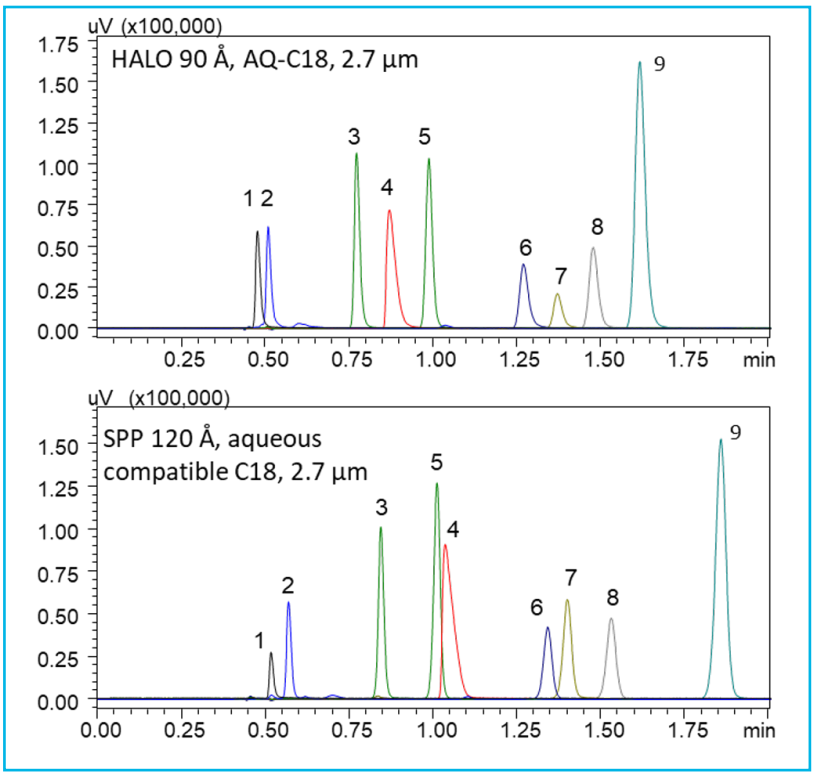
Purine Metabolites on HALO® AQ-C18 compared to a Competitor 100% Aqueous Compatible Column



PEAK IDENTITIES

1. 5-Amino-imidazole-4-carboxamide
2. Azepinomycin
3. Guanine - Substrate
4. 2,6-Diaminopurine
5. Uric Acid
6. Xanthine - Product
7. 8-Azaxanthine
8. 8-Azaguanine
9. Allopurinol

TEST CONDITIONS:

Column: HALO 90 Å AQ-C18, 2.7 µm, 2.1 x 100 mm
Part Number: 92812-622
Column: SPP 2.7 µm, 130 Å 100% aqueous compatible C18
Mobile Phase A: water/0.1% formic acid
Isocratic: 100% A
Flow Rate: 0.5 mL/min.
Temperature: 35 °C
Injection Volume: 1 µL

Wavelength: PDA, 254 nm
Flow Cell: 1 µL
Data Rate: 40 Hz
Response Time: 0.050 sec.
LC System: Shimadzu Nexera X2

The HALO 90 Å AQ-C18, 2.7 µm column stands out in its ability to resolve this set of purine metabolites compared to a competitor 100% aqueous compatible C18 SPP column. The molecules are highly polar and are not retained under reversed-phase conditions that include an organic modifier. The HALO 90 Å AQ-C18, 2.7 µm column was chosen for its ability to resolve the highly polar purine metabolites and inhibitors of interest. Under the current use conditions, the AQ-C18 column is stable for many thousands of samples, including tissue homogenates.