

LIPID MAPS Glycerophospholipid LC/MS Analysis Parameters

4000 Qtrap parameters:

CUR: 30
IS: -3500
TEM: 450
GS1: 50
GS2: 50
Ihe: on
CAD: LOW
DP: -110
CES: 0
CE -5

Scan Type: EMS
Scan range: 350 to 1200 m/z

dynamic fill time

Shimadzu HPLC parameters:

Phenomenex Luna Silica column 2x250 mm 5 micron

Mobile phase A: IPA:Hexane: 100 mM NH₄CO₂H 58:40:2

Mobile phase B: IPA:Hexane: 100 mM NH₄CO₂H 50:40:10

Flow rate: 300 uL/min

Initial %B 50

Gradient program:

| <u>Time</u> | <u>Event</u> | |
|-------------|--------------|-------|
| 0.01 | Controller | Start |
| 5.00 | Pump B | 50% |
| 30.00 | Pump B | 100% |
| 40.00 | Pump B | 100% |
| 41.00 | Pump B | 50% |
| 50.00 | Controller | Stop |

Autosampler parameters:

20 uL injection (samples dissolved in 100 uL of mobile phase A)

Note: These parameters have been optimized for a 4000 Qtrap MS only. Analysis using other instrumentation will require the optimization of MS parameters using glycerophospholipid standards. For a detailed description of the extraction and analysis of glycerophospholipids please see Ivanova et al, Methods in Enzymology, vol. 432, 2007, pgs 21-57.