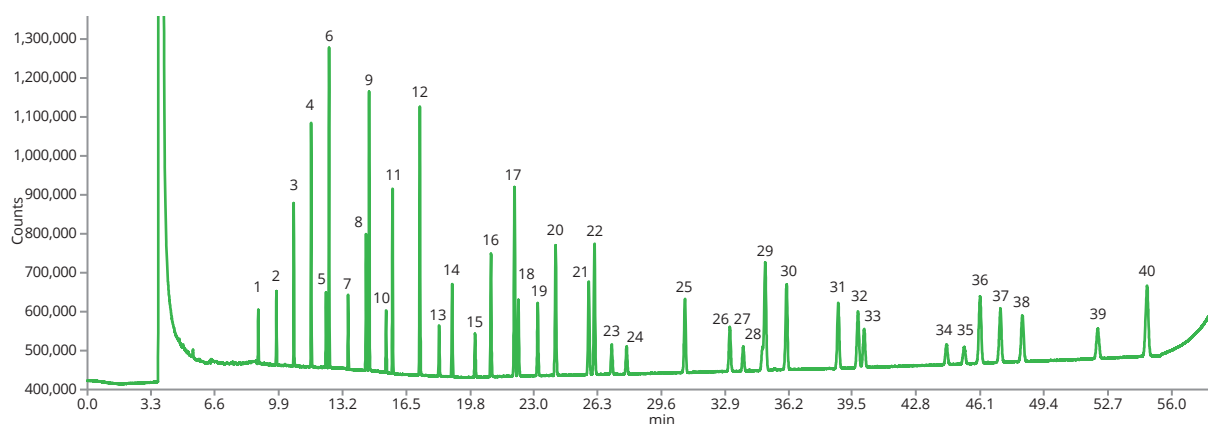




Fatty acids

Control of the profile of fatty acids in blood samples is actual due to the role of fatty acids as biomarkers in the pathogenesis of atherosclerosis. Capillary Column LION™ LN-FAME HT GC provides separation of the 40 fatty acids with excellent reproducibility and robustness.

Substance	Fatty Acids (see table below)
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Calibration standard on LION™ LN-FAME HT GC column



Fatty acids

Column	LION™ LN-FAME HT GC
Dimensions	60 m × 0.25 mm × 0.2 µm
Part number	LNI-5881-FE60
Injection temperature	260 °C
Injection mode	S/SL, Split Ratio 12:1
Column flowrate	Carrier Gas – Hydrogen, constant pressure 80 kPa, 40 mL/min
Oven program	40 °C, hold 0 min 15 °C/min, 160 °C, hold 0 min 50 °C/min, 200 °C, hold 5 min 3 °C/min, 180 °C, hold 0 min 0.5 °C/min, 200 °C, hold 0 min 10 °C/min, 230 °C, hold 0 min
Sample	GLC 566 (Nu-CHEK, prep.) mix in heptane, total concentration 2.5 mg/mL
Detection	FID at 260 °C Air: 350 mL/min Hydrogen: 35 mL/min Make-up gas (Nitrogen): 35 mL/min
Analytes	See table below

This application was developed
by Charles University, First Faculty of Medicine.



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Fatty acids

Peak No.	Compound ID	Retention time (min)
1	FA 8:0	8.810
2	FA 9:0	9.747
3	FA 10:0	10.647
4	FA 11:0	11.540
5	FA 11:1n-5	12.307
6	FA 12:0	12.463
7	FA 13:0	13.447
8	FA 13:1n-5	14.370
9	FA 14:0	14.533
10	FA 14:1n-5	15.410
11	FA 15:0	15.740
12	FA 16:0	17.150
13	FA 16:1n-7	18.143
14	FA 17:0	18.817
15	FA 17:1n-7	20.000
16	FA 18:0	20.820
17	FA 18:1n-9	22.033
18	FA 18:1n-7	22.233
19	FA 19:0	23.233
20	FA 18:2n-6	24.157
21	FA 18:3n-6	25.867
22	FA 20:0	26.160
23	FA 18:3n-3	27.050
24	FA 20:1n-9	27.820
25	FA 20:2n-6	30.830
26	FA 20:3n-6	33.147
27	FA 22:0	33.837
28	FA 20:3n-3	34.837
29	FA 20:4n-6	34.967
30	FA 22:1n-9	36.083
31	FA 23:0	38.743
32	FA 20:5n-3	39.760
33	FA 22:2n-6	40.077
34	FA 24:0	44.327
35	FA 22:3n-3	45.243
36	FA 22:4n-6	46.060
37	FA 24:1n-9	47.107
38	FA 22:5n-6	48.237
39	FA 22:5n-3	52.137
40	FA 22:6n-3	54.673