

About HILIC Columns

HILIC is, abbreviated name for Hydrophilic Interaction Chromatography, and it was developed as an alternative to reversed phase chromatography for highly polar compounds (Figure 1). Inertsil HILIC is the column which chemically bonded with diol group, and it provides excellent peak shape for neutral and basic compounds. In HILIC mode, generally when organic concentration is raised, it shows a strong retention (Figure 2). Moreover, it can get more stable analysis by adding basic solvent to the eluate, such as ammonium acetate.

Figure 1 : Separation Mode from Reversed Phase to HILIC

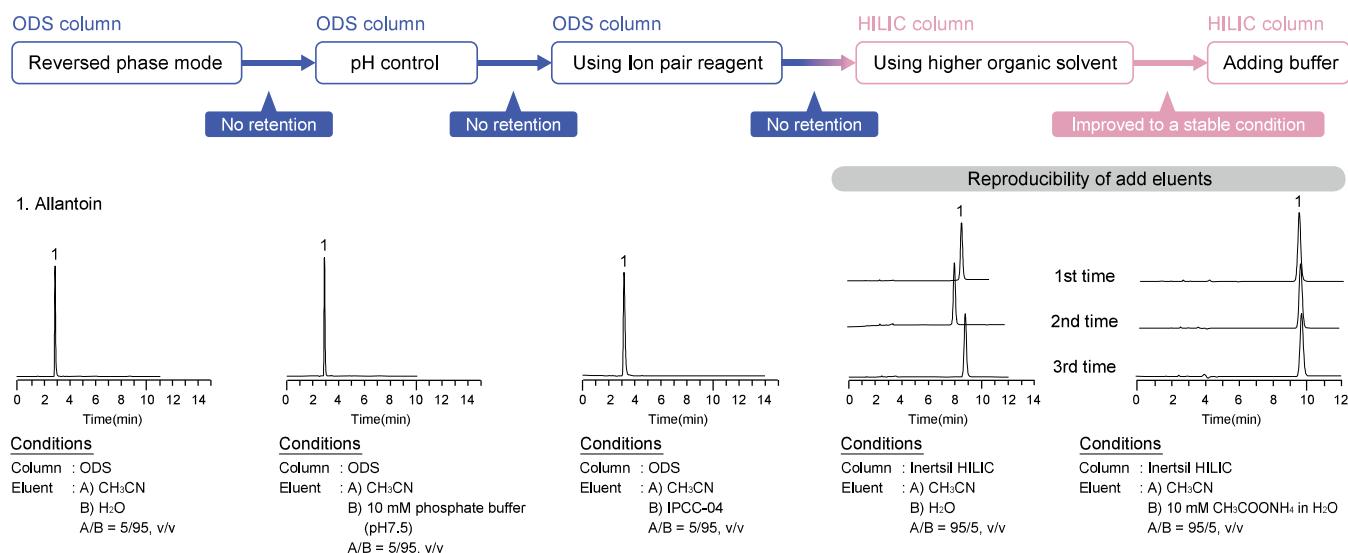
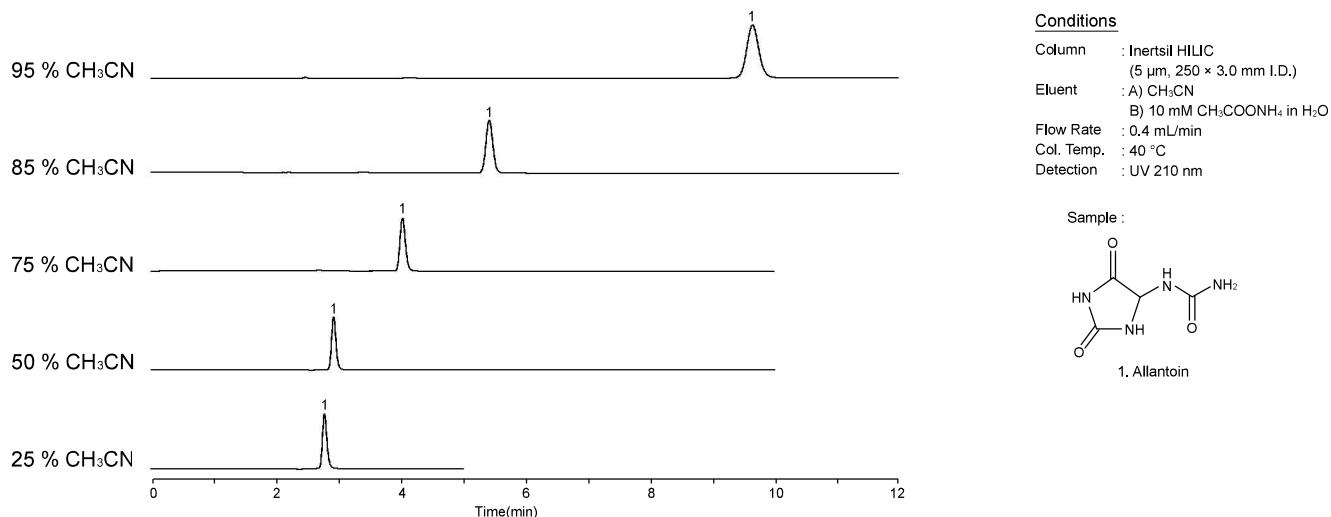


Figure 2 : Correlation between Retention Time and the Concentration of CH₃CN in Mobile Phase



HILIC Column Specification

Columns	Features	Particle Size (μm)	Pore Size (nm)	Surface Area (m²/g)	Carbon Loading (%)	Recommended pH range
InertSustain Amide	Frist choice column for HILIC mode.	3, 5	10	350	15	2 - 8.5
Inertsil Amide	Effective when the retention of high polar components is further strengthened.	3, 5	10	450	18	2 - 7.5
Inertsil HILIC	Effective when the overall retention is to be reduced or when the separation pattern is to be changed.	3, 5	10	450	20	2 - 7.5
InertSustain NH2	First choice column for sugar analysis.	3, 5	10	350	7	2 - 7.5
Inertsil NH2	Effective for intensifying retention in sugar analysis.	3, 5	10	450	8	2 - 7.5

HILIC Column Selection

