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 H_2O B: 0.1% formic acid in MeOH

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

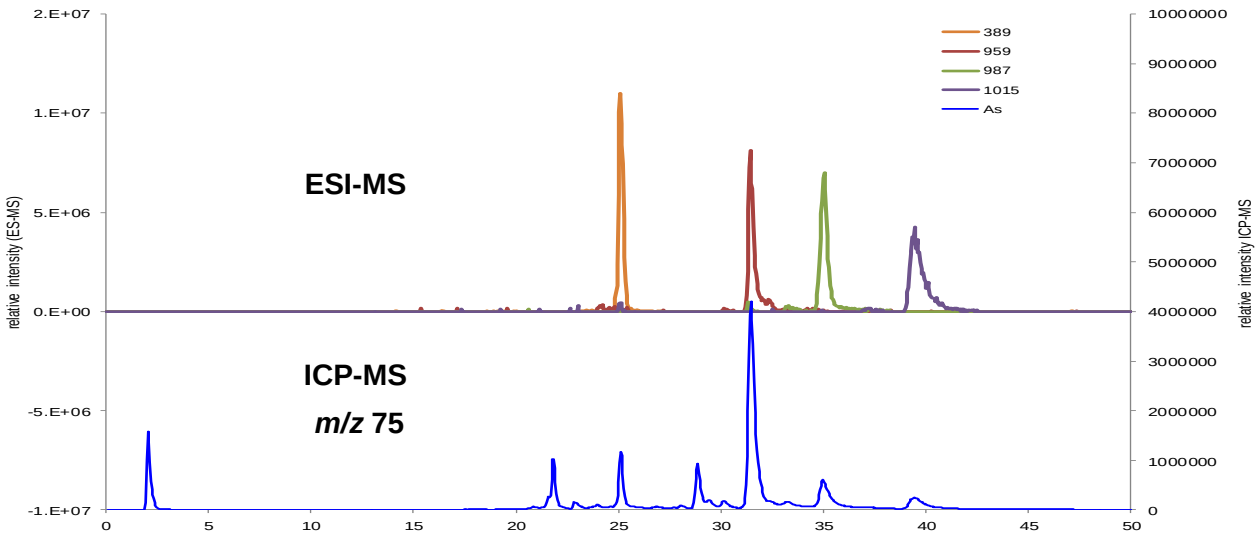
Flow Rate:	1 mL/min
Injection:	100 µL
Temperature:	45 °C
Detection:	Split ratio: 75% ESI-MS: 25% ICP-MS Thermo Scientific Element 2 ICP-MS Mode: Organic mode Medium resolution Thermo Scientific Orbitrap Discovery Positive ESI mode Spray voltage: 4.5 kV Capillary temperature: 320 °C Capillary voltage: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

Arsenic-containing hydrocarbon:

m/z 389 [M + H]+ for $C_{21}H_{46}AsO$

Arsenic-containing phospholipids:

m/z 959 [M + H]+ for $C_{45}H_{89}AsO_{14}P$ (C16:0/C16:0)
m/z 987 [M + H]+ for $C_{47}H_{93}AsO_{14}P$ (C18:0/C16:0)
m/z 1015 [M + H]+ for $C_{49}H_{97}AsO_{14}P$ (C20:0/C16:0)



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