Convergent Total Synthesis of (−)-CalidousteneClick to copy article link
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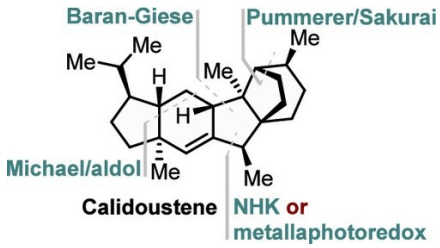
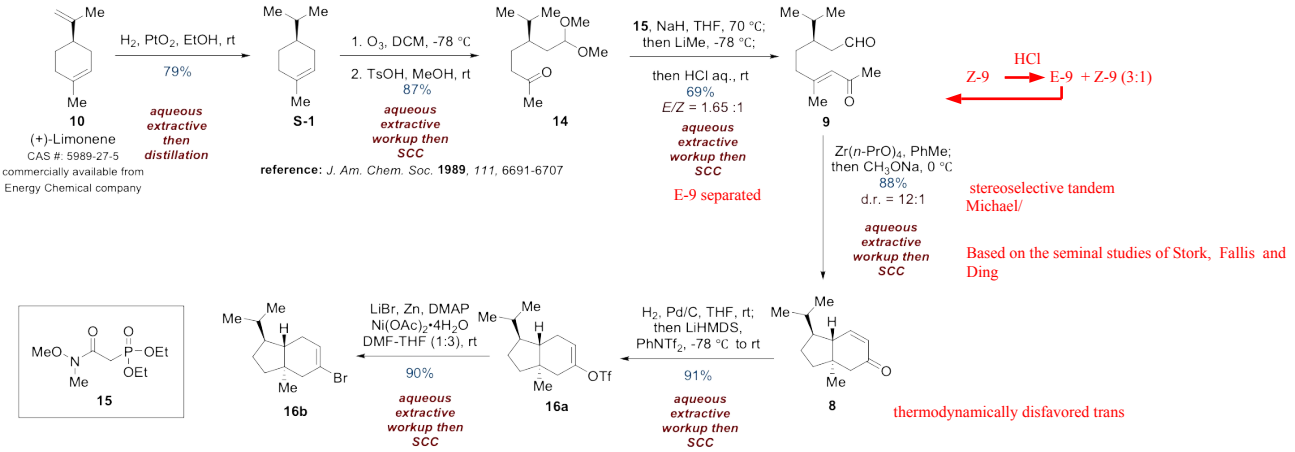


Synthesis of Fragment 16a and 16b



Synthesis of Fragment 20

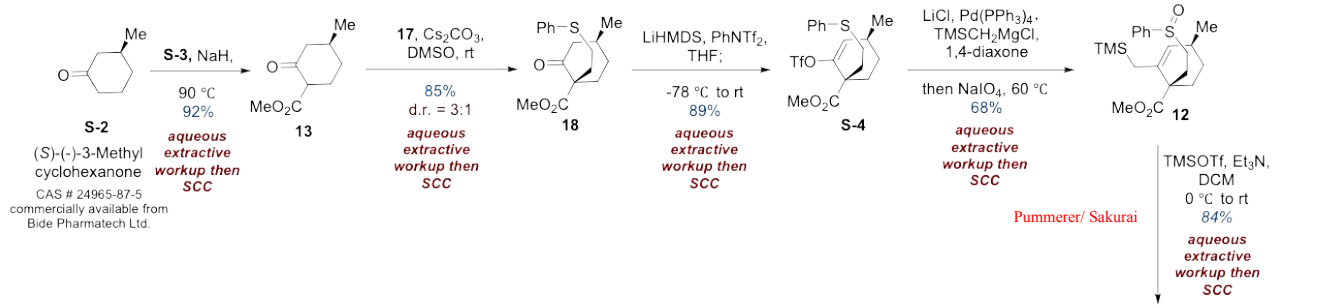
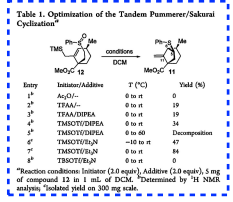


Table 1. Optimization of the Tandem Pummerer/Sakurai Cyclization[a]



Entry	Initiator/Additive	T (°C)	Yield (%)
1[b]	Ac_2O/–	0 to rt	0
2[b]	TFAA/–	0 to rt	19
3[b]	TFAA/DIPEA	0 to rt	19
4[b]	TMSOTf/DIPEA	0 to rt	34
5[b]	TMSOTf/DIPEA	0 to 60	Decomposition
6[c]	TMSOTf/Et_3N	−10 to rt	47
7[c]	TMSOTf/Et_3N	0 to rt	84
8[b]	TBSOTf/Et_3N	0 to rt	0

[a]Reaction conditions: Initiator (2.0 equiv), Additive (2.0 equiv), 5 mg of compound 12 in 1 mL of DCM. [b]Determined by ^1H NMR analysis. [c]Isolated yield on 300 mg scale.

Synthesis of (-)-Calidoustene