

18-membered macrolide with four stereogenic centers;

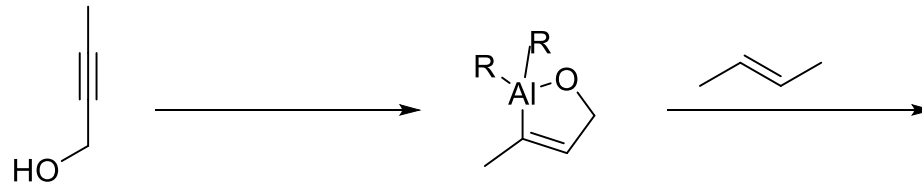
Exhibits inhibitory growth of human cervical cancer and leukemia cells;

Cytotoxic against various human tumor cell lines in submicromolar concentrations;

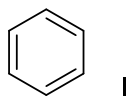
Biselyngbyolide B possesses 30- to 100- fold apoptosis-induction compared to congener, Biselyngbyaside

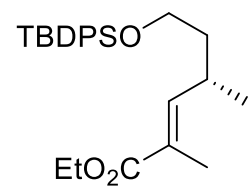
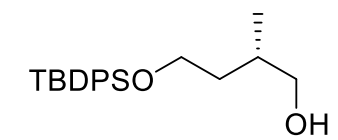


"Jamison's Protocol":

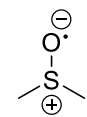


DMP Oxidation:

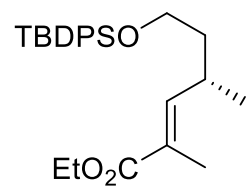
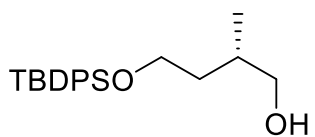




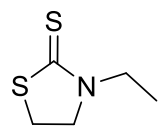
Swern Oxidation:



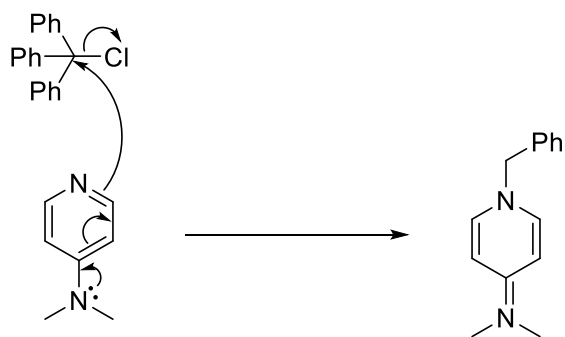
Witting Olefination:

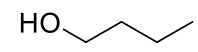
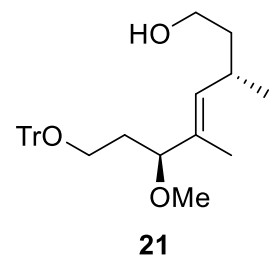


Sodium Borohydride Reduction:

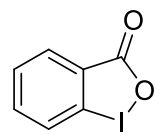


Hydroxyl Protection:

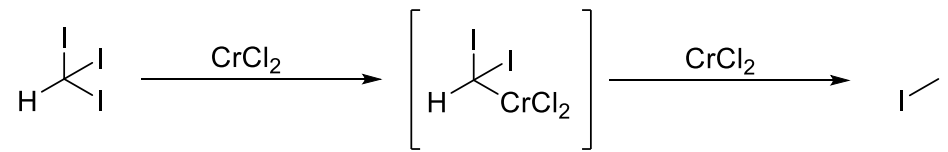


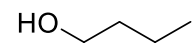
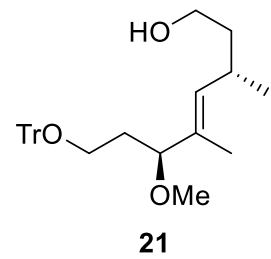


IBX Oxidation:

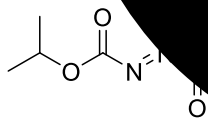


Takai Olefination:

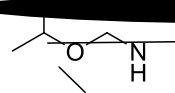




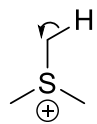
Mitsunobu Reaction:



Oxidation to Sulfone:



Epoxide Opening:



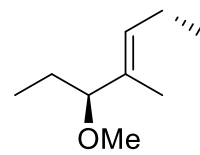
Silyl Protection:

Dihydroxylation:

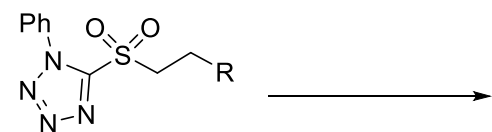
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Sodium Periodate Diol Cleavage:



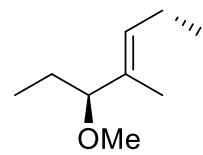


Julia-Kocienski Olefination:

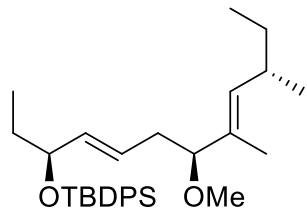


Desilylation with CSA:





Pinnick Oxidation:



Heck Reaction:

Pd(0)

R

1	$\text{Pd}(\text{PPh}_3)_4, \text{NEt}_3, \text{MeCN}$	60	3	decomposition
2	$\text{PdCl}_2(\text{MeCN})_2, \text{NEt}_3, \text{CO}_2\text{H}_2, \text{MeCN}$	25	3	decomposition
3				
