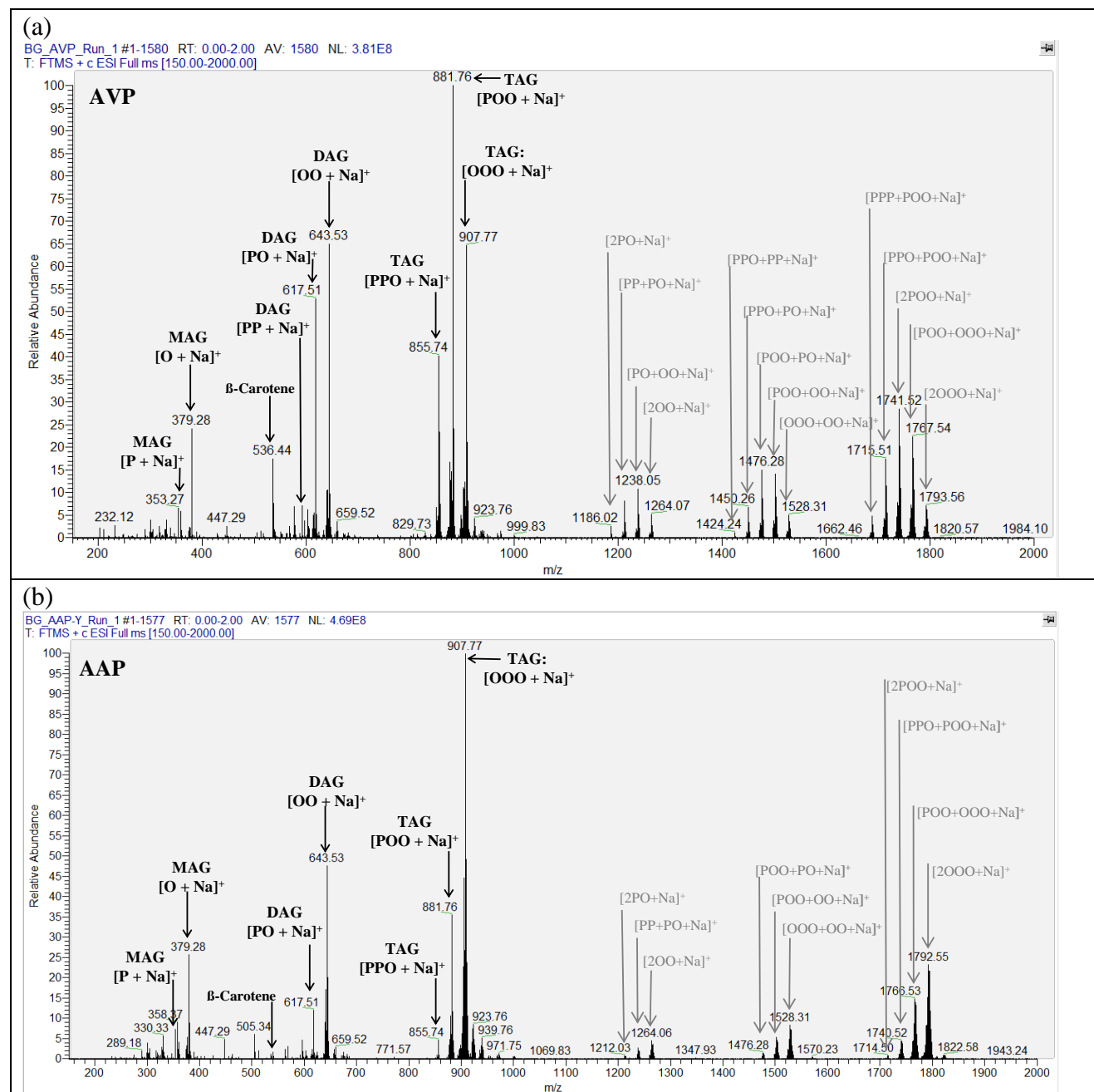


Supporting Information



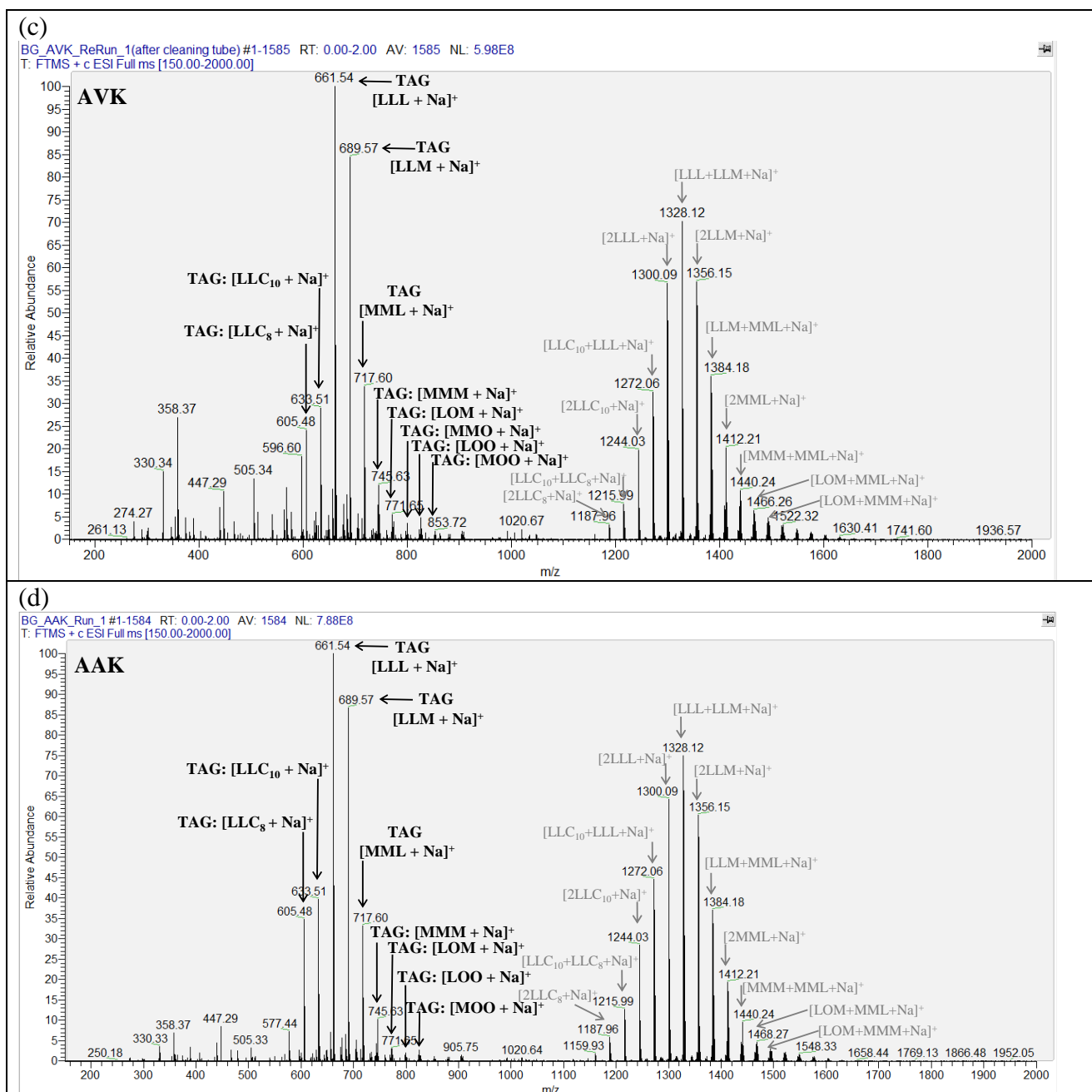


Figure S1. Full-scan ESI-MS from 150 to 2000 m/z for (a) *Astrocyrium vulgare* pulp oil, (b) *Astrocyrium Aculeatum* pulp oil, (c) *Astrocyrium vulgare* kernel oil and (d) *Astrocyrium Aculeatum* kernel oil. Major peaks are labeled with the identified molecule adducts.

Table S1: Shear rate vs. shear stress data for AVK and AAK

Parameters	30°C		40°C		60°C		90°C	
	AVK	AAK	AVK	AAK	AVK	AAK	AVK	AAK
τ_0	0.71	0.10	0.02	-0.01	0.01	-0.01	0.16	0.02
κ	21.40	31.08	32.88	29.54	17.13	15.98	7.34	8.28
n	1.10	1.05	0.99	0.99	0.99	1.00.	1.02	1.00
Viscosity (η) (mPa.S)	21.41	31.16	28.29	29.36	15.06	15.82	7.35	8.07

Table S2: Shear rate vs. shear stress data for AVP and AAP

Parameters	40°C	
	AVP	AAP
τ_0	0.02	-0.01
κ	32.88	29.54
n	0.99	0.99
Viscosity (η) (mPa.S)	36.35	35.03

Table S3: Subcell units of the polymorphic forms typical of fatty acid derivatives and their associated characteristic Bragg's d-spacing values and Miller indices.

Polymorph	β -form		β' -form		α -form	
Subcell	triclinic		orthorhombic		hexagonal	
Characteristic Bragg's d -spacing (Å) and associated Miller indices (hkl)	d (Å)	hkl	d (Å)	hkl	d (Å)	hkl
	4.6	010	4.2	110	4.2	100
	4.5	101	3.7	200		
	4.4	011				
	3.9	$\bar{1}00$				
	3.8	$\bar{1}00$				
	3.7	100				
	3.5	110				