

Figure 1

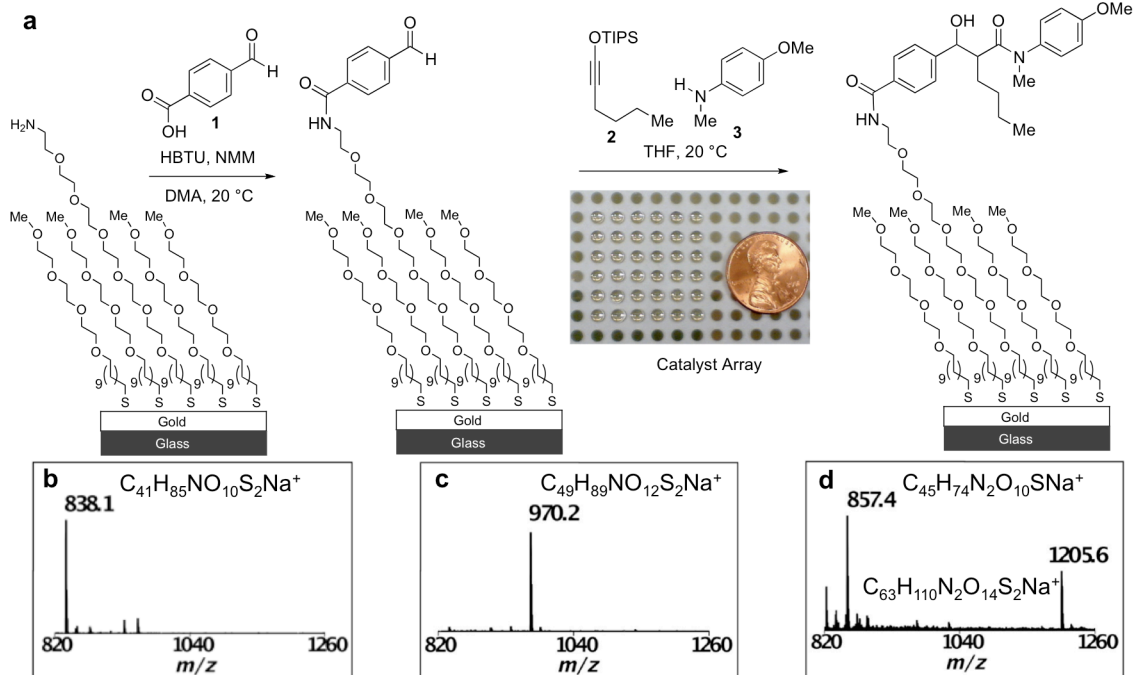


Figure 2

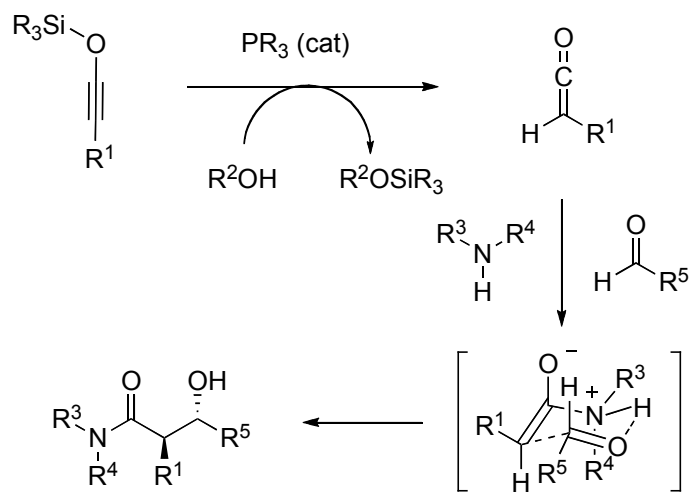


Figure 3

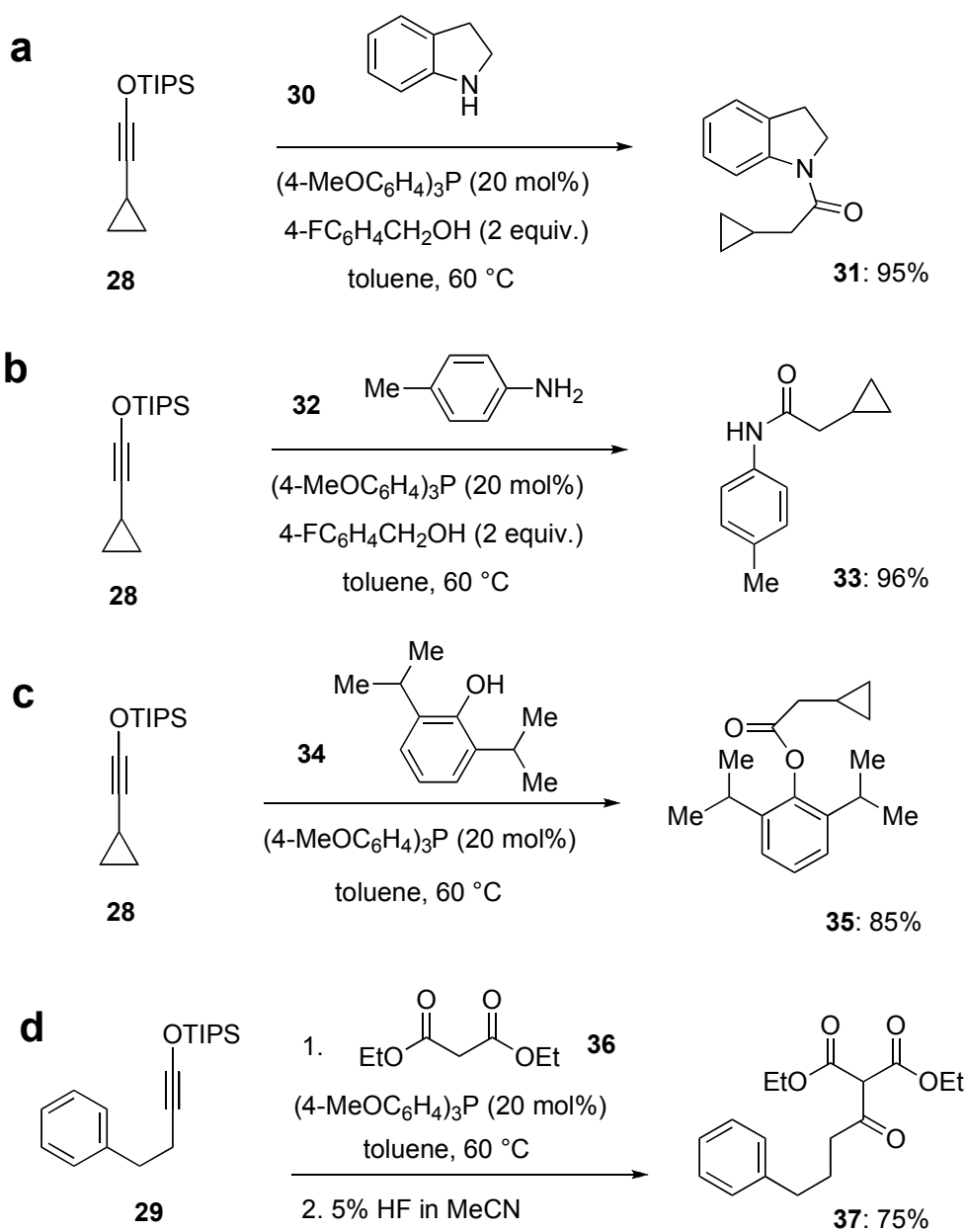
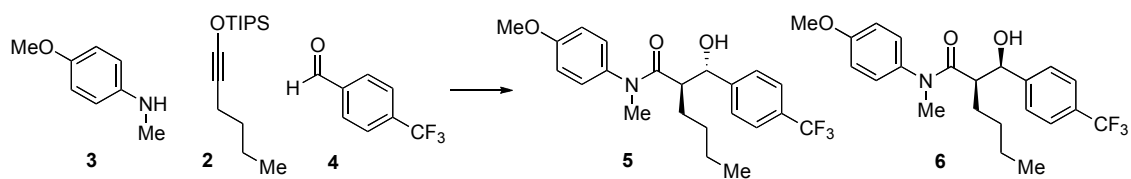
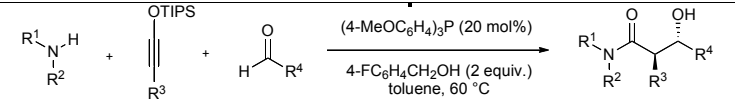


Table 1

Entry	Catalyst (mol%)	Additive (Equiv.)	Solvent, Temp (°C)	Conversion	d.r.
1	Pd(PPh ₃) ₄ (5)	MeOH (5)	THF (20)	56%	85:15
2	Pd(OAc) ₂ (5)	MeOH (5)	toluene (20)	< 2%	
3	Pd(PCy ₃) ₂ (5)	MeOH (5)	toluene (20)	35%	85:15
4	Pd(PPh ₃) ₄ (5)	MeOH (5)	toluene (60)	65%	85:15
5	Ph ₃ P (20)	MeOH (5)	toluene (60)	50%	88:12
6	(4-MeC ₆ H ₄) ₃ P (10)	MeOH (2.5)	toluene (60)	60%	91:9
7	(4-MeOC ₆ H ₄) ₃ P (10)	MeOH (2.5)	toluene (60)	75%	91:9
8	(4-MeOC ₆ H ₄) ₃ P (20)	BnOH (2)	toluene (60)	89%	91:9
9	(4-MeOC ₆ H ₄) ₃ P (20)	4-FC ₆ H ₄ CH ₂ OH (2)	toluene (60)	96%	91:9

Table 2



Entry	R ¹	R ²	R ³	R ⁴	Major Product	Yield, %	d.r.
1	Me				5	87	91:9
2	Me				7	87	88:12
3	Me				8	73	88:12
4	Me				9	63	91:9
5	Me				10	74	93:7
6	Me				11	68	91:9
7	Me				12	66	84:16
8	Me				13	59	88:12
9	Me				14	63	90:10
10	Me				15	58	91:9
11	Me				16	44	84:16
12	Me		Me		17	75	85:15
13	Me				18	72	91:9
14	Me				19	80	91:9
15	Me				20	87	91:9
16	Me				21	76	91:9
17	Me				22	74	95:5
18	Me				23	61	91:9
19					24	78	88:12
20					25	57	89:11
21					26	52	80:20
22					27	30	63:37