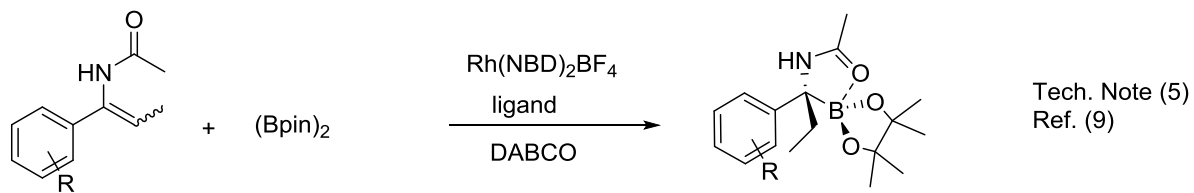
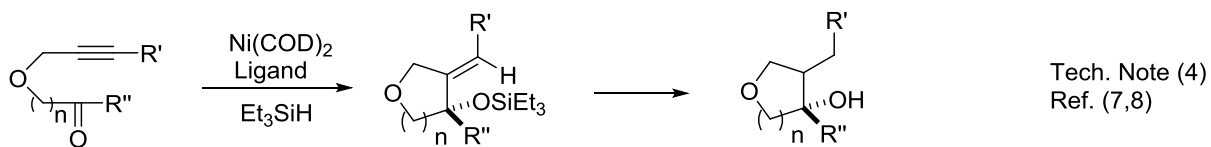
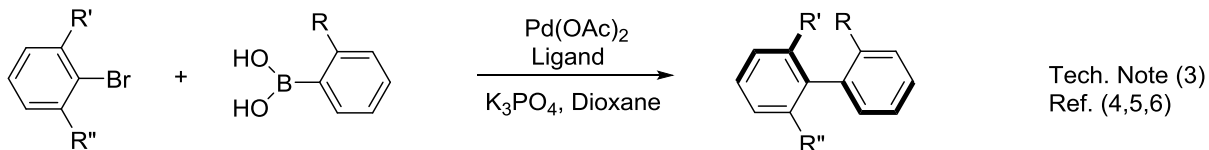
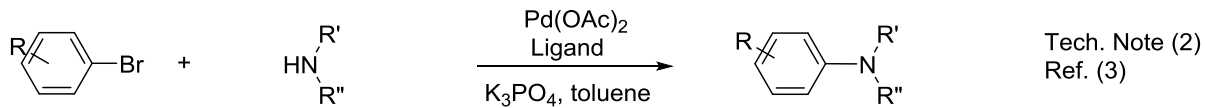
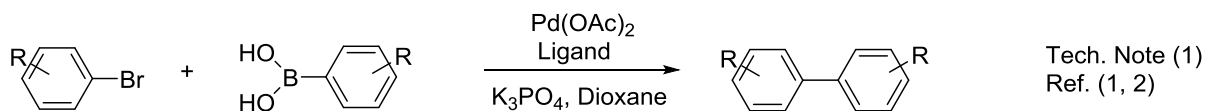


Technical Notes:

1. Ligand/palladium catalyst for general and sterically demanding Suzuki-Miyaura cross-coupling reactions.
2. Ligand/palladium catalyst for sterically demanding Buchwald-Hartwig amination.
3. Ligand/palladium catalyst for asymmetric Suzuki-Miyaura cross-coupling reactions.
4. Ligand/nickel catalyst for asymmetric intramolecular reductive cyclization
5. Ligand/rhodium catalyst for asymmetric hydroboration



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