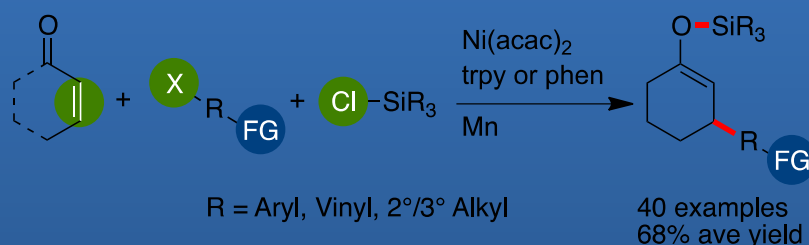


No Nucleophiles Required: Direct Reductive Coupling of Organic Halides With Electrophiles

Reductive Coupling of Aryl, Heteroaryl, or Vinyl Halides with Alkyl Halides



Reductive Conjugate Addition of Functionalized Halides to Enones



Functional Group Compatibility

Chemoselective for C-X Over C-[M]

FG includes:

nucleophiles

-SnMe₃
-Bpin
-SiMe₂OH

acids

-NHBoc
-NHCbz
-OH
-NHTs
-NHTFA

electrophiles

-OAc
-C(O)Me
-CHO
-OTf
-OTs

Reductive coupling avoids the pre-formed organometallic reagents which improves functional-group compatibility and increases the number of commercially available starting materials. Reactions can be assembled on the bench with no special techniques.