

SUPPLEMENTARY DATA

Table S1. Formulations of oil-in-water emulsion made with SIO. All (%) corresponding to % weight/weight.

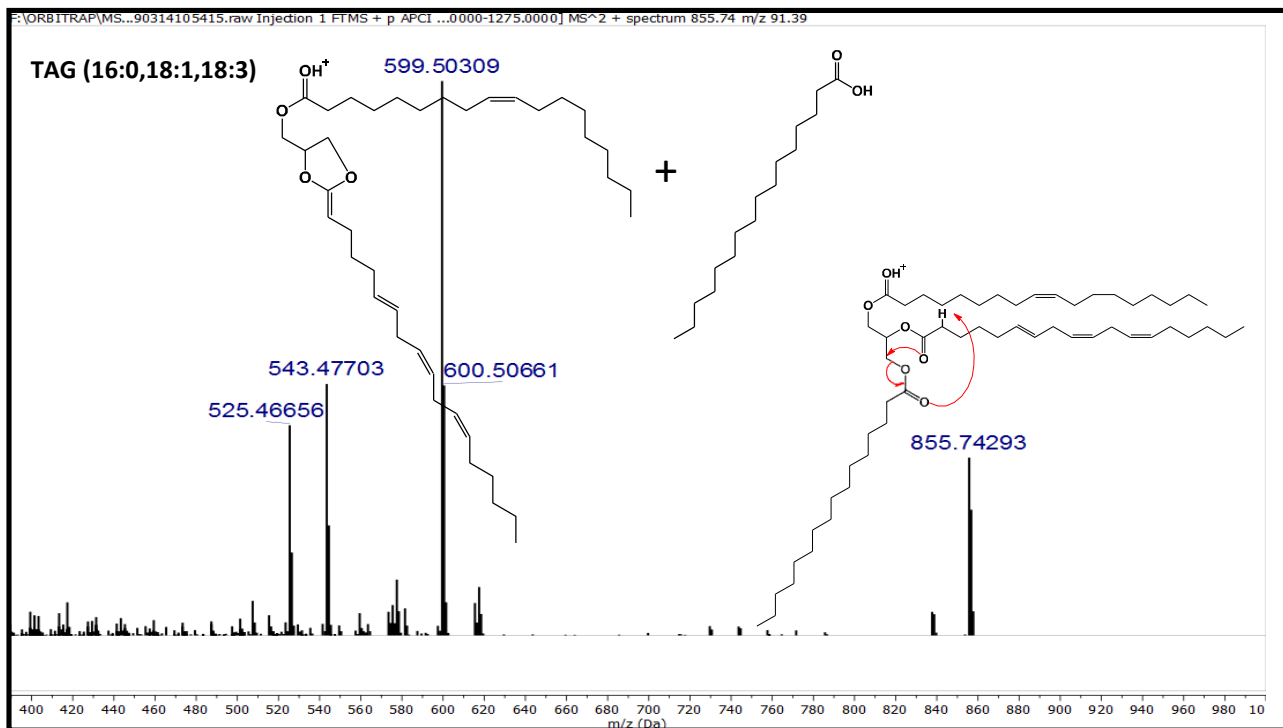
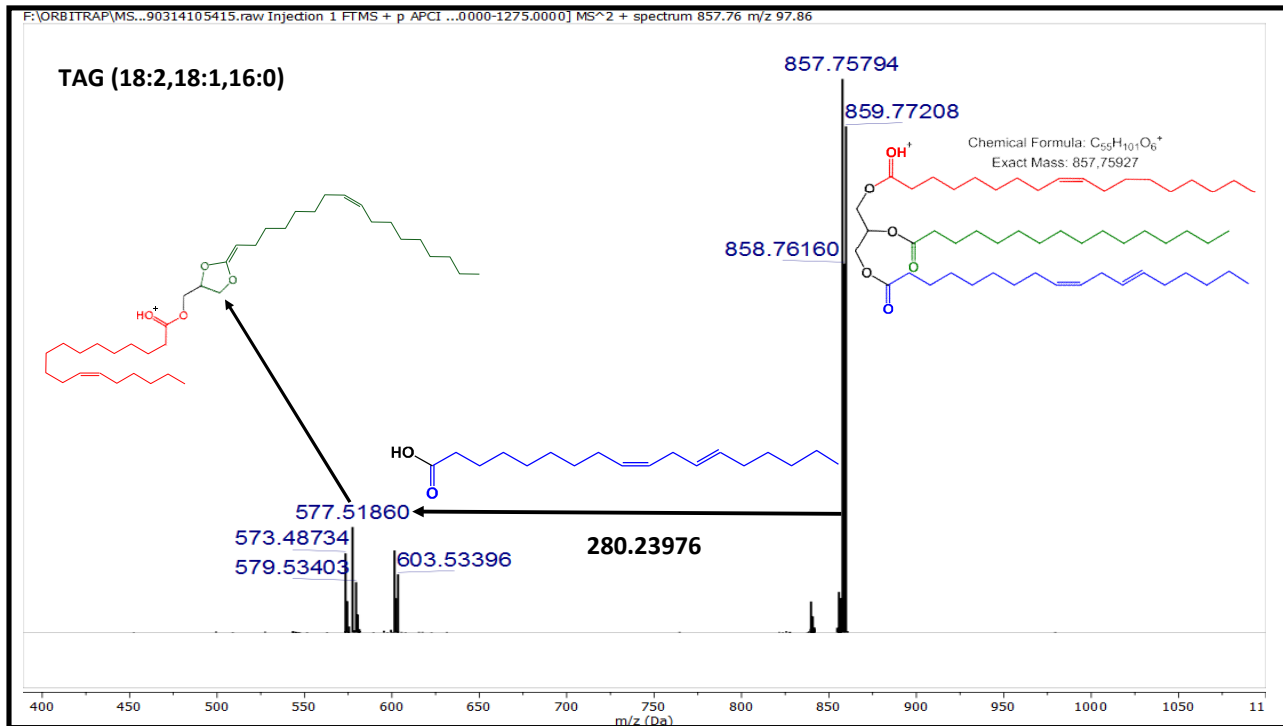
System	HLB ^B	<i>Sacha Inchi</i> Oil (%)	Preservatives	Surfactants Blend at 2%		% Water
			mp + pp (%)	Steareth 2 (%)	Steareth 20 (%)	
1	6	9.30	0.30 + 0.14	1.79	0.21	q.s.
	8			1.40	0.60	
	10			1.02	0.98	
	12			0.63	1.37	
				Glyceryl Stearate (%)	Polyoxyl 40 Stearate (%)	
2	6	9.30	0.30 + 0.14	1.67	0.33	q.s.
	8			1.38	0.62	
	10			1.08	0.92	
	12			0.79	1.21	
				Sorbitan oleate (%)	Polysorbate 80 (%)	
3	6	9.30	0.3 + 0.14	1.68	0.32	q.s.
	8			1.31	0.69	
	10			0.93	1.07	
	12			0.56	1.44	

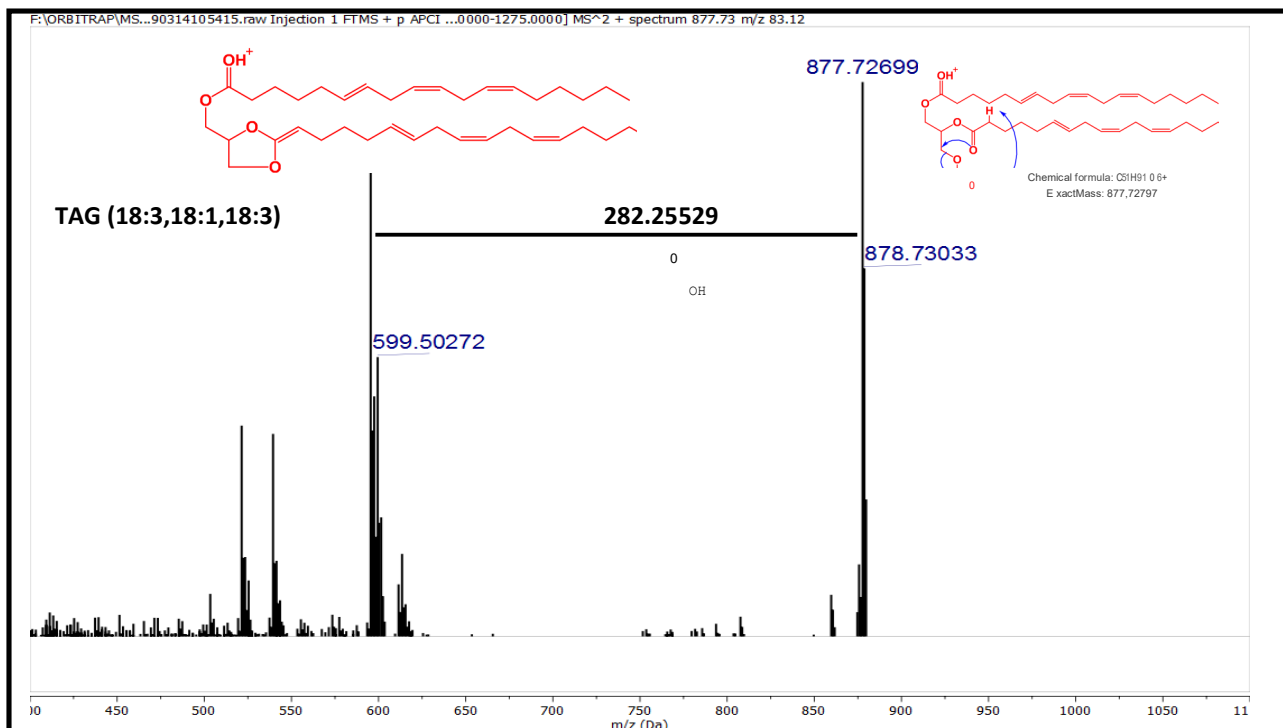
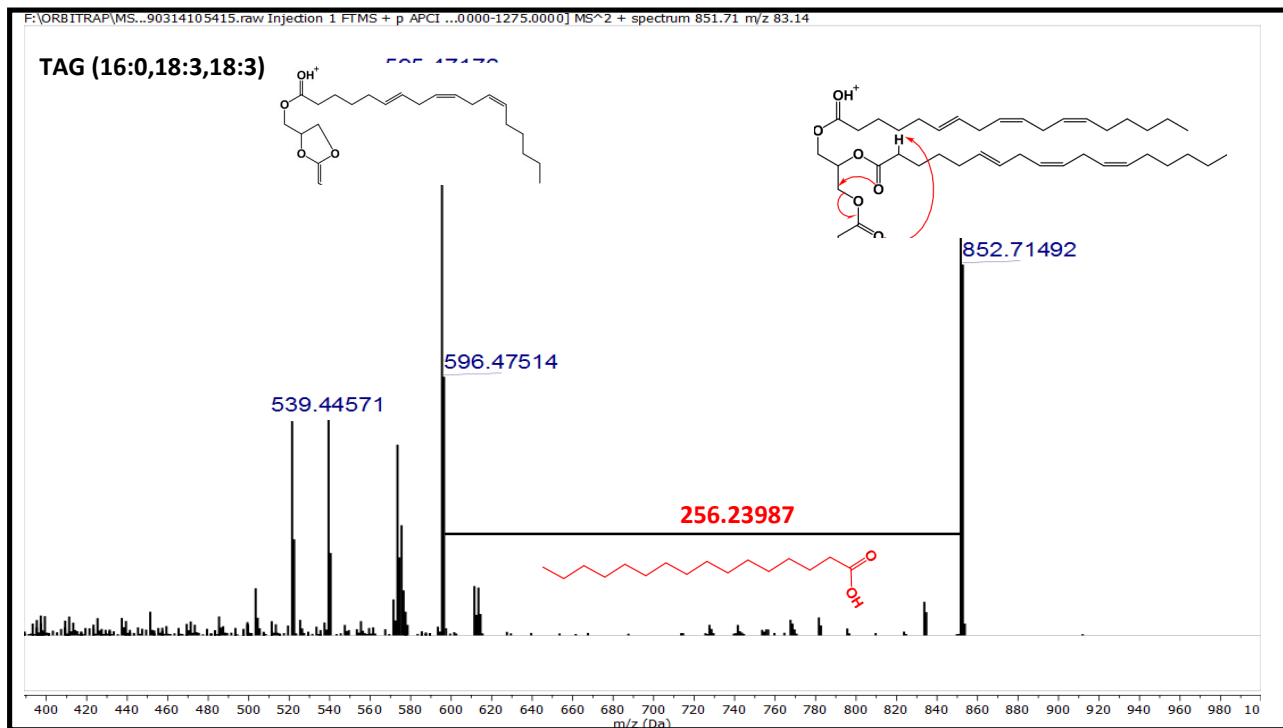
All % represent weight/weight, q.s. = quantity sufficient, mp = methylparaben, pp = propylparaben

Table S2: Values of shear rate applied in the emulsion and nano-emulsion systems in viscometric assay.

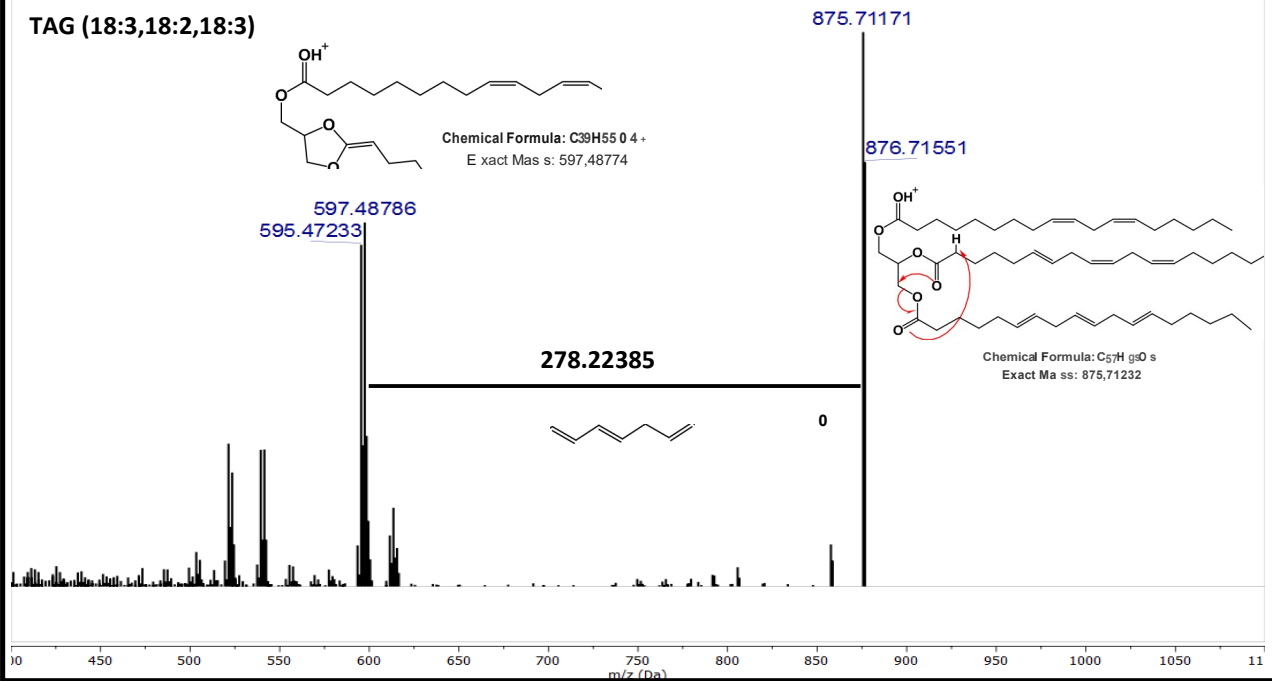
System	HLB ^B	Values of Shear Rate (s ⁻¹) Applied to the Emulsion Made up with <i>Sacha Inchi</i> Oil				
		t=0	t=1 st week	t=2 nd week	t=3 rd week	t= 4 th week
1	6	400	--	--	--	--
	8	400	312	312	312	--
	10	400	480	480	480	480
	12	480	--	--	--	--
		t=0	t=2 nd week	t=2 nd week	t=2 nd week	t= 4 th week
2	6	480	--	--	--	--
	8	480	480	480	480	480
	10	480	--	--	--	--
	12	480	--	--	--	--
		t=0	t=2 nd week	t=2 nd week	t=2 nd week	t= 4 th week
3	6	480	--	--	--	--
	8	480	5750	5750	5750	4600
	10	480	--	--	--	--
	12	480	--	--	--	--

-- Correspond to emulsions with phase separation, where the viscosity value was not determined

