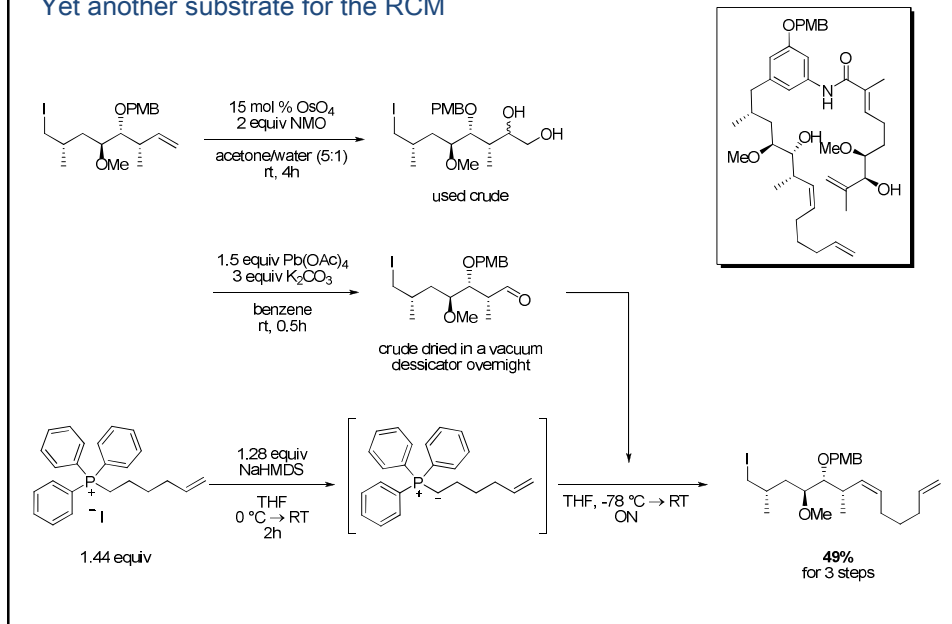


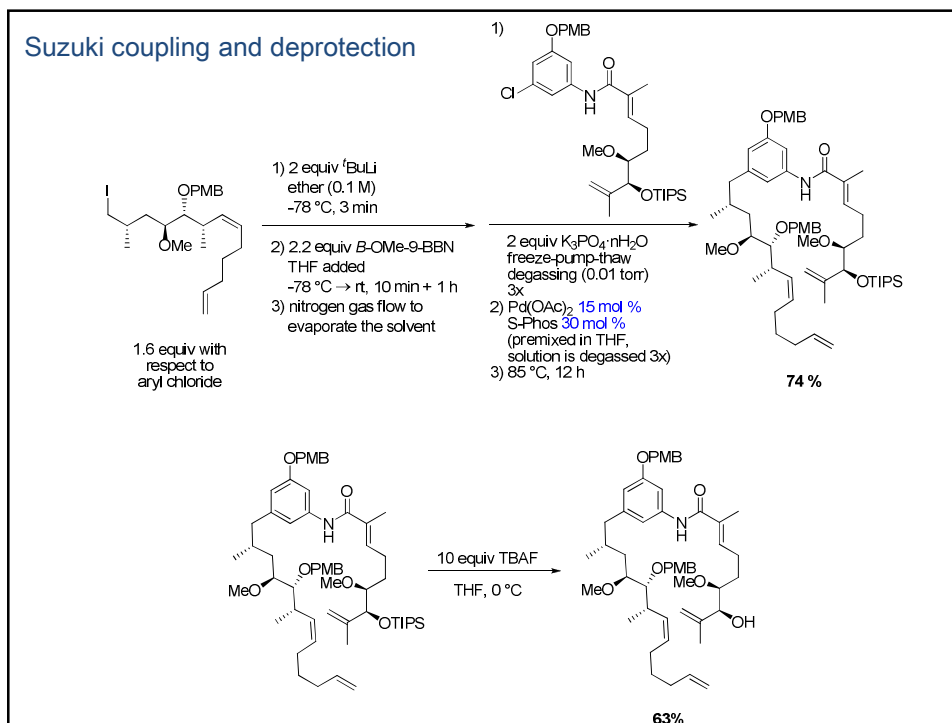
Group meeting – 06/29/09

Luis Sanchez

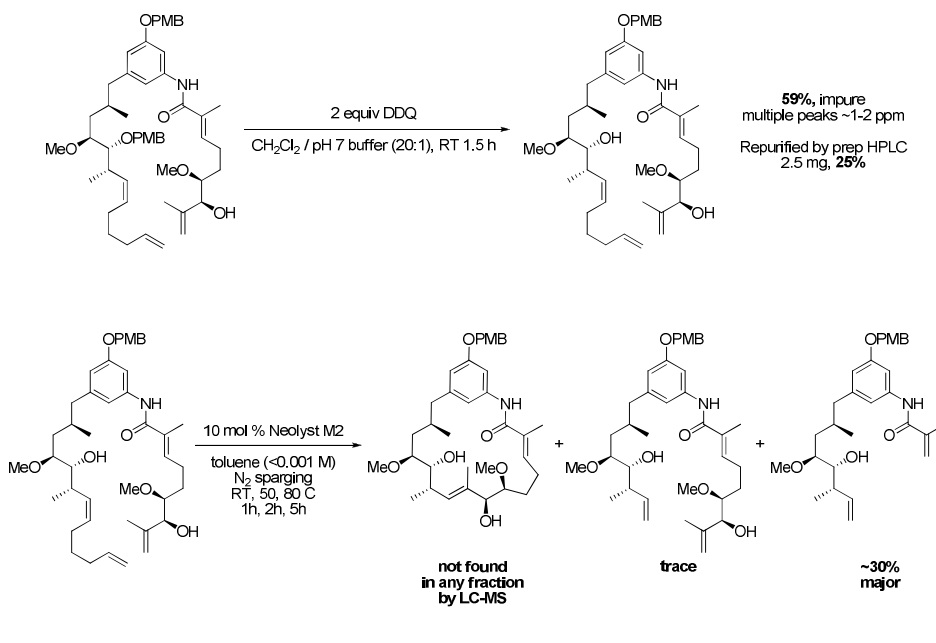
