

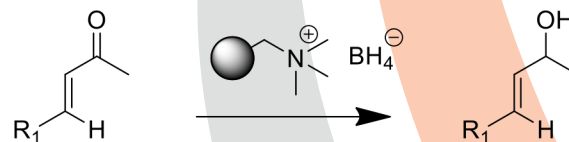
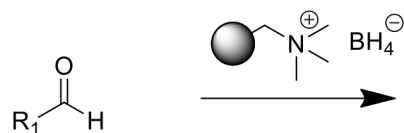
Borohydride (BH₄)

Borohydride Resin, MP, is a macroporous resin functionalized with a tetraalkylammonium borohydride end group. It is a commonly utilized reagent for the conversion of carbonyl containing moieties to alcohols. It is a free flowing solid. The resin provides greater control over reactivity when compared to solution borohydride, providing selectivity of aldehydes>ketones>double bonds. This control allows researchers to reduce α,β -unsaturated carbonyls to the corresponding alcohols without adversely affecting the integrity of the double bond.

Reductive amination in the presence of Titanium(IV) Isopropoxide has been reported. Following reaction, the excess Ti(OiPr)₄ is scavenged with DEAM resin and the desired amine product is isolated via 'Catch and Release' methodology utilizing MP-TsOH.

Standard carbonyl reduction protocol involves agitation of the reaction solution with excess MP-Borohydride in methanol or ethanol, followed by filtration and concentration of the filtrate to pure alcohol.

General Reaction



References

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Solvent Compatibility

THF
DCM
DCE
MeOH
EtOH

Ordering Information

MP-Borohydride

Loading: 2.7-3.0 mmol/g	10g	SPMP 04-10
	25g	SPMP 04-25
Bead size: 330-1225 microns, 15-50 mesh	100g	SPMP 04-100
(>90% within)	1Kg	SPMP 04-1kg