

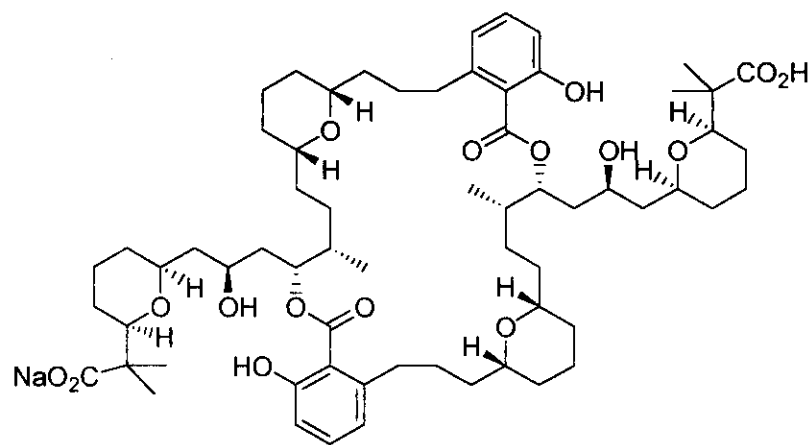
Current Literature

(Beomjun Joo 03/27/04)

Total Synthesis of (+)-SCH 351448

Eun Lee *et al.* JACS 2004, 126, 2680-2681

School of Chemistry and Molecular Engineering, Seoul National University, Seoul 151-747, Korea

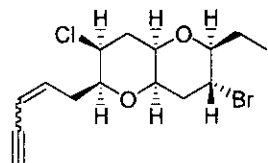


SCH-351448

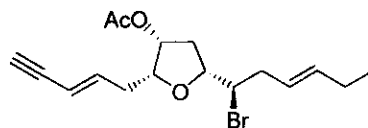
activator of low-density lipoprotein receptor (LDL-R)

Key Reaction: β -Alkoxyacrylate Radical Cyclization

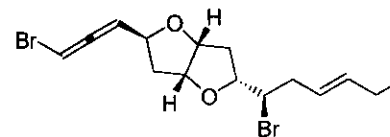
Total Synthesis Using β -Alkoxyacrylate Radical Cyclization by Eun Lee Group



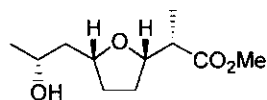
(E and Z)-Dactomelynes
JACS 1995, 117, 8017-



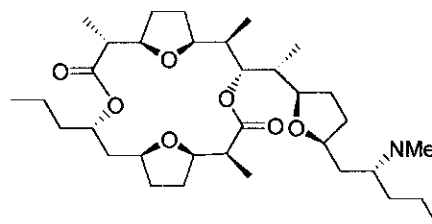
(-)-*trans*-Kumausyne
Tet. Lett. 1997, 38, 7757-



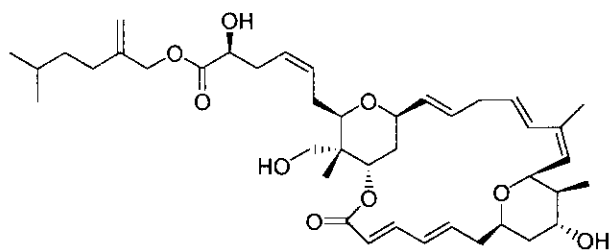
(-)-Kumausallene (Formal)
Tet. Lett. 1998, 317-



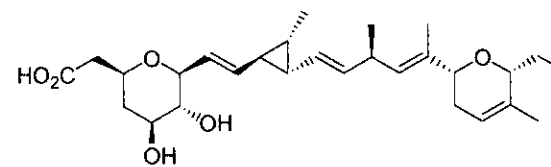
(+)-Methyl Nonactate
Org. Lett. 1999, 1, 1127-



