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Enantioselective Remote C–H Activation Directed by a Chiral Cation
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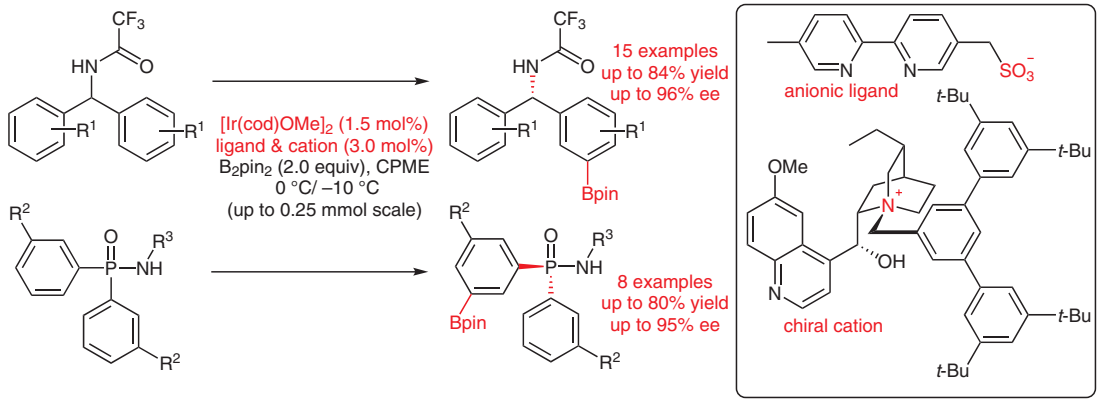
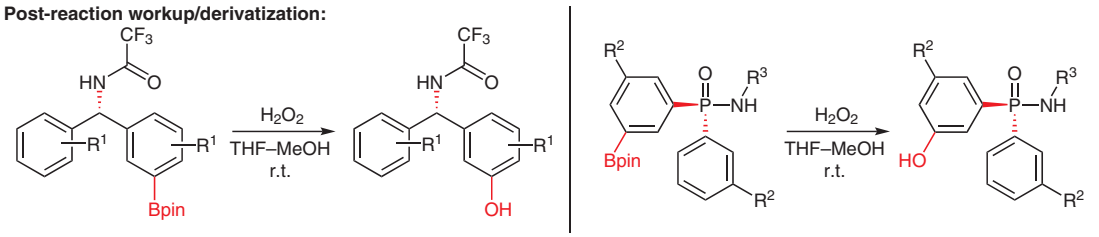
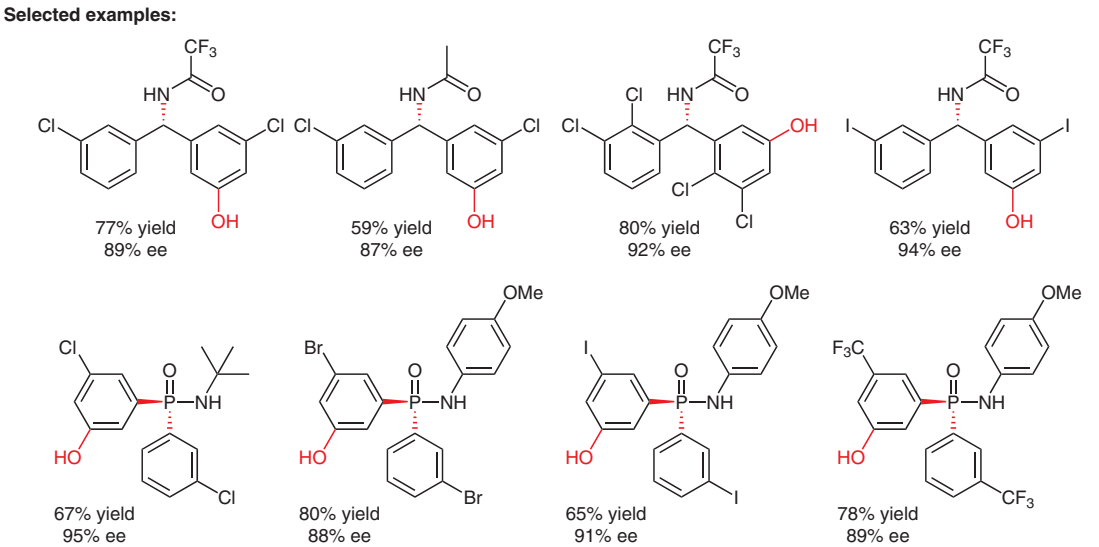
# Chiral Cation–Anion Ligand Pair Directs Highly Selective Remote C–H Activation




**Significance:** Phipps and co-workers report the application of chiral cation–anion ligand pairing in iridium complexes to achieve long-range asymmetric induction for C–H borylation. The reaction proceeds with low catalyst loading, affording the product in good yield with high regio- and enantioselectivity.

**Comment:** The authors propose that the control of enantioselectivity is enabled by the chiral cation employed in the iridium complex. Notably, both phosphorous and carbon stereocenters can be formed, depending on the substrate class employed.

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**Category**
**Metals in Synthesis**

**Key words**
iridium catalysis
C–H activation
enantioselectivity
regioselectivity
chiral cations

Synfact of the Month