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.*

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