

Assuring retention of polar compounds in an Aqueous Normal Phase ANP gradient in positive ion mode LCMS – Tips & Suggestions

When using a Cogent TYPE-C™ column such as the Diamond Hydride prepare your solvents for positive ionization in LC-MS:

- Solvent A: 50% methanol / 50% DI water + 0.1% formic acid
- Solvent B: 90% acetonitrile /10% DI water + 0.1% formic acid.

Aqueous Normal Phase ANP gradients need to start between 100% – 90% of Solvent B (*to retain polar compounds*) and then reduce the percent of Solvent B as much as 20% solvent B (*when 50% methanol / 50% water is used as Solvent A*).

One important advantage to note about the Cogent TYPE-C columns is that they equilibrate between gradient runs very fast (*5 minutes*) compared to HILIC columns which require up to 20-30 minutes or more.

