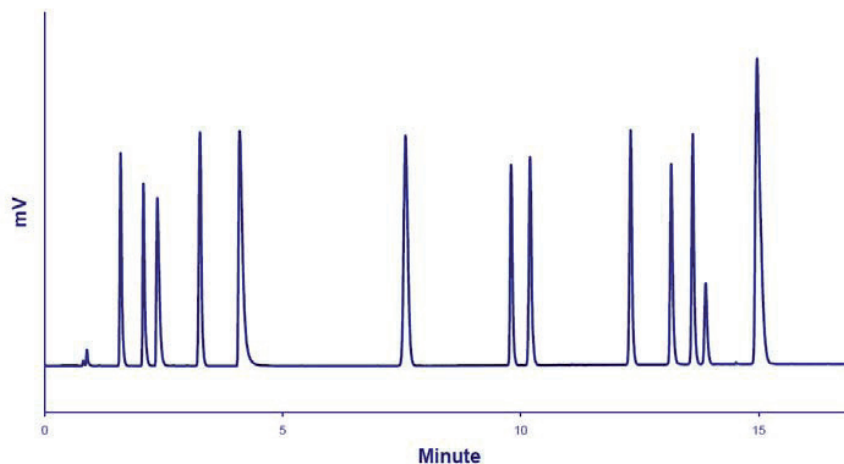


HPLC/LT-ELSD Analysis of Organic Acids



Chromatogram of the Simultaneous HPLC/LT-ELSD Analysis of Organic and Phenolic Acids.

Standard mixture: 12 Compounds (see Table next slide)

Injection volume: 2 μ L

Column: Imtakt Scherzo SM-C18 (3 μ m, 2 x 150mm), 30°C

Flowrate: 0.3mL/min

Eluent: A: H₂O + 0,3% HCOOH - B: ACN + 1% HCOOH

Gradient: 0-2 minutes: 100%A, 2-10 minutes: from 0%B to 20%B, 10-15 minutes: 20%B

Detector: SEDEX 90LT, 30°C, 3.5Bar

HPLC/LT-ELSD Analysis of Organic Acids

	RT	%RSD (n=8)		LOD (S/N=3)
	Minutes	RT	Response	ng (o.c.)
1 - Quinic acid	1.60	0.09	2.1	4.5
2 - Malic acid	2.08	0.09	1.9	7.7
3 - Tartaric acid	2.37	0.11	2.7	20.9
4 - Succinic acid	3.27	0.20	2.2	9.0
5 - Citric acid	4.11	0.25	1.3	25.3
6 - Gallic acid	7.60	0.31	1.9	8.0
7 - Lactic acid	9.81	0.18	2.4	55.9*
8 - Protocatechuic acid	10.21	0.14	2.4	3.7
9 - 4-HPAC	12.32	0.09	1.7	3.4
10 - Chlorogenic acid	13.16	0.07	2.2	4.0
11 - Syringic acid	13.62	0.07	3.0	2.3
12 - Gentisic acid	14.97	0.06	1.9	6.2

* Semi-volatile compound