

Arsenolipids from Edible Seaweed by LC-ICP-MS and LC-ESI-MS

ACE[®]
Ultra-inert
UHPLC & HPLC Columns

Application #AN1970

Conditions

Column: ACE 3 C18
Dimensions: 150 x 4.6 mm
Part Number: ACE-111-1546
Mobile Phase: A: 0.1% formic acid in H₂O
B: 0.1% formic acid in MeOH

Time (mins)	%B
0	0
20	100
45	100

Flow Rate: 1 mL/min
Injection: 100 µL
Temperature: 45 °C
Detection: Split ratio: 75% ESI-MS: 25% ICP-MS
Thermo Scientific Element 2 ICP-MS
Mode: Organic mode
Medium resolution
Thermo Scientific Orbitrap Discovery
Positive ESI mode
Spray voltage: 4.5 kV
Capillary temperature: 320 °C
Capillary voltage: 42 V

Arsenic-containing hydrocarbon:

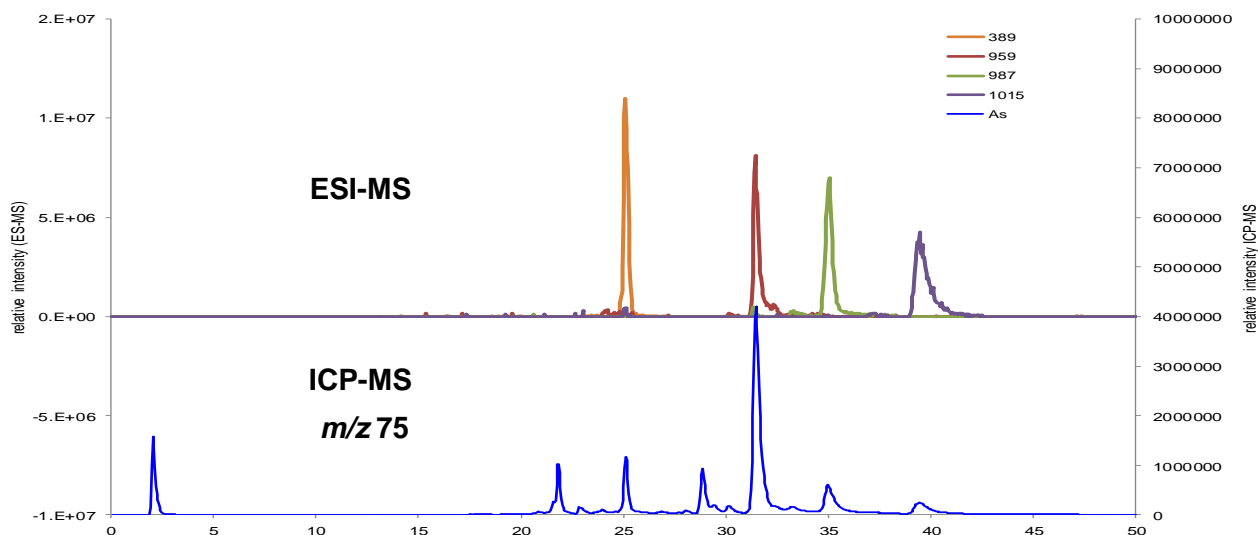
m/z 389 [M + H]⁺ for C₂₁H₄₆AsO

Arsenic-containing phospholipids:

m/z 959 [M + H]⁺ for C₄₅H₈₉AsO₁₄P (C16:0/C16:0)

m/z 987 [M + H]⁺ for C₄₇H₉₃AsO₁₄P (C18:0/C16:0)

m/z 1015 [M + H]⁺ for C₄₉H₉₇AsO₁₄P (C20:0/C16:0)



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