Yet another substrate for the RCM



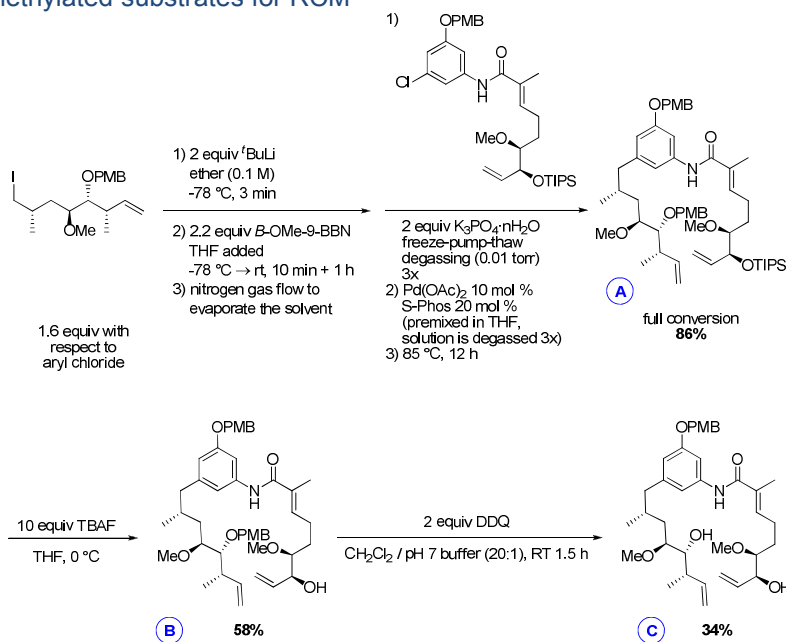
Suzuki coupling and deprotection



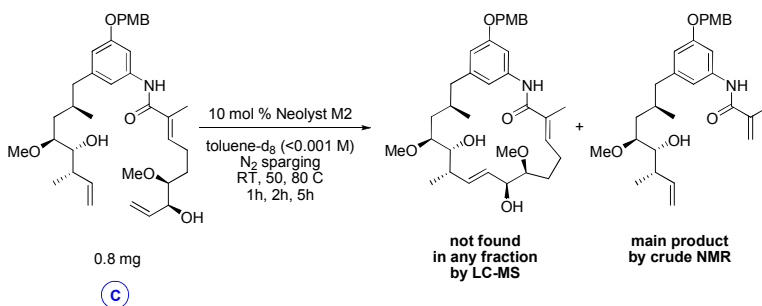
