Ac$_2$O, Py, DMAP

DCM

(-)-Sabinene
160 °C

- AcOH

hetero Diels-Alder
reaction

Sharpless AD Mix-b,
MsNH$_2$

t-BuOH/H$_2$O

1

2

NaHCO₃
MeOH

MeOH

work up

allyl bromide, K₂CO₃
acetone

+ K₂CO₃

TESCl, Py

Claisen rearrengement

1,2-dichlorobenzene
200 °C

PIFA, K₂CO₃

+ K₂CO₃

HF, Py

+ H⊕