

Table S1. Operating parameters for HPLC/ICP-DRC-MS and ESI-MS/MS

	Parameter	Setting
ICP-MS	Instrument	PE Sciex ELAN 6100 DRC II
	RF Power	1100-1200 W
	Nebulizer gas (Ar) flow rate	0.87-0.93 L min ⁻¹
	Auxiliary gas (Ar) flow rate	1.20 L min ⁻¹
	Plasma gas (Ar) flow rate	16 L min ⁻¹
	Sampler and skimmer cones	Pt
	Lens voltage	7.0 - 9.5 V
	Detector mode	Dual
	Data collection mode	⁹¹ AsO, ⁵² Cr, ¹²¹ Sb
	Scan mode	Peak hopping
	DRC gas (O ₂) flow rate	0.55 mL min ⁻¹
	Rpq	0.55
	Rpa	0
	Instrument	PE series 200 HPLC pump PE series 225 HPLC autosampler PE series 200 column oven PE series 200 UV detector
Procedure 1	Column	Hamilton PRP-X100
	Elution	Gradient
	Mobile phase content	EDTA disodium salt, ammonium nitrate
	Concentration of mobile phase	0.003 mol L ⁻¹ EDTANa ₂ , 0.036 mol L ⁻¹ NH ₄ NO ₃
	pH of mobile phase	Eluent A: 4.6; Eluent B: 9.0
	Mobile phase flow rate	1.2 mL min ⁻¹
	Injection volume	100 µL
	Column temperature	25°C
	Procedure 2	Column
Elution		Isocratic
Mobile phase content		ammonium dihydrogen phosphate, ammonium nitrate
Concentration of mobile phase		0.01 mol L ⁻¹ NH ₄ H ₂ PO ₄ , 0.01 mol L ⁻¹ NH ₄ NO ₃
pH of mobile phase		9.2
Mobile phase flow rate		1.2 mL min ⁻¹
Injection volume		100 µL
Column temperature		25°C
Procedure 3		Column
	Elution	Isocratic
	Mobile phase content	sodium dihydrogen phosphate, sodium chloride
	Concentration of mobile phase	0.05 mol L ⁻¹ NH ₄ H ₂ PO ₄ , 0.03 mol L ⁻¹ NaCl
	pH of mobile phase	5.2
	Mobile phase flow rate	0.55 mL min ⁻¹
	Injection volume	100 µL
	Column temperature	25°C

ESI-MS/MS Procedure 4	Instrument	Q-Exactive Orbitrap MS Thermo Fisher
	Syringe pump flow rate	5 $\mu\text{l min}^{-1}$
	Ion source	HESI -II
	Sheath gas (N ₂) flow rate	15 units
	Auxiliary gas (N ₂) flow rate	5 units
	Auxiliary gas temperature	120 °C
	Electrospray Voltage	-2.5 kV
	Ion transfer tube temperature	250 °C
	S-lens RF	50
	Collision energy	30 eV

*ICP-MS – inductively coupled plasma spectrometry; HPLC - high performance liquid chromatography; ESI-MS/MS - electrospray ionization tandem mass spectrometry; DRC – dynamic reaction cell; Rpa - rejection parameter a; Rpq - rejection parameter q.