HYDROGENATION OF BORYLATED ARENES

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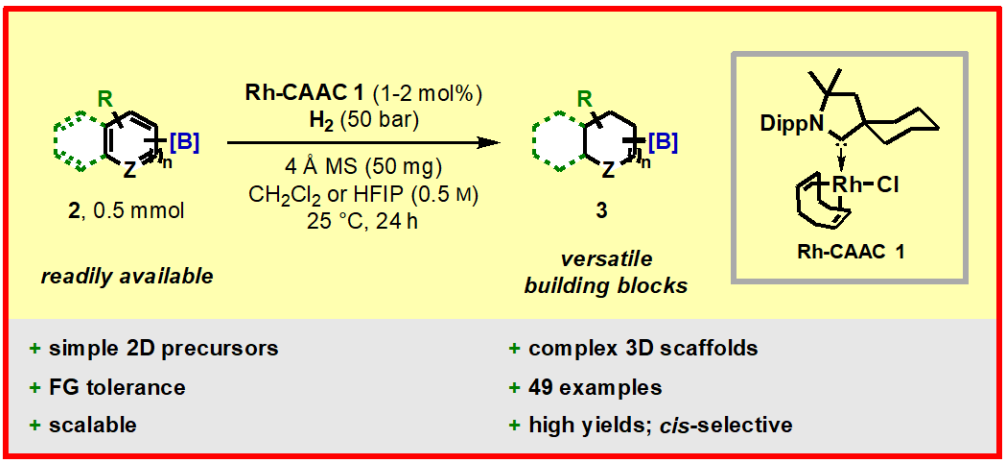
In pharmaceutical drug discovery flat, aromatic molecules are the predominant species, mainly because of their easy preparation.[1] At the same time natural products and substances that pass clinical trials have an increased C_{sp^3} fraction.[2] Hence, the stereoselective transformation of accessible aromatic compounds into saturated (hetero-)cycles is a desirable task.

Utilising the previously reported Rh-complex **1**[3] we were able to develop a highly efficient, *cis*-selective method for the hydrogenation of abundant aryl boronic acids and their derivatives, opening a route to access versatile saturated boronate products as new building blocks to be explored in pharmaceutical research. The reaction proceeds with various boron-protecting groups and is tolerant of a variety of functional groups. The utility of the corresponding saturated cyclic building blocks was shown by post-functionalisation of the boron group.



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