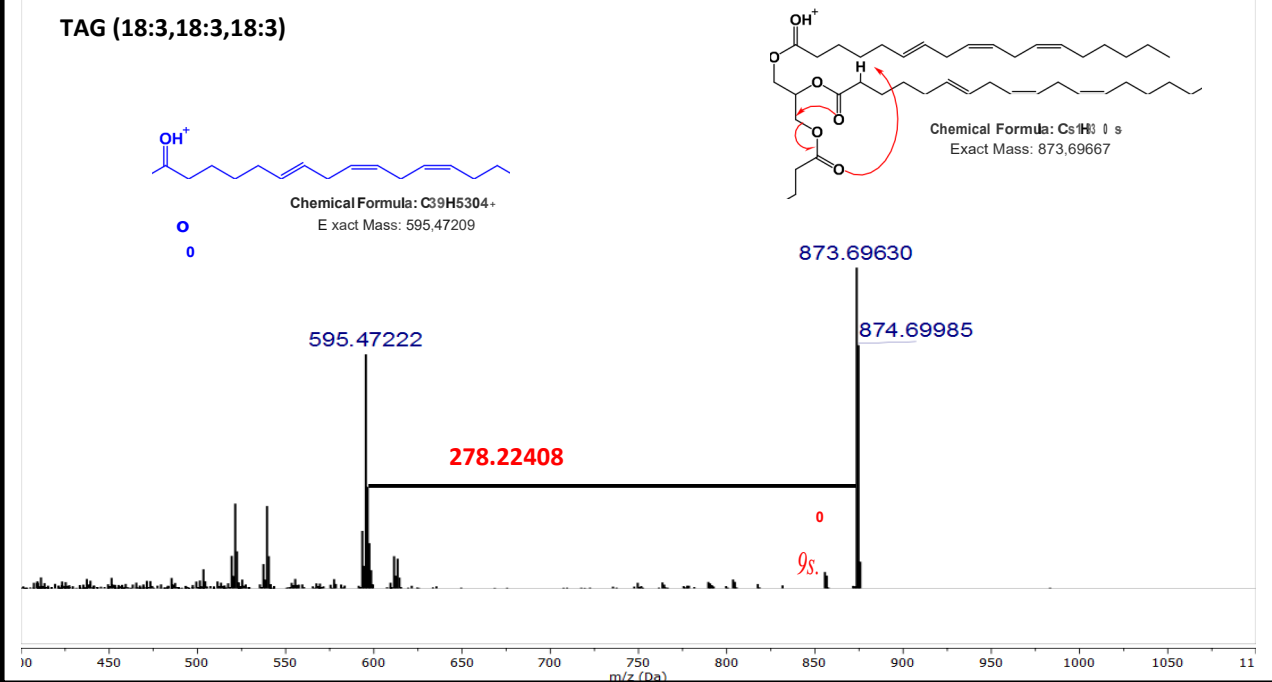




TAG (18:3,18:2,18:3)



TAG (18:3,18:3,18:3)



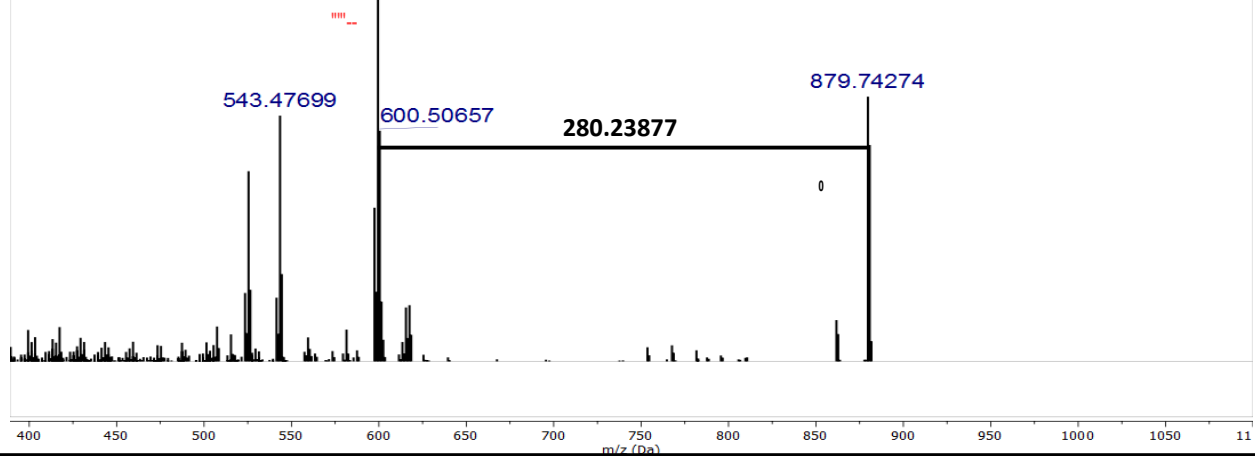
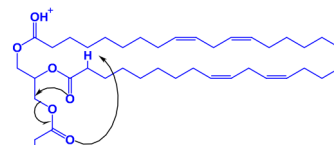
F:\ORBITRAP\MS...90314105415.raw Injection 1 FTMS + p APCI ...0000-1275.0000] MS² + spectrum 879.74 m/z 85.16

TAG (18:2,18:2,18:2)