Pamamycin-607
JACS 2002, 124, 49, 14655-

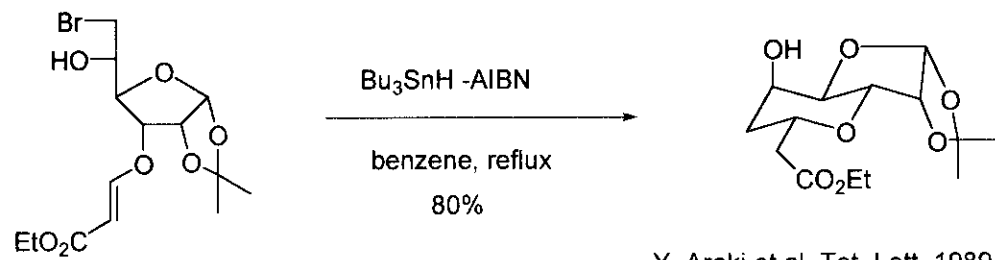


Lasonolide A
JOC 2003, 68, 8080-

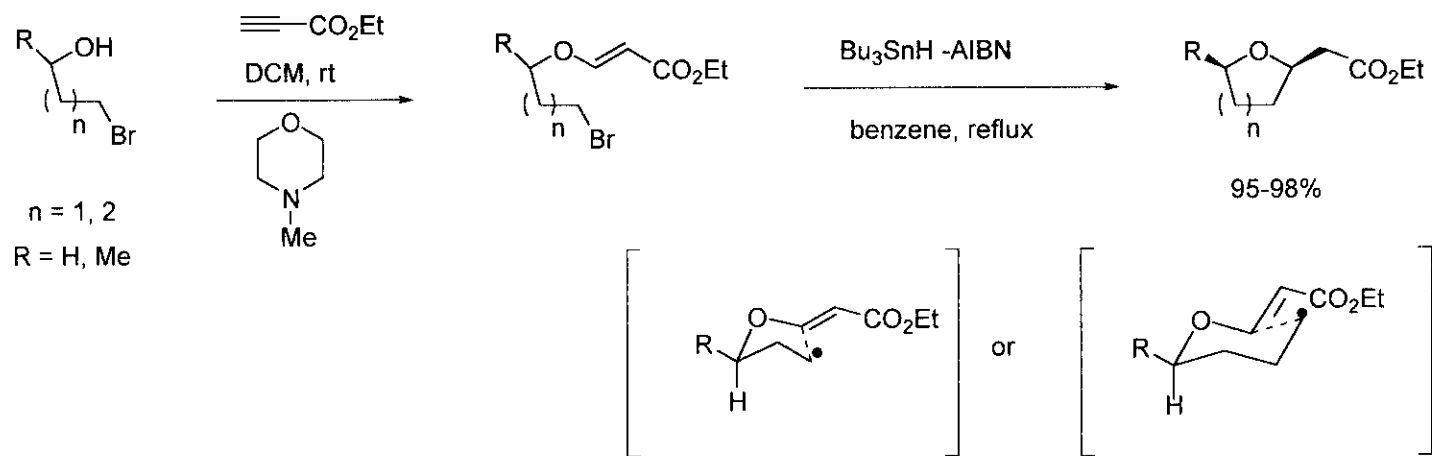


(+)-Ambruticin
ACIEE 2002, 41, 176-

β -Alkoxyacrylate Radical Cyclization

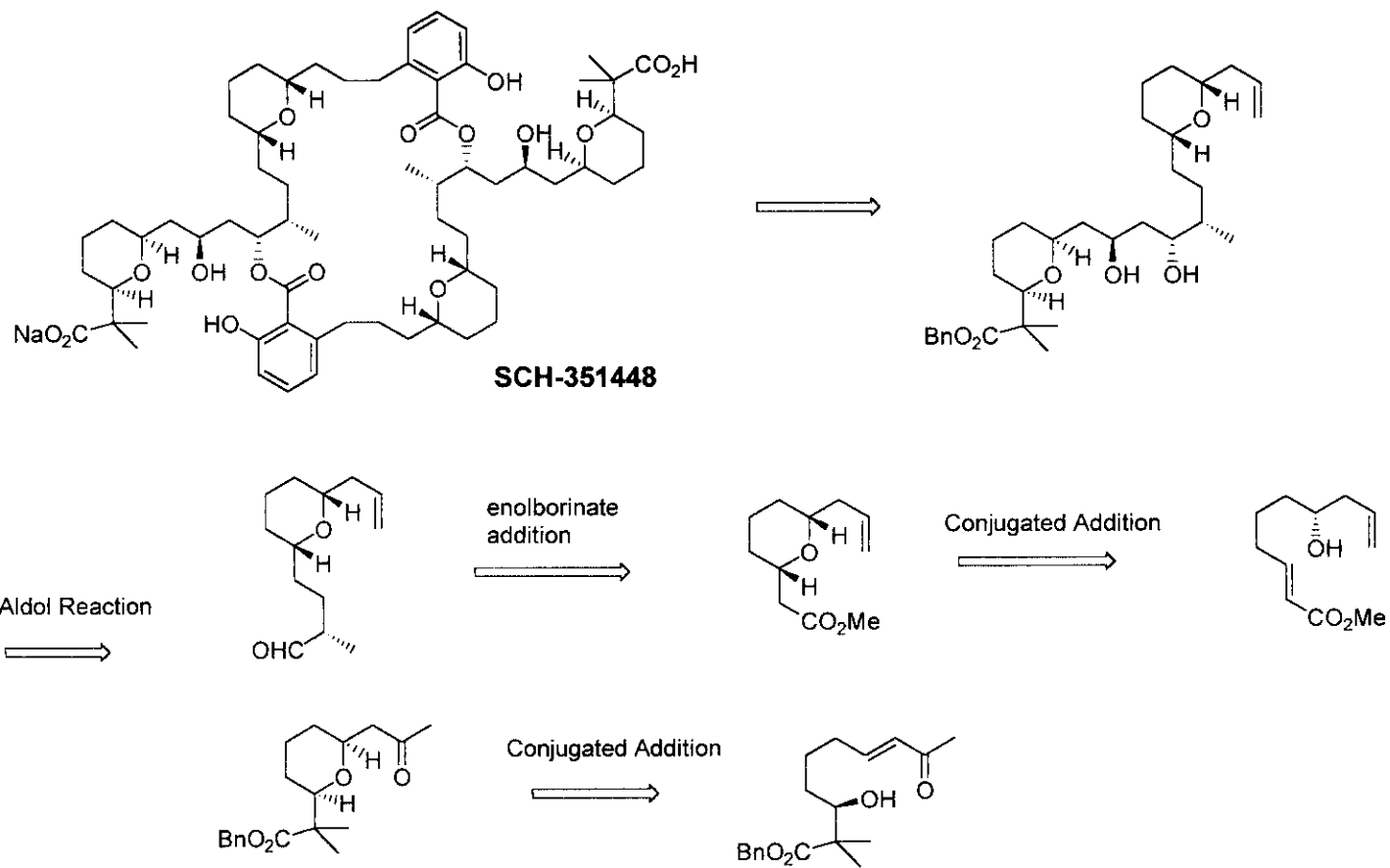


