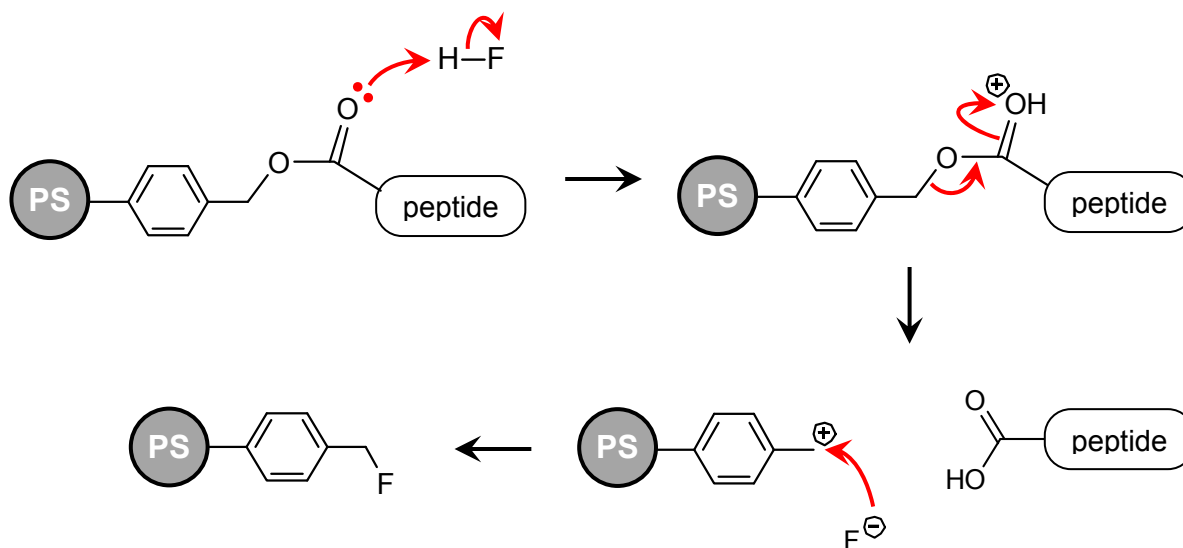


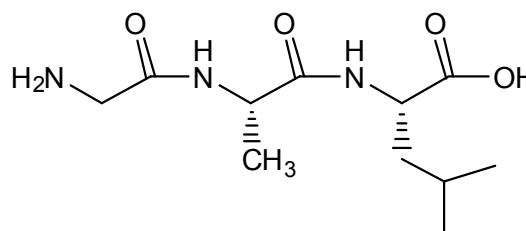
Workshop 24 Solutions
Fmoc Chemistry in Peptide Synthesis

1.



The intermediate carbocation that's formed in the S_N1 reaction is benzylic, so even though it's primary, it's fairly stable.

2. Peptides and proteins are named from the N-terminus to the C-terminus, so "Gly-Ala-Leu" means "H₂N-glycine-alanine-leucine-COOH", or:



The Fmoc protecting group protects the amine of an amino acid just like the *t*Boc protecting group does, so the synthetic scheme will be similar to that of *t*Boc-based synthesis; the peptide will be bound to the support on its -COOH end ("C-terminus"), and Fmoc-protected amino acids are added one by one to the -NH₂ end ("N-terminus") of the support-bound chain.