599.50311

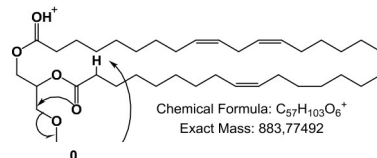
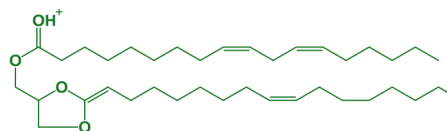


Chemical Formula: $C_{57}H_{103}O_4$
Exact Mass: 599.50339

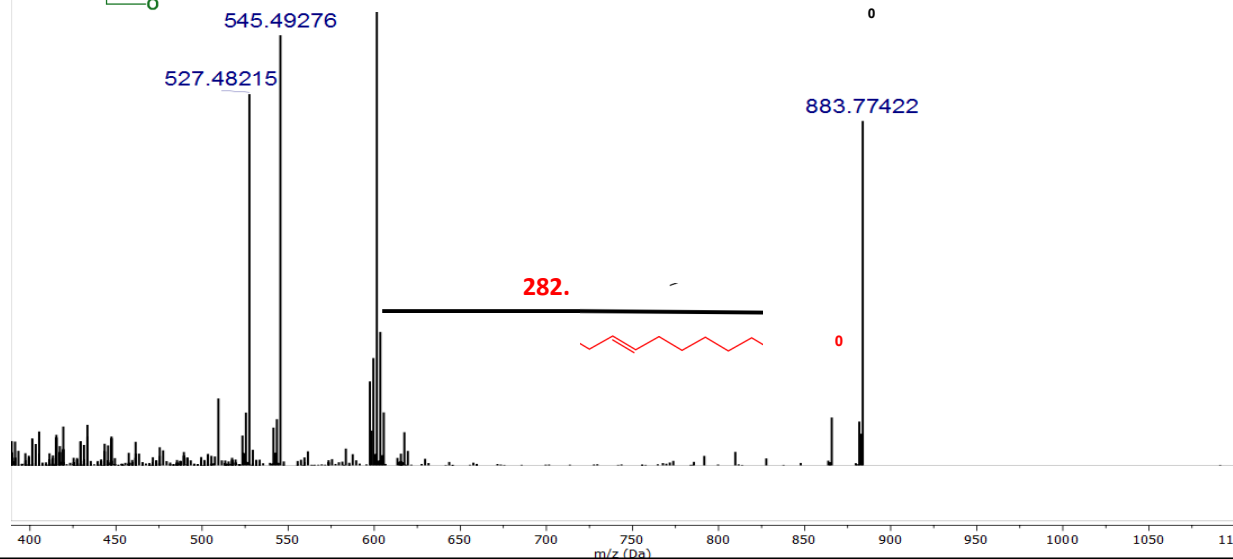


F:\ORBITRAP\MS...90314105415.raw Injection 1 FTMS + p APCI ...0000-1275.0000] MS² + spectrum 881.76 m/z 95.30

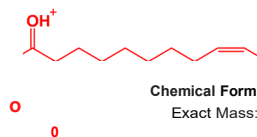
TAG (18:1,18:2,18:1)



Chemical Formula: $C_{57}H_{103}O_6^+$
Exact Mass: 883.77492

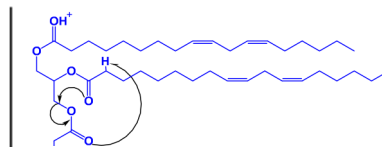


TAG (18:2,18:2,16:0)



Chemical Formula: $C_{39}H_{67}O_4$
Exact Mass: 599.50339

855.74203



856.74516

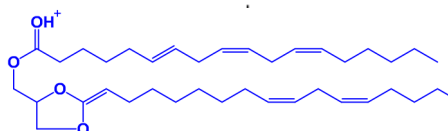
857.74898

599.50307

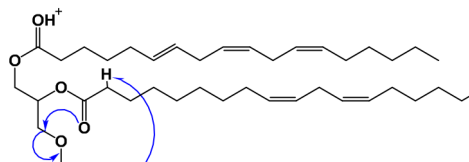
256.23896

m/z (Da)

TAG (16:0,18:2,18:3)