Y. Araki et al, Tet. Lett. 1989, 30, 2829-



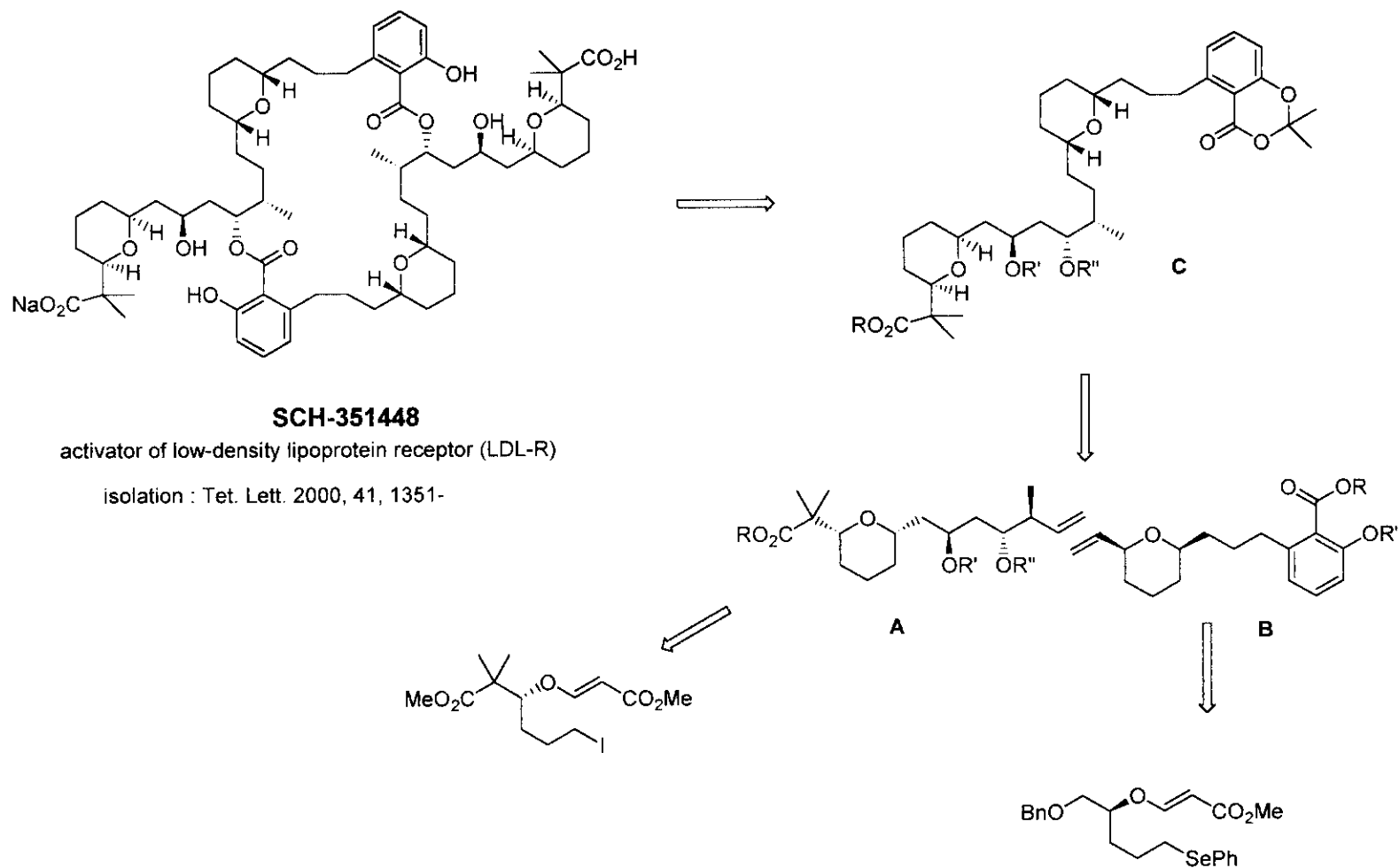
Eun Lee, Jin Sung Tae et al Tet. Lett. 1993, 34, 4831-

