Technical Notes:
1. Iridium catalyst used for the highly enantioselective hydrogenation of α,β-unsaturated esters.
2. Iridium catalyst used for the stereoselective catalytic hydrogenation and conjugate reduction of 4-methylitaconate derivatives bearing a chiral auxiliary.
3. Iridium catalyst used in the synthesis of thiophene-based TAK-779 analogues via C-H arylation.
4. Iridium catalyst used in the practical synthetic approach to chiral (α-chloroalkyl)boronic esters via an iridium-catalyzed, chemoselective hydrogenation of chloro-substituted alkenyl boronates.
5. Iridium catalyst used in the regioselective C-H activation and hydrogen-isotope exchange of non-aromatic unsaturated functionality.
6. Iridium(I) N-heterocyclic carbine (NHC)/phosphine catalyst for the mild chemoselective catalyst used in a mild and chemeoselective hydrogenation process.

![Chemical structure](image-url)
References: