Alpha cleavage in mass spectrometry is a characteristic fragmentation of the molecular ion derived from carbonyl compounds, in which the bond linking the carbonyl carbon to the atom occupying an alpha position breaks.

**Example:**

\[
\text{M}^+ \rightarrow \text{M}^+ (m/z 128)
\]

\[
\text{M}^+ \rightarrow \text{M}^+ (m/z 95) + \text{C}_2\text{H}_4
\]

\[
\text{M}^+ \rightarrow \text{M}^+ (m/z 57) + \text{C}_2\text{H}_5
\]

See beta cleavage.

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**Contributors**

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