

No Peaks for Succinic Acid or Alpha-Ketoglutarate With the Cogent Diamond Hydride LC-MS Column - Tips & Suggestions

If you are using LCMS with positive ionization mode, the Diamond Hydride™ column for separation and the mobile phase has 0.1% formic acid in A and B solvents you may not see peaks for succinic acid and alpha-ketoglutarate in the EICs.

These compounds are both acidic and will not be amenable to either an acidic mobile phase additive or detection by positive ion mode.

Suggestion: Try using a 10mM ammonium acetate buffer in A and B solvents when using negative ion mode in LCMS. The ammonium acetate will keep the compounds in their ionic form and will furthermore be retained longer in Aqueous Normal Phase ANP methods. Hence, there are two advantages to use of ammonium acetate with the Diamond Hydride™ column.

As for detection, these compounds will be readily detected as $[M-H]^-$ ions in the EICs.

Click [HERE](#) for ordering information and pictures of the Diamond Hydride columns

