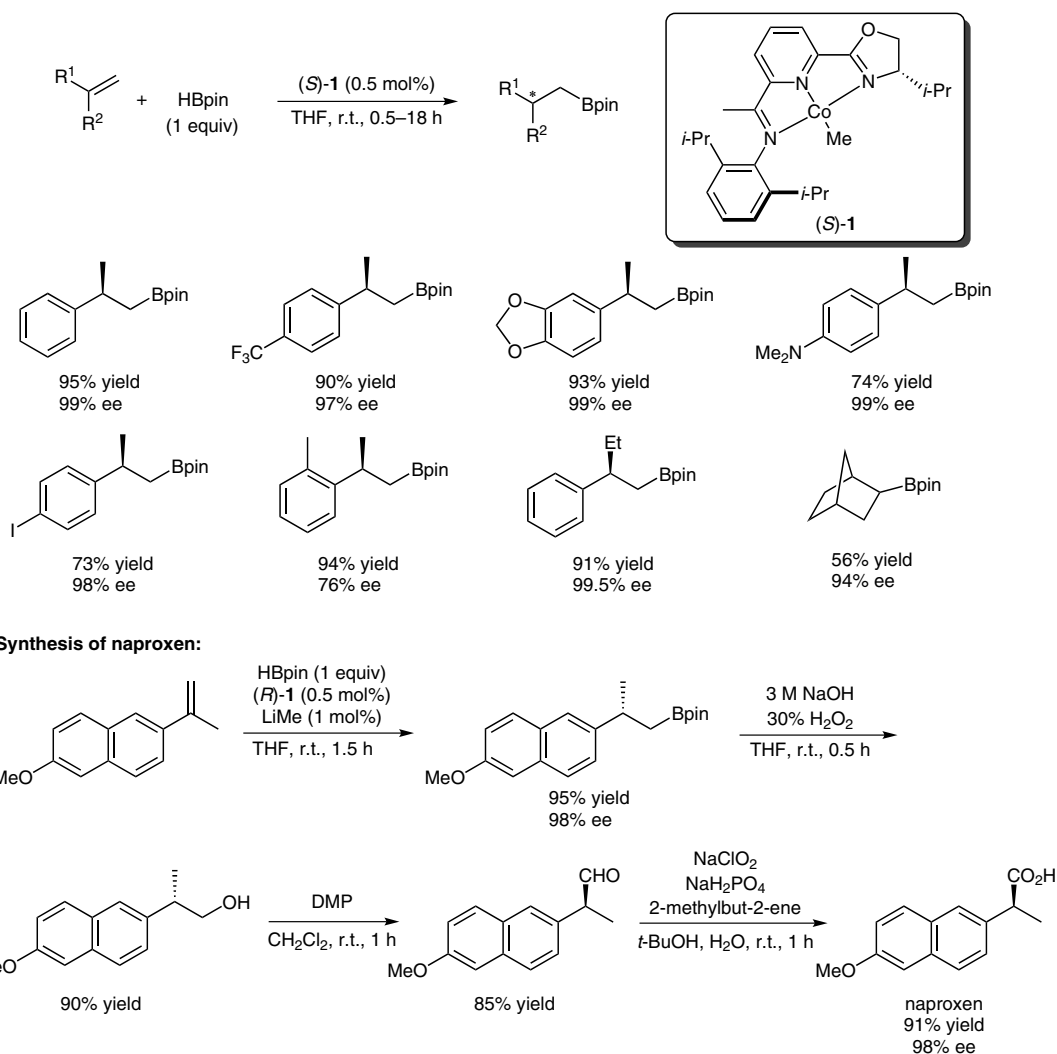


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Cobalt-Catalyzed Enantioselective Hydroboration of 1,1-Disubstituted Aryl Alkenes
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Cobalt-Catalyzed Asymmetric Hydroboration of Alkenes of Alkenes



Significance: A cobalt-catalyzed asymmetric hydroboration of 1,1-disubstituted aryl alkenes is presented. A series of chiral α -alkyl- β -pinacolboranes were prepared with exclusive regioselectivities in high yields (up to 98%) with excellent enantioselectivities (up to 99.5% ee).

Comment: Novel iminopyridine-oxazoline (IPO) ligands are found to be highly efficient in the enantioselective hydroboration of alkenes under cobalt catalysis. The synthetic utility of this method is demonstrated by the synthesis of naproxen.

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