

## Quaternary amines analysis by LCM and finding the right ion - How To

**When analyzing quaternary amines in LC-MS, you should remember that they are permanently charged species.**

A tertiary amine for example, may be observed in the positive ion mode as the  $[M + H]^+$  ion, but because quaternary amines are already ionized, you should look for the  $[M]^+$  ion in the extracted ion chromatograms (EICs) instead.

If you look for the  $m/z$  of the  $[M + H]^+$  ion, you may see no peak or a peak corresponding to some other compound in the sample because quaternary amines do not form these ions.

These kinds of suggestions can help you identify the proper peak for your **analyte** and avoid peak assignment errors.