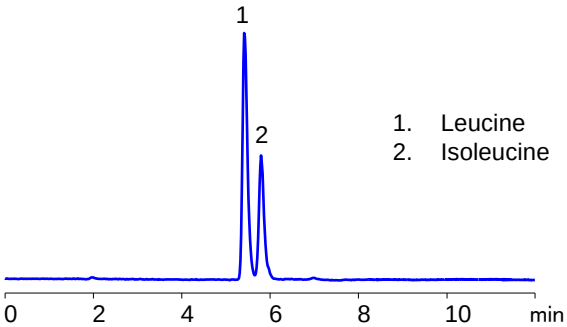
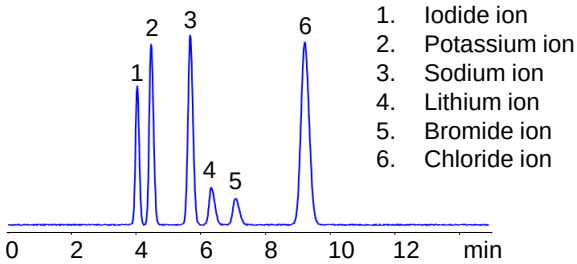
How Powerful is the New Amaze TCH HILIC Column from Helix? Part 1.



Column: Amaze TCH
Dimensions: 4.6x150 mm, 3 um, 100A
Mobile phase: 75% ACN with 15 mM AmFm pH 2.7
Flow rate: 1 ml/min
Detection: ELSD, 45°C

Fig. 1 HPLC Separation of Leucine and Isoleucine in HILIC, Cation-Exchange Modes on Amaze TCH Column



Column: Amaze TCH
Dimensions: 4.6x150 mm, 3 um, 100A
Mobile phase: 73% ACN with 20 mM AmFm pH 2.7
Flow rate: 1 ml/min
Detection: Corona CAD

Fig. 2 HPLC Separation of Monovalent Inorganic Cations and Anions in HILIC, Cation- and Anion-Exchange Modes on Amaze TCH Column

Application Notes

The name says it all: Amaze for Amazing, TCH for Total Control HILIC. This column has been 3 years in the making. It is a part of a new surface modification platform to offer you new stationary phases with even better selectivity than our other columns. How do we know about AMAZEing selectivity of the Amaze TCH mixed-mode column? Here are just some examples that will be presented in the next few weeks:

- Separation of leucine and isoleucine
- Separation of paraquat and diquat
- Separation of 8 aminoglycoside antibiotics
- Separation of streptomycin and dihydrostreptomycin
- Separation of one valent cations and anions in one isocratic run
- Separation of 20 amino acids

How is this possible?

- Unique multifunctional ligand
- Ability to explore HILIC, RP, cation-exchange, anion-exchange, and chelating mechanisms
- Optimized ligand density to retain and separate poly-charged compounds with low buffer concentration
- Compatibility with mass spectrometry. Most of the mobile phases consist of ACN/water with low buffer concentration