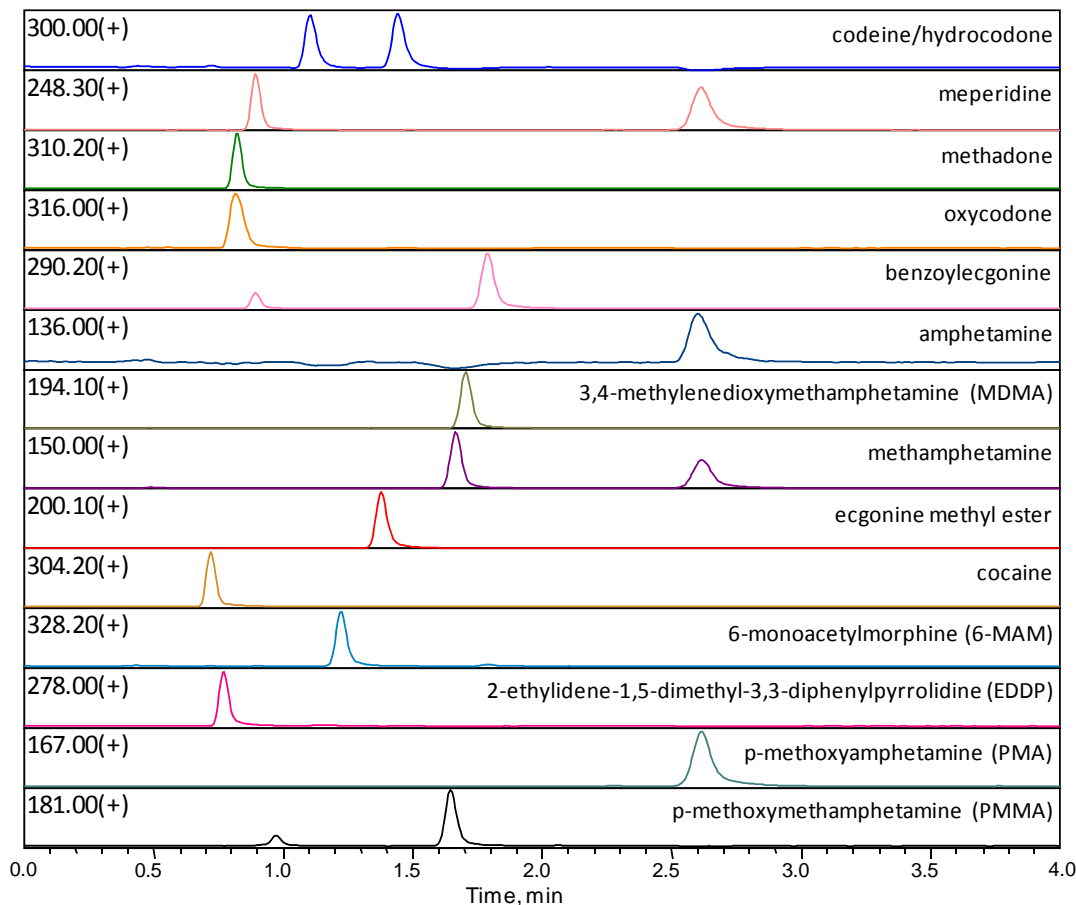


Application Note: 123-DA

## LC-MS Separation of Drugs of Abuse and Metabolites on HALO Penta-HILIC



G0107

### TEST CONDITIONS:

Column: 2.1 x 100 mm, HALO 2.7 µm Penta-HILIC  
 Part Number: 92812-605  
 Mobile Phase A: 5 mM Ammonium Formate, pH 3  
 Mobile Phase B: Acetonitrile  
 Isocratic: premixed 5/95 A/B  
 Flow Rate: 0.5 mL/min.  
 Pressure: 149 bar  
 Temperature: 60°C  
 Detection: Selected Ion Monitoring as indicated  
 Injection Volume: 1 µL  
 Sample Solvent: 90/10 ACN/water  
 MS parameters: Positive ion mode, 2 kV, 400°C heat block  
 225°C capillary  
 LC-MS System: Shimadzu Nexera and LCMS-2020 (single quadrupole MS)

This mixture of drugs of abuse and metabolites is quickly identified using a HALO Penta-HILIC column and selected ion monitoring (SIM) for improved sensitivity. Adapted from *J. Pharm. Anal.* 2013; 3 (5): 303-311.