

## Which Cogent TYPE-C column do you recommend for the separation of positional isomers by HPLC or LCMS – FAQ

**The answer to this question depends on what type of positional isomers.**

For Reversed Phase separation of aromatic positional isomers, the **Cogent Phenyl Hydride™** is often a good choice. These isomers may differ in their electron density of the aromatic ring due to the positions of the various substituents that may be present. These differences can be exploited by  $\pi$ - $\pi$  interactions from the Phenyl Hydride ligand, resulting in additional chromatographic selectivity.

For nonpolar cis/trans isomers, use of the **Cogent UDC-Cholesterol™** is advisable.

For highly polar positional isomers, the **Cogent Diamond Hydride™** or Cogent UDA™ can be appropriate. Since the ANP retention mechanism is quite different than reversed phase, isomers that may be difficult to resolve in the latter may be more readily resolved using ANP.