

# Fast ISOCRATIC Analysis by HILIC-MS/MS of Amino Acids and Other Polar Compounds

**Column:** PolyHYDROXYETHYL A™,  
4.6 x 200mm, 5µm, 100Å

**Mobile Phase:** 0.2% formic acid + 10 mM ammonium formate with 60% ACN

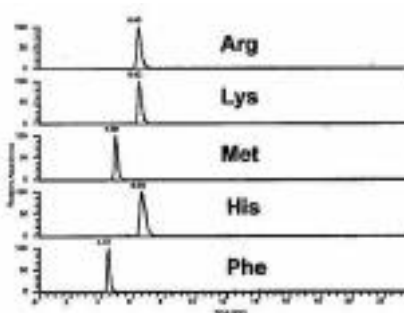
**Flow Rate:** 0.8 mL/min

**MS Detector:** Finnegan LCQ (APCI positive ion mode)

**NOTE:** Substitution of 70% MeOH for the ACN increases sensitivity of detection 10-100x. However, in some cases the resulting selectivity is inadequate.

*Data courtesy of Robert CroesDuPont Biotech (Newark, DE)*

## Quick sample throughput (polar amino acids elute last)



NL: 1.71E7  
m/z= 174.5-175.5  
F: + c Full ms  
[140.00 - 200.00]

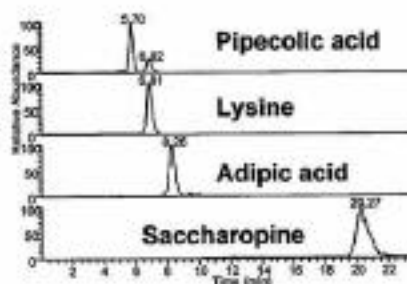
NL: 7.69E6  
m/z= 146.5-147.5  
F: + c Full ms  
[140.00 - 200.00]

NL: 9.88E6  
m/z= 149.5-150.5  
F: + c Full ms  
[140.00 - 200.00]

NL: 1.05E7  
m/z= 155.5-156.5  
F: + c Full ms  
[140.00 - 200.00]

NL: 2.68E7  
m/z= 165.5-166.5  
F: + c Full ms  
[140.00 - 200.00]

## Works for polar metabolites too!



NL: 1.37E6  
m/z= 83.5-84.5  
F: + c SRM ms2 130.10  
[83.35-84.65]

NL: 6.00E6  
m/z= 129.6-130.6  
F: + c SRM ms2 147.10  
[129.45-130.75]

NL: 3.10E5  
m/z= 115.5-116.5 +  
143.5-144.5  
F: + c SRM ms2 162.00  
[115.35-144.75]

NL: 1.06E5  
m/z= 212.5-213.5  
F: + c SRM ms2 259.10  
[212.45-213.75]