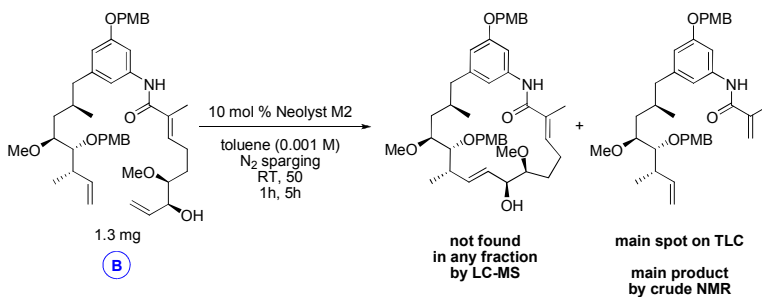
Diol substrate for RRCM



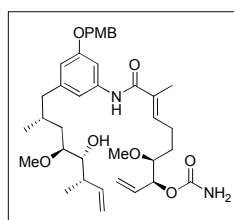
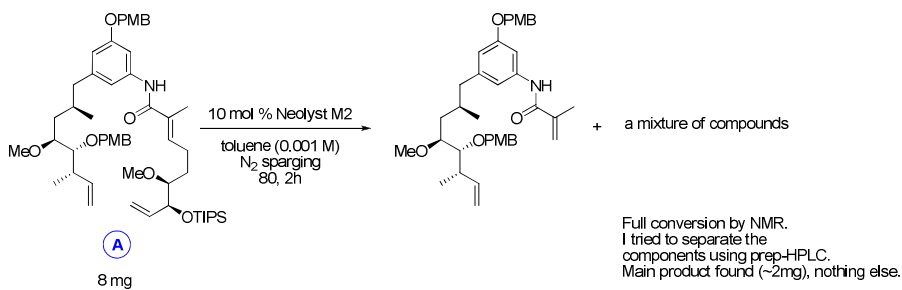
Demethylated substrates for RCM

