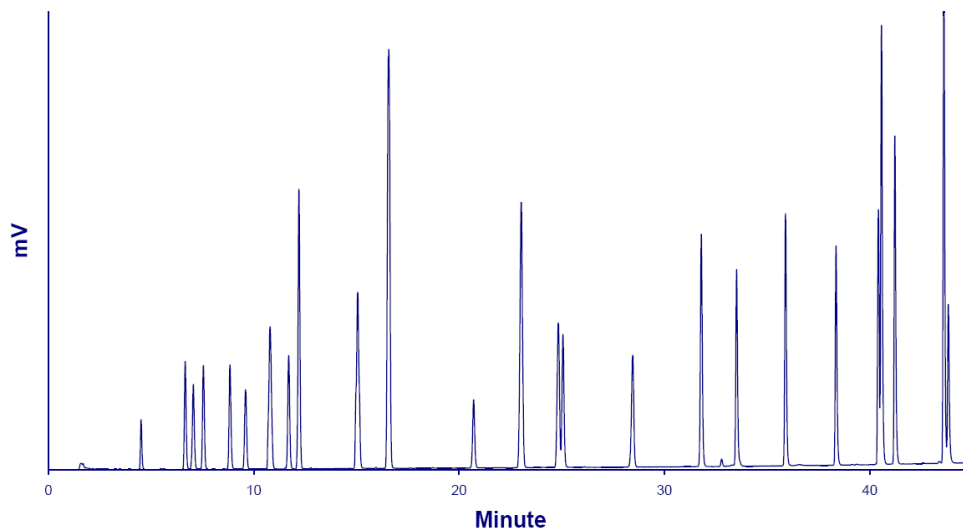


Direct HPLC/LT-ELSD Analysis of Amino Acids



Chromatogram of the Direct HPLC/LT-ELSD Analysis of Amino Acids.

Standard mixture: 22 Compounds (see Table next slide)

Injection volume: 2 μ L

Column: Zorbax SB-C18 (1,8 μ m, 2,1 x 150mm), 40°C

Flowrate: 0.3mL/min

Eluent: A: H₂O + (0,5% TFA, 0,3% HFBA) - B: ACN

Gradient: 0-3 minutes: 100%A, 3-10 minutes from 0%B to 5%B, 10-20 minutes: from 5%B to 35%B, 20-22 minutes: 35%B

Detector: SEDEX 90LT, 50°C, 3.5Bar

SEDEX LT-ELSD: S90 Applications



Direct HPLC/LT-ELSD Analysis of Amino Acids

	RT	%RSD (n=6)		LOD (S/N=3)
	Minutes	RT	Response	ng (o.c.)
1 - Taurine	1.06	0.05	1.7	2.2
2 - Glycine	1.47	0.04	2.1	2.8
3 - Aspartic acid	1.64	0.05	1.4	2.3
4 - Glutamine	1.77	0.04	3.2	3.2
5 - Glutaric acid	2.01	0.06	1.4	2.5
6 - Threonine	2.10	0.04	1.0	2.3
7 - GABA	2.50	0.06	6.1	2.0
8 - Cysteine	2.65	0.03	3.2	4.3
9 - Ornithine	3.23	0.05	1.1	2.4
10 - Lysine	5.17	0.19	1.4	5.2
11 - Proline	5.65	0.21	1.0	7.5
12 - Histidine	7.23	0.14	1.6	3.8
13 - Theanine	9.37	0.14	1.7	6.7
14 - Arginine	11.29	0.17	1.5	4.5
15 - Valine	11.77	0.12	1.9	6.3
16 - Methionine	12.53	0.14	1.9	6.4
17 - Tyrosine	14.67	0.05	2.4	2.9
18 - Isoleucine	17.13	0.07	1.8	1.7
19 - Leucine	17.60	0.03	1.7	1.6
20 - Norleucine	17.86	0.07	1.3	1.5
21 - Phenylalanine	18.75	0.03	0.9	1.6
22 - Tryptophane	19.88	0.06	1.3	1.4