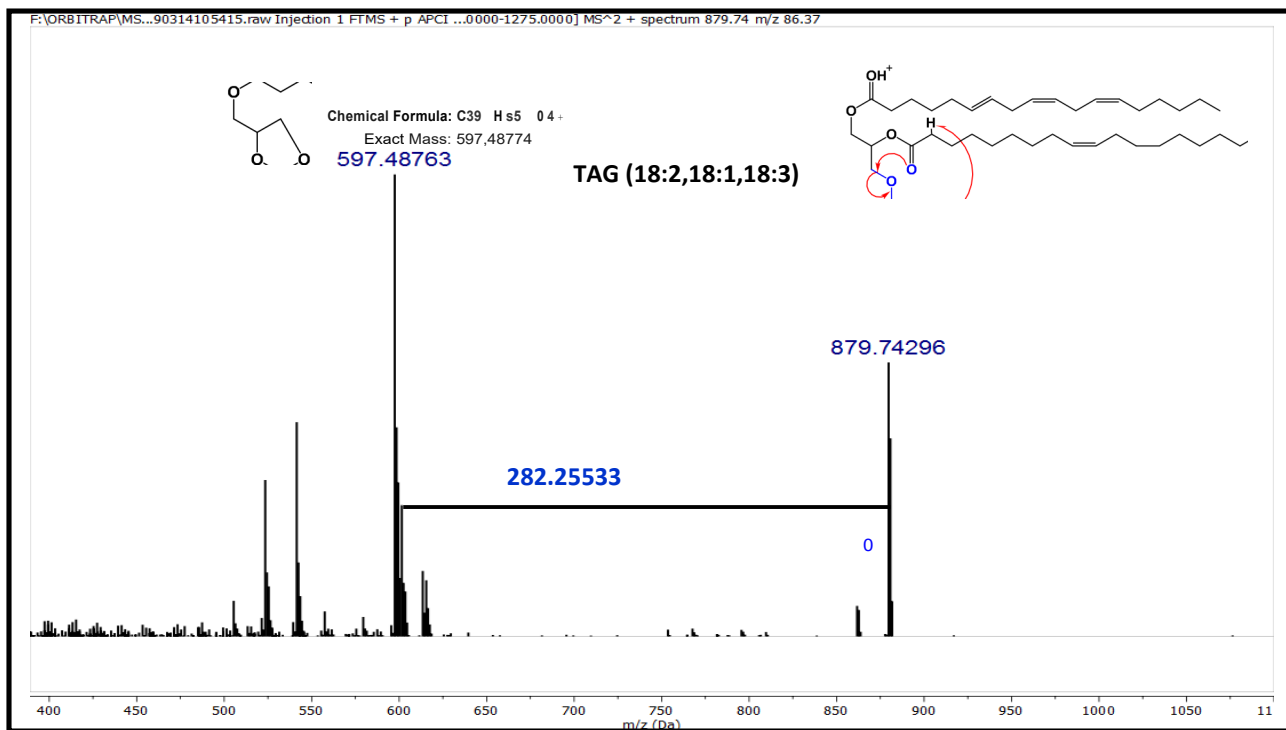
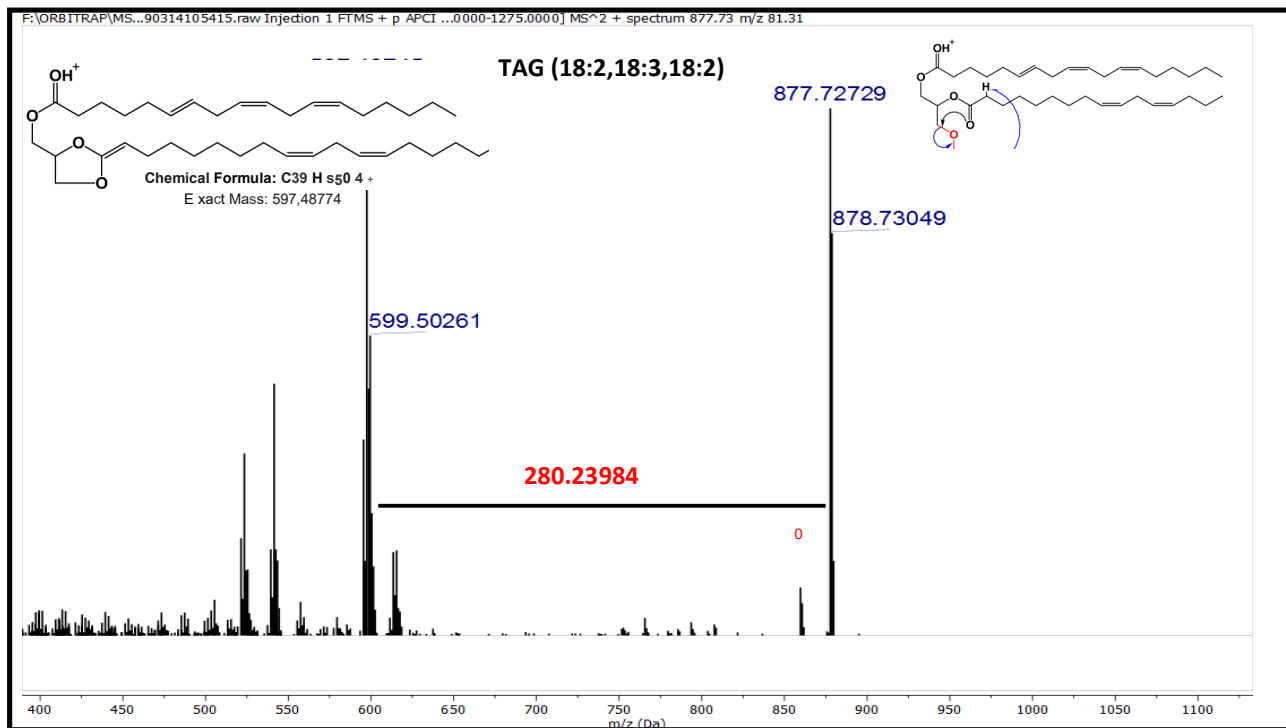
597.48727