Previous Synthetic Effort toward (+)-SCH 351448

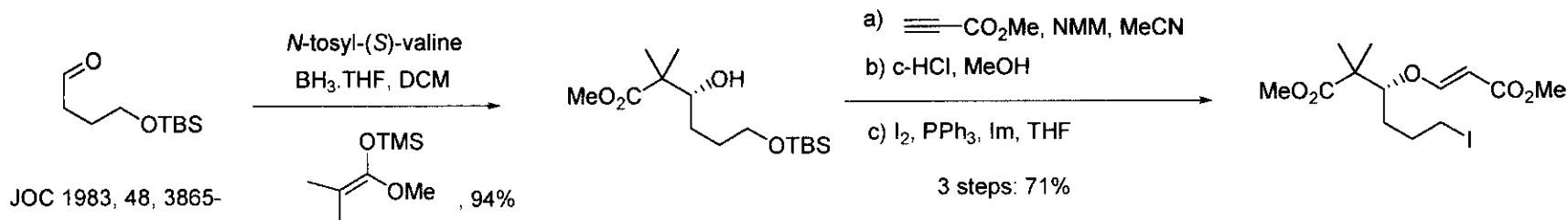


J. K. De. Brabander et al. *Org. Lett.* 2002, 4, 4, 481-484

(+)-SCH 351448 and Its Retrosynthetic Analysis

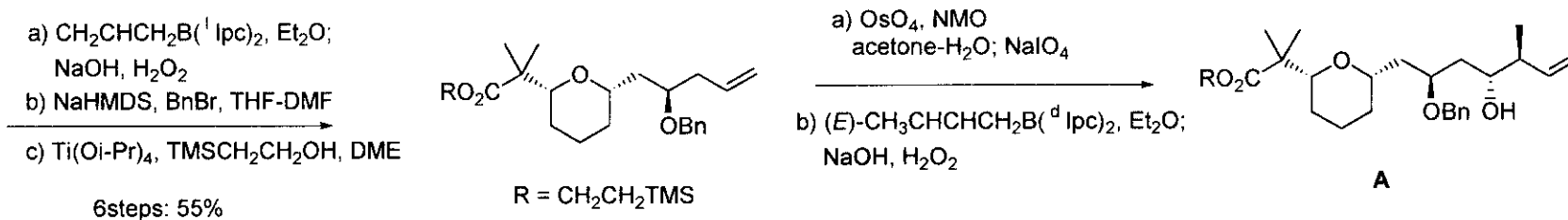
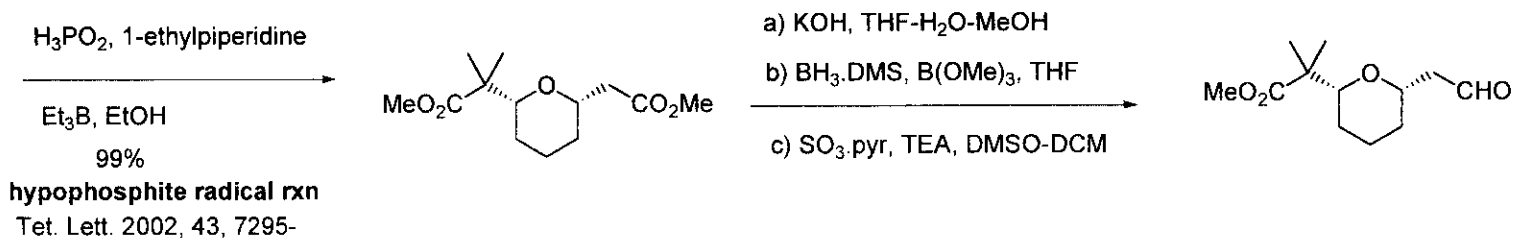


