The best way to avoid with ion suppression issues in LCMS if you need to use an ion-pair agent - Primer

In many cases, you will not need ion-pair agents when using Cogent TYPE-C Silica™ columns however ion pair agents are generally used to either increase retention of a poorly retained compound in reversed phase (RP) or to improve peak shape due to silanolic tailing.

The best way to avoid ion suppression is to use a Cogent TYPE-C™ Silica column which can retain analytes by aqueous normal phase (ANP) and is highly suited to retention of polar compounds without ion-pair agents. Furthermore, these columns have very few surface silanols due to the silica hydride surface and therefore tailing due to these moieties is much less problematic.

It has been demonstrated that ANP can analyze positively or negatively charged compounds having molecular weights below 100 and weights of larger molecules such as peptides. Most polar uncharged molecules can also be analyzed by this approach.

In every case the mobile phases do not contain more than 10 mM of an additive such as acetic or formic acids, or ammonium acetate or formate, all of which are MS compatible and do not cause ion suppression.

Click HERE for Cogent Diamond Hydride HPLC Column Ordering Information.

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MicroSolv Technology Corporation
9158 Industrial Blvd. NE, Leland, NC 28451
Tel: (732) 380-8900
Fax: (910) 769-9435
Email: customers@mtc-usa.com
Website: www.mtc-usa.com