

## Unison UK-C18 Cadenza CD-C18

75 x 4.6 mm

Technical

## Unison and Cadenza's Elution Characteristics



A: water, B: acetonitrile, 0-100%B (0-10 min), 1 mL/min, 37 °C, 260 nm

The 3um ODS Unison series UK-C18 has a different retention characteristics than Cadenza CD-C18. The above chromatogram shows these differences.

This data compares Unison and Cadenza's retention characteristics through a reversed-phase gradient mode that can elute high polar to low polar compounds.

Unison UK-C18 shows the following characteristics. There is a big retention on hydrophilic compounds such as caffeine that have a high polarity region up to 10% of organic solvent strength. Conversely, the retention is short hydrophobic compounds such as diphenyl that possess highly organic solvent concentration.

In pharmacokinetic research, metabolite's polarity generally rises causing a large degree of separation between metabolites and drugs that makes concurrent analysis ineffective. Unison provides excellent separation even when the materials have disparate polarities.

For hydrophilic compounds, we recommend Unison. For hydrophobic compounds, we recommend Cadenza. To achieve the finest level of separation, the choice between Unison and Cadenza rests in the structure of the compound being separated.