
Mobile Phase recommendation Cogent Diamond Hydride columns for use with serum samples in Aqueous Normal Phase LCMS - Tips & Suggestions

When using serum and other biological samples, to keep the columns clean, the A Solvent with DI water and methanol or IPA should be used continuously and not only for conditioning.

We recommend with this mobile phase:

- **Solvent A:** 50:50 DI water / methanol (or 2-propanol) + 0.1% formic acid (for positive mode MS) or +10 mM ammonium acetate or formate (for negative mode MS).
- **Solvent B:** The same as you would ordinarily use with Aqueous Normal Phase ANP for example, 98% Acetonitrile and 2% DI water with 1-5mM acid or base.

Cleaning Tip: Methanol or 2-propanol (IPA) helps to clean the column between injections, which is necessary for analysis of complex matrices such as plasma, serum, urine, etc. If for any reason only DI water (with additives) has to be used as solvent A, you can add a washing step in the autosampler sequence every 10 injections using the methanol or 2-propanol-containing solvent A listed above.

Related article: [General solvent conditioning for TYPE-C Silica columns](#)

