

LC/MS/MSによる下痢性貝毒の分析

Analysis of diarrhetic shellfish poisoning by LC/MS/MS

D150706B

Procedure

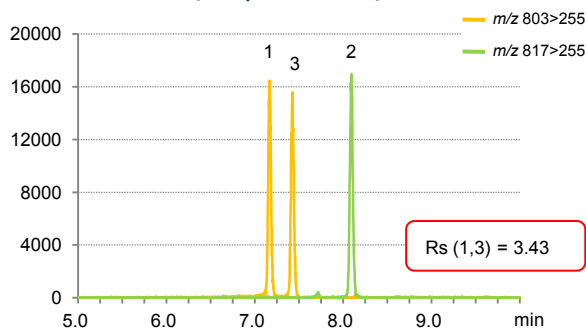
Extraction

Hydrolysis

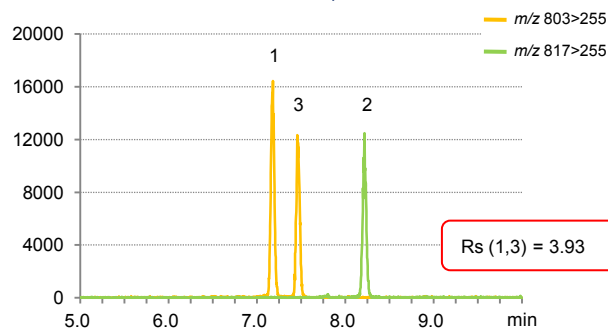
Purification

Measurement

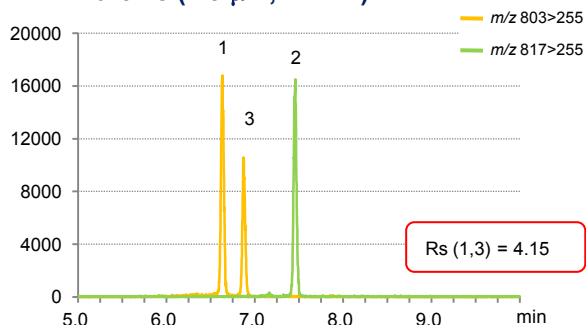
YMC-Triart C18 (1.9 μ m, 12 nm)



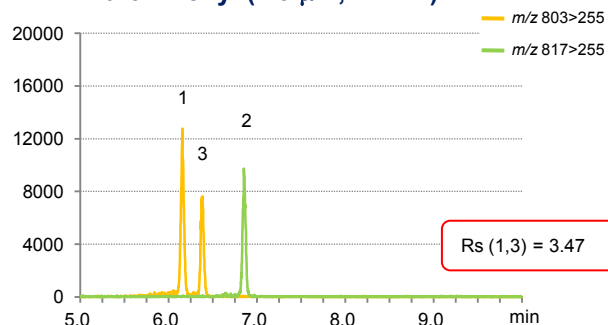
YMC-Triart C18 ExRS (1.9 μ m, 8 nm)



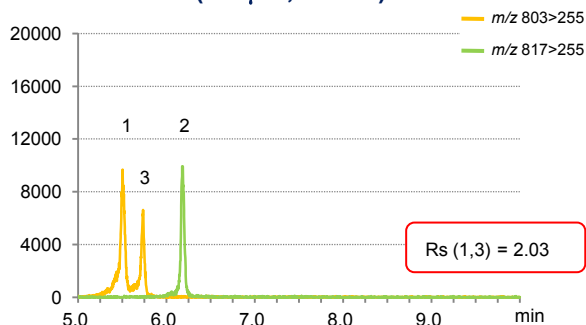
YMC-Triart C8 (1.9 μ m, 12 nm)



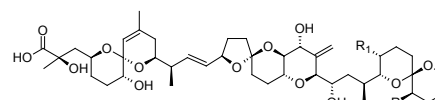
YMC-Triart Phenyl (1.9 μ m, 12 nm)



YMC-Triart PFP (1.9 μ m, 12 nm)



Okadaic acid



	R ₁	R ₂
1. Okadaic acid (OA)	CH ₃	H
2. Dinophysistoxin-1 (DTX1)	CH ₃	CH ₃
3. Dinophysistoxin-2 (DTX2)	H	CH ₃

Courtesy of Japan Frozen Foods Inspection Corporation

Column : 75 X 2.1 mm I.D.

Eluent : A) water containing 2 mM HCOONH₄ and 50 mM HCOOH
B) acetonitrile/water (95/5) containing 2 mM HCOONH₄ and 50 mM HCOOH
40%B (0-2.5 min), 40%-100%B (2.5-7.5 min), 100%B (7.5-12.5 min)

Temperature : 40°C

Flow rate : 0.2 mL/min

Detection : AB SCIEX QTRAP® 4500, ESI, Negative, MRM

Okadaic acid (m/z 803>255)

Dinophysistoxin-1 (m/z 817>255)

Dinophysistoxin-2 (m/z 803>255)

Sample : Matrix matched standards

Injection : 5 μ L (5 ppb)