853.72681

256.23954

m/z (Da)



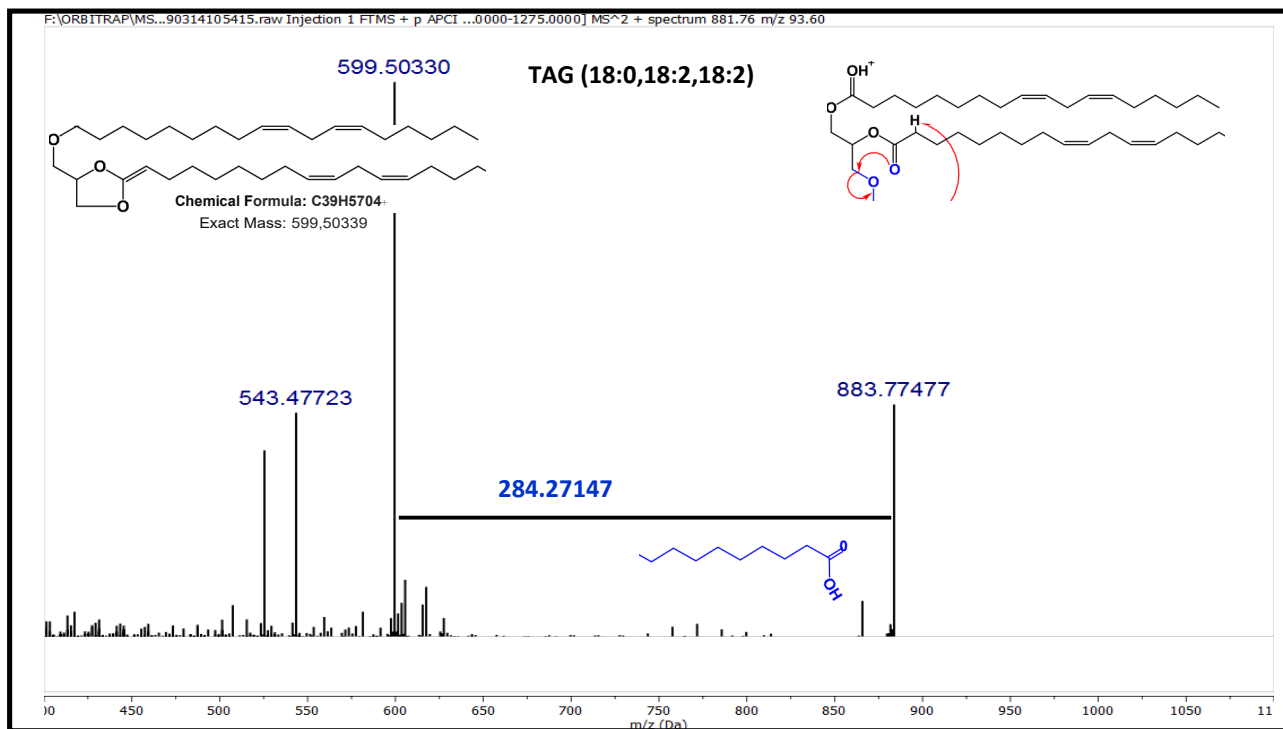


Figure S1. High-resolution tandem mass spectra of SIO glycerolipids.