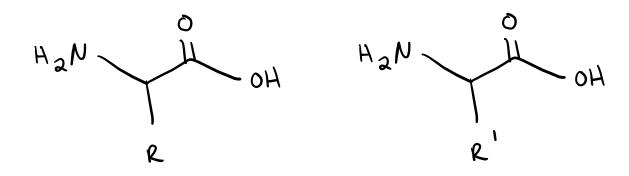
Peptide Synthesis

4/24/2023

Peptide Synthesis: Protecting Groups



Protecting the Amine Group

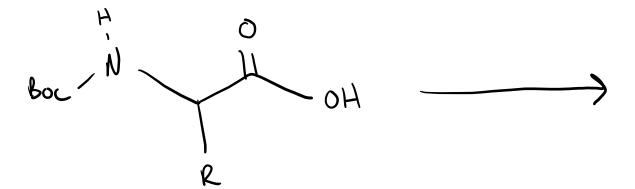
General:

$$H_2N \longrightarrow \stackrel{\circ}{\longrightarrow} N \longrightarrow \stackrel{\circ}{\longrightarrow} OH$$

Using the "Boc" protecting group:

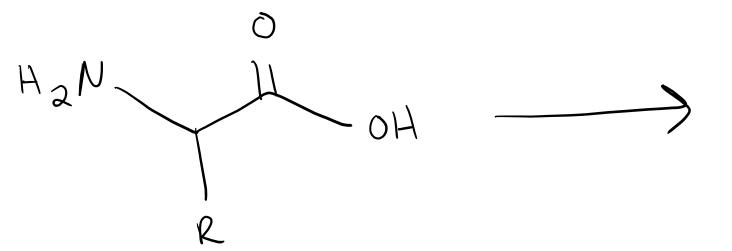
$$H_2N$$
 OH
 R

"Deprotecting" the Amine: Removing Boc

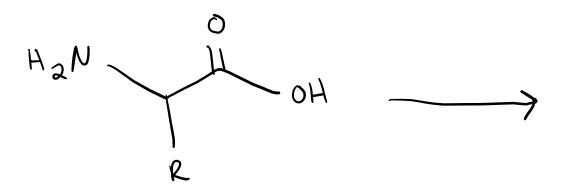


Amine Protection and Deprotection with "Fmoc"

$$H_2N$$
 OH OH



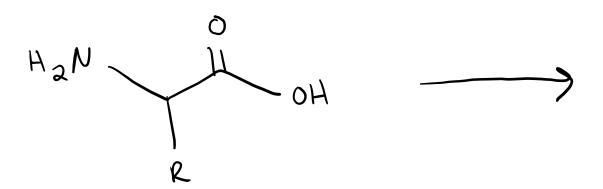
Protecting/Deprotecting the Carboxylic Acid: Methyl Ester



$$H_2N$$
 OCH_3

Deprotection: Mechanism

Protecting/Deprotecting the Carboxylic Acid: Benzyl Ester



Synthesizing Peptides: General Strategy

Synthesizing Peptides: Example

Synthesite Val-Ala

Synthesizing Peptides: Example

Synthesite

Phe - Ser - Cys