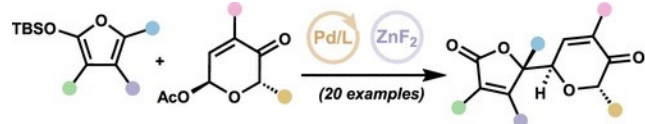
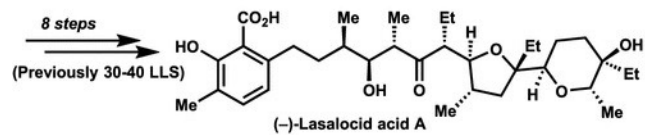


Modular Total Synthesis of Lasalocid Acid A through Direct C(sp³)-C(sp³) Attached Ring Construction

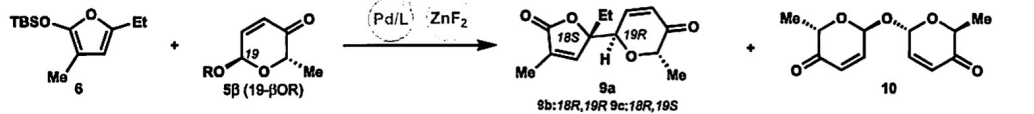
Florian E. H. Kromm, Soren L. B. Moller, Adam S. Jensen, Gustav J. Wormer, Michelle



direct and stereoselective construction of the 1H¹-1H² attached rings



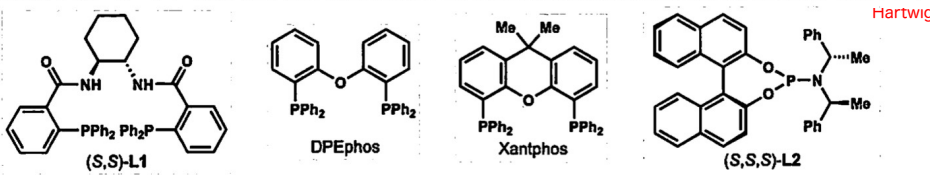
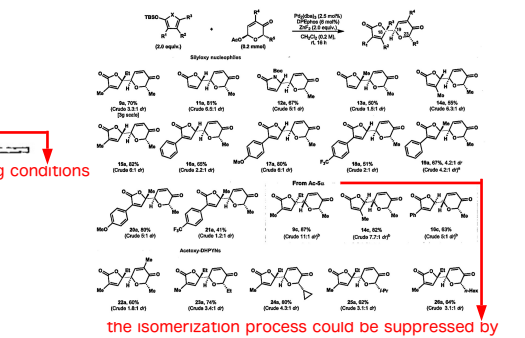
C(sp³)-C(sp³) attached ring products >20:1 regio selective diastereoselective



Isuji-Irost-type chemistry
C-glycosylation over competing Michael addition
via an outer-sphere mechanism on the Pd-π-allyl complex

entry	conditions	R	yield 9a	yield 9b	yield 9c	yield 10
1	Pd ₂ (dba) ₃ , (S,S)-L1, K ₂ CO ₃ , NH ₄ OAc, THF	Ac	-	-	-	-
2	Pd(OAc) ₂ , (S,S)-L1, K ₂ CO ₃ , NH ₄ OAc, THF	Ac	-	-	-	-
3	Pd(PPh ₃) ₄ , Xantphos, CH ₂ Cl ₂	Boc	-	-	-	-
4	Pd ₂ (dba) ₃ , PPh ₃ , ZnF ₂ , CH ₂ Cl ₂	Ac	22	7	<5	38
5	Pd ₂ (dba) ₃ , PPh ₃ , ZnF ₂ , CH ₂ Cl ₂	Boc	-	-	-	-
6	Pd ₂ (dba) ₃ , DPEphos, ZnF ₂ , CH ₂ Cl ₂	Ac	70	21	5	-
7	Pd ₂ (dba) ₃ , (S,S)-L1, ZnF ₂ , CH ₂ Cl ₂	Ac	47	<5	-	24
8	[Ir(COD)Cl] ₂ , (S,S,S)-L2, ZnF ₂ , CH ₂ Cl ₂	Ac	<5	-	<5	-

lowering the Pd/L stoichiometry suppressed both dimerization of



Scheme 1. Modular Total Synthesis of Lasalocid Acid A^a