Synthesis of the Fragment A



Chiral Borane Mukaiyama-Aldol Rxn

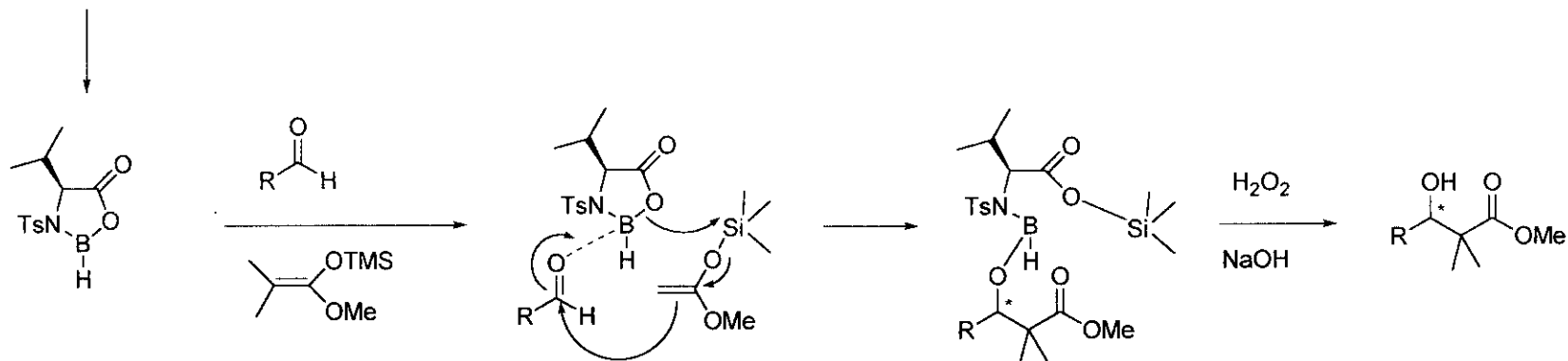
JOC 1991, 56, 2276-



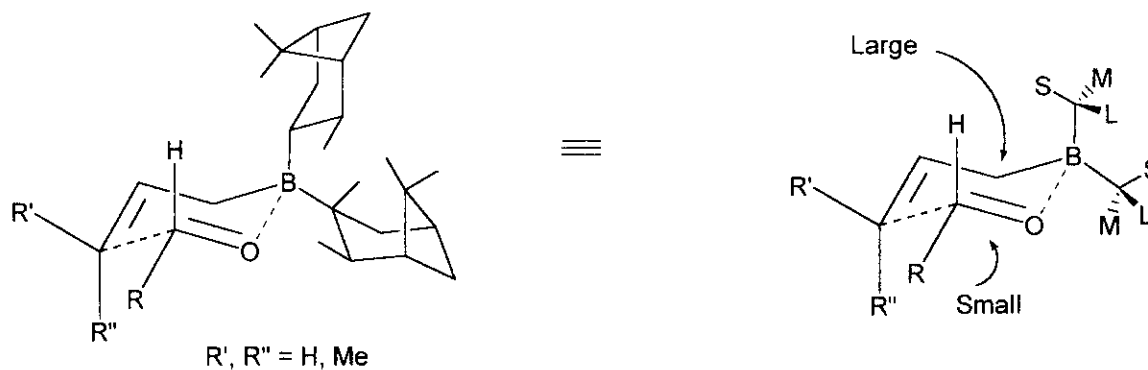
- Chiral Borane Mukaiyama-Aldol Rxn

S. Kiyooka *et al.* JOC 1991, 56, 2276-

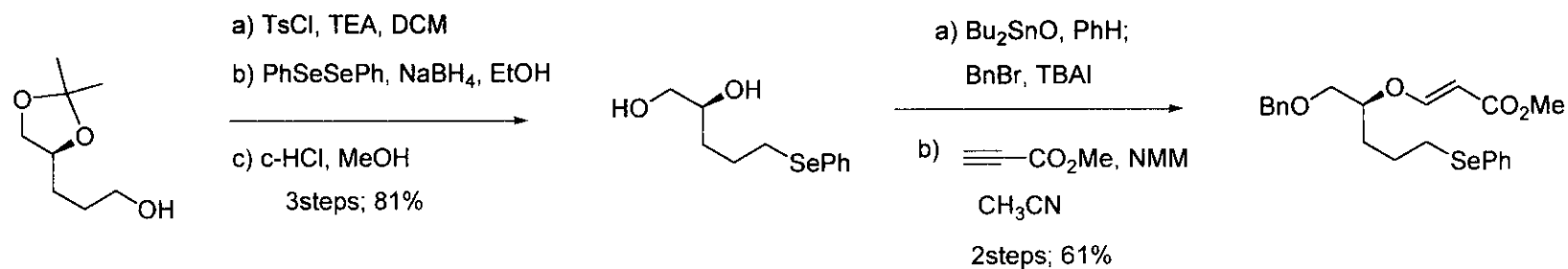
N-tosyl-(*S*)-valine, BH_3 .THF



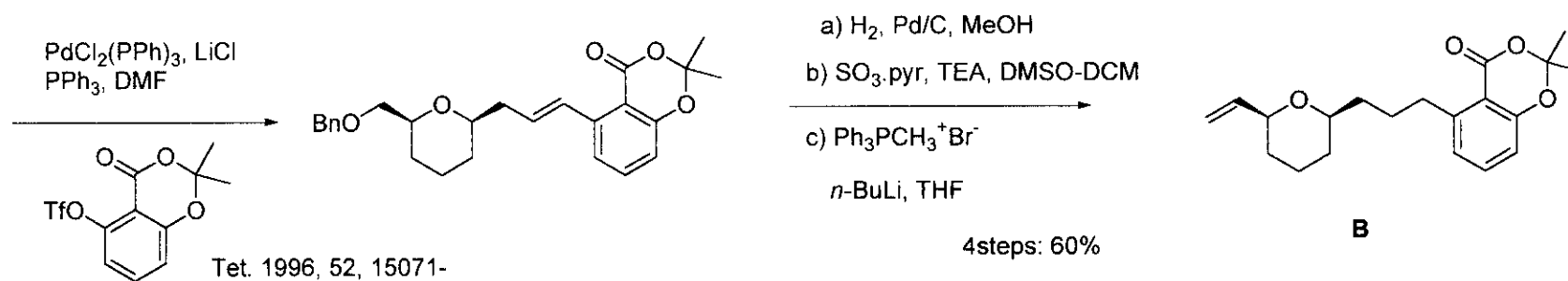
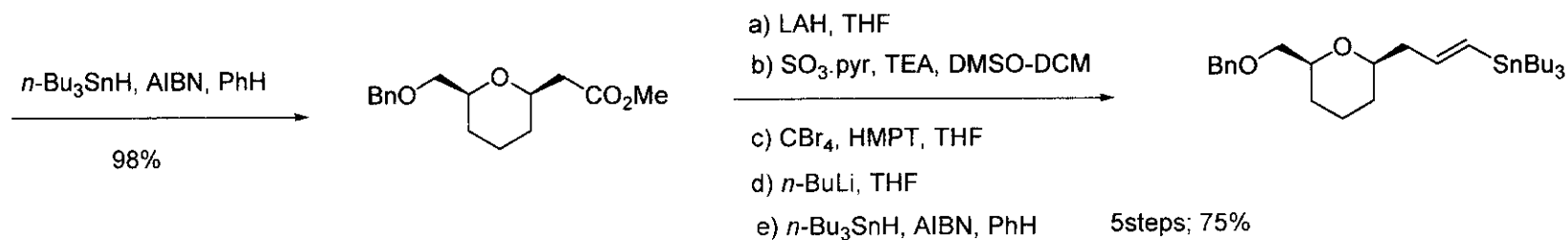
- Brown's Asymmetric Allylation and Crotylation