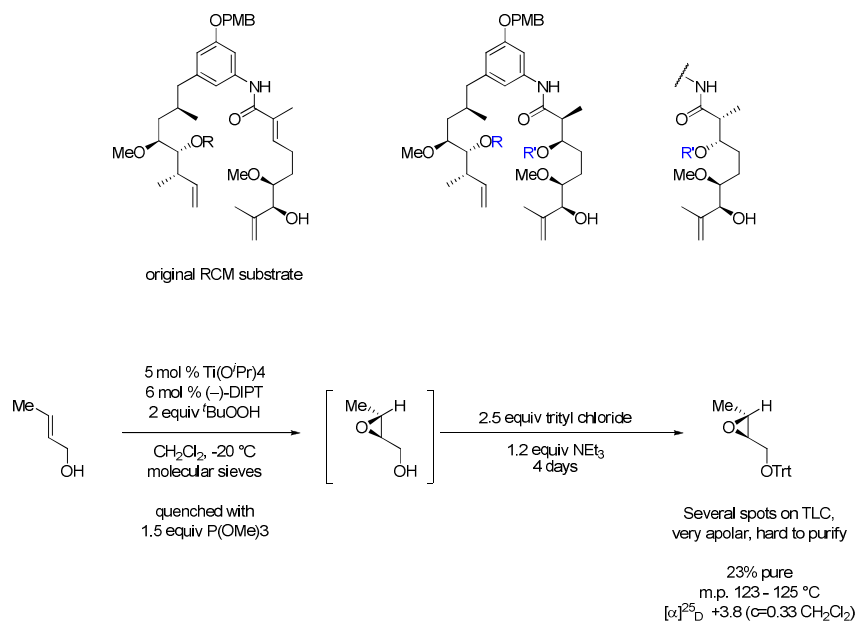


Demethylated substrates for RCM

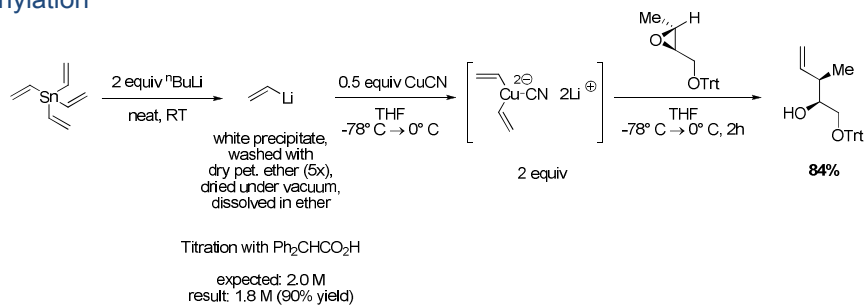


Demethylated substrates for RCM

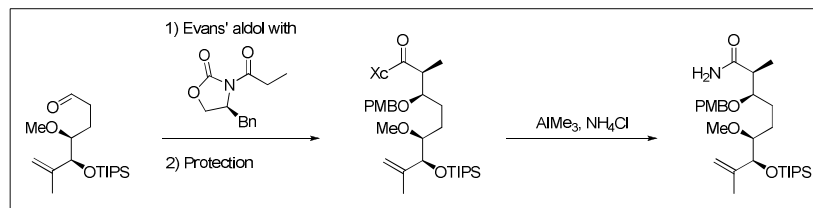


Masking the α,β -unsaturated amide

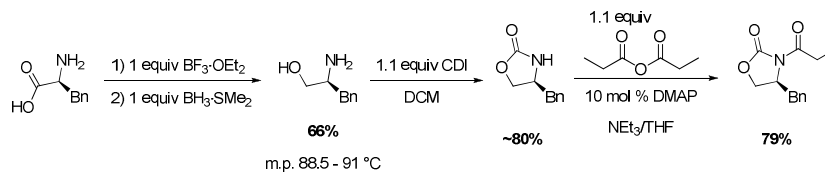
Vinylation



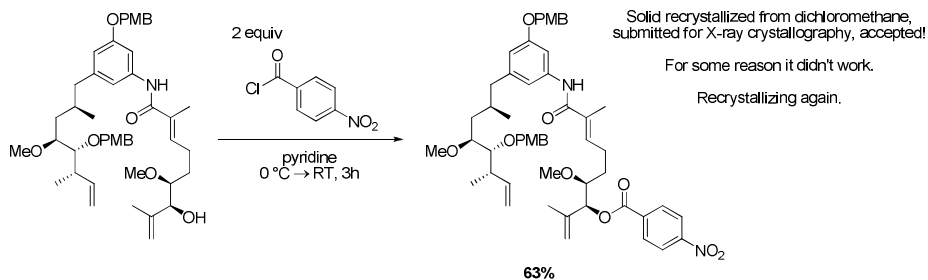
There is a faster way



Preparing the chiral auxiliary

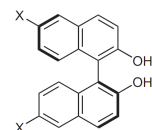
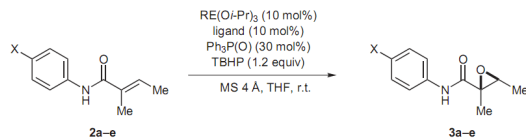


