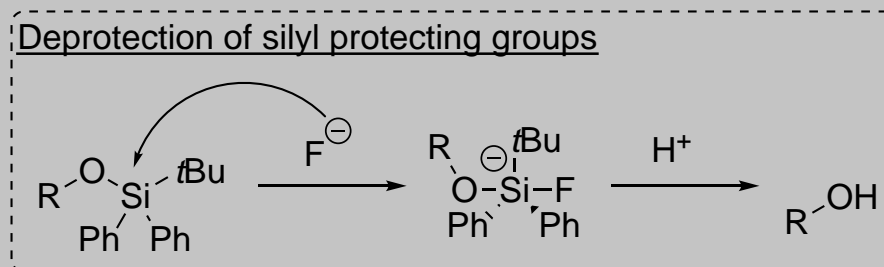
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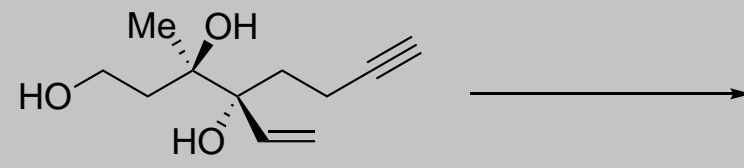
0.52 !/g



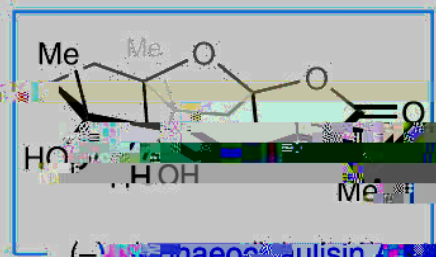
Swern Oxidation







b

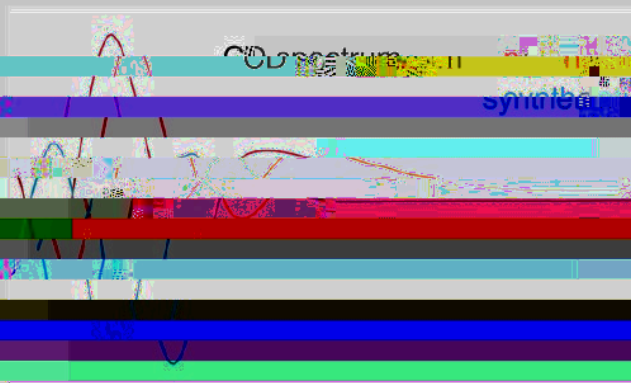


natural
 $[\alpha]_D^{25} = +38.4$

synthetic

$[\alpha]_D^{25} = -40.0$

(-)-paucaulisin A
(synthetic, proposed natural)



Constitution

synthetic

structural

ISICSEI



(revised natural)