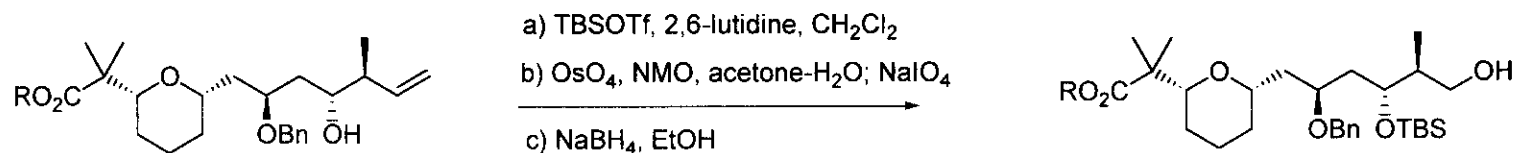
Synthesis of the B Fragment



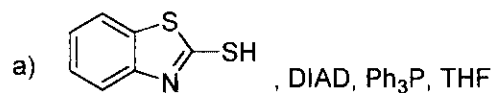
Aust. J. Chem. 1990, 43, 1391-



Preparation of the C Fragment

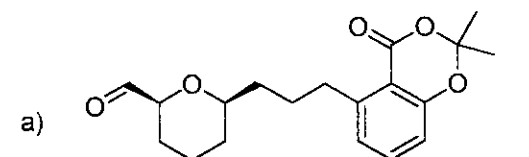
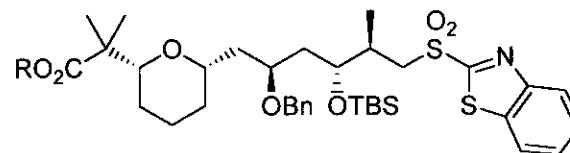


R = CH₂CH₂TMS **A**



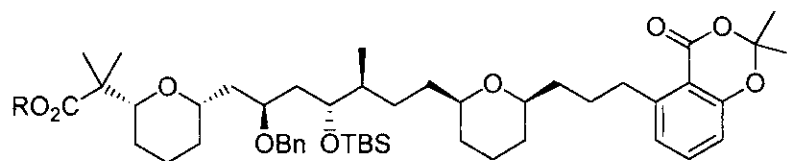
b) (NH₄)₆Mo₇O₂₄·4H₂O, H₂O₂, EtOH

5steps; 84%



NaHMDS, Et₂O

b) TsNHNH₂, NaOAc, DME-H₂O



C

Completion of the Synthesis

