Hofmann rearrangement, also known as Hofmann degradation and not to be confused with Hofmann elimination, is the reaction of a primary amide with a halogen (chlorine or bromine) in strongly basic (sodium or potassium hydroxide) aqueous medium, which converts the amide to a primary amine. For example:

\[
\begin{align*}
\text{Et} & \quad \text{Br}_2, \text{NaOH} \\
\text{NH}_2 & \quad \text{H}_2\text{O} \\
\rightarrow & \quad \text{Et-} \cdot \text{NH}_2 + \text{CO}_2
\end{align*}
\]

Mechanism:

Contributors

- Gamini Gunawardena from the OChemPal site (Utah Valley University)