

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.

