

How does ammonium fluoride affect HPLC and LCMS data if using Aqueous Normal Phase ANP methods - FAQ

Ammonium fluoride is beneficial in several ways in an Aqueous Normal Phase ANP chromatographic method:

- As a buffer (i.e. pH control)
- Improvement of peak shape.
- Improvement of sensitivity in MS for certain compounds.

Using ammonium fluoride as a mobile phase additive is suggested for LCMS when using Aqueous Normal Phase HPLC methods. For further reading, please refer to the following third-party journal article reference:

J. Pesek, M. Matyska, "Ammonium fluoride as a mobile phase additive in aqueous normal phase chromatography," J. Chromatogr. A. 1401, 2015, 69–74.

NOTE: care should be taken when using ammonium fluoride because it is corrosive to glass (Teflon bottles are preferred) and using a concentration in excess of 1 mM may permanently damage the column. Cogent TYPE-C™ Silica columns last much longer than ordinary columns but ammonium fluoride may somewhat decrease the column lifetime.

