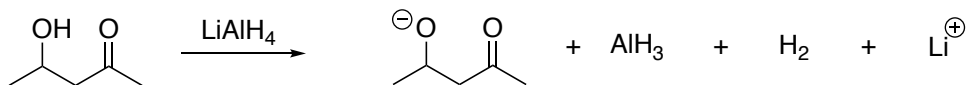


## When to Use an Alcohol Protecting Group

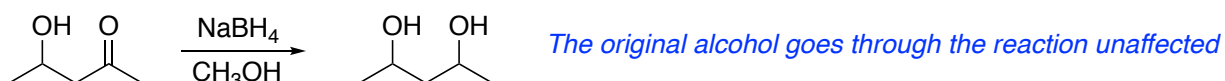
A silicone protecting group can be used to protect any alcohol that you don't want to react.

### Some Examples:

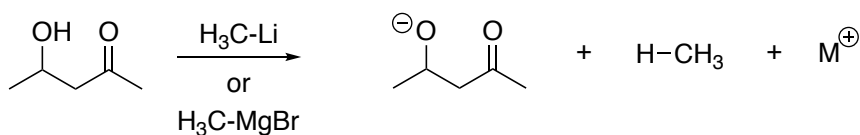
LAH is not compatible with protic groups such as alcohols



This is not an issue with  $\text{NaBH}_4$ . It is a more mild reducing agent and is even routinely mixed with a protic solvent,  $\text{CH}_3\text{OH}$ .



Strong organometallic reagents like  $\text{R-Li}$  and  $\text{R-MgBr}$  are extremely basic in addition to being nucleophilic. These reagents are not compatible with alcohols as they will react together in an acid/base reaction.



Protecting groups are also sometimes used prior to an oxidation reaction where an alcohol would undergo an undesired oxidation during the reaction.