Crystals finally? No, not yet



Can we use an epoxide as a protective group? Shibasaki's paper

Table 1 Optimization of Reaction Conditions^a



$\text{X} = \text{H}$: (S)-BINOL (1a)
 $\text{X} = \text{Ph}$: (S)-6,6'-Ph-BINOL (1b)
 $\text{X} = \text{I}$: (S)-6,6'-I-BINOL (1c)

Entry	Anilide: X	Ligand	RE	Time (h)	Conv. (%) ^b	ee (%) ^c
1	H- (2a)	1a	Sm	36	8	89
2	Cl- (2b)	1a	Sm	30	9	85
3	Me- (2c)	1a	Sm	30	21	85
4	MeO- (2d)	1a	Sm	30	32	83
5	Me ₂ N- (2e)	1a	Sm	30	59	82
6	2e	1b	Sm	30	91	84
7	2e	1b	Pr	6	98	86
8 ^d	2e	1b	Pr	4	95	87

^a Reaction was performed at r.t. with anilide **2**, $\text{RE}(\text{O}i\text{-Pr})_3$ (10 mol%), ligand **1** (10 mol%), $\text{Ph}_3\text{P}(\text{O})$ (30 mol%), and TBHP (1.2 equiv) in THF (0.1 M), unless otherwise noted.

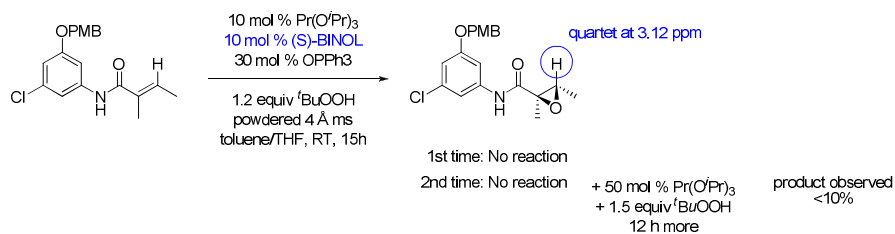
^b Conversion yield determined by ¹H NMR analysis of crude reaction mixture.

^c Determined by chiral HPLC analysis using DAICEL CHIRALPAK AD-H or CHIRALCEL OJ-H.

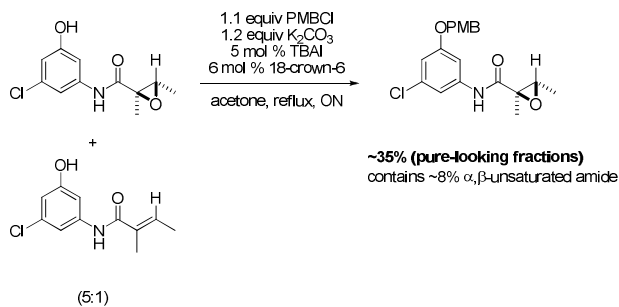
^d THF-toluene = 1:1 was used as solvent.

Chen, Z.; Morimoto, H.; Matsunaga, S.; Shibasaki, M. *Synlett* 2006, 3529-3532.

Epoxide as a protective group

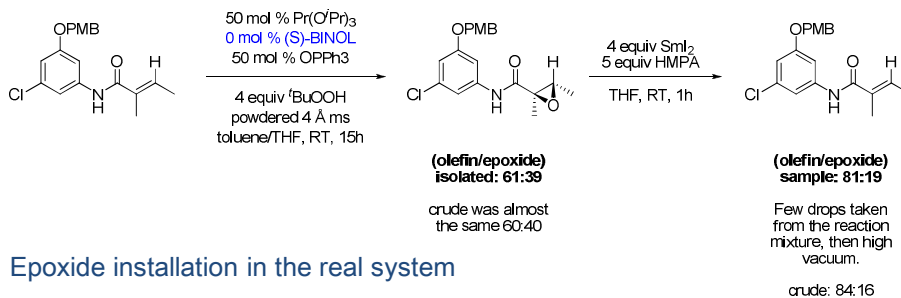


To know what to expect



Epoxide installation/removal

Concellon, J.; Bardales, E.
Eur. J. Org. Chem. **2004**,
 1523-1526



Epoxide installation in the real system

