

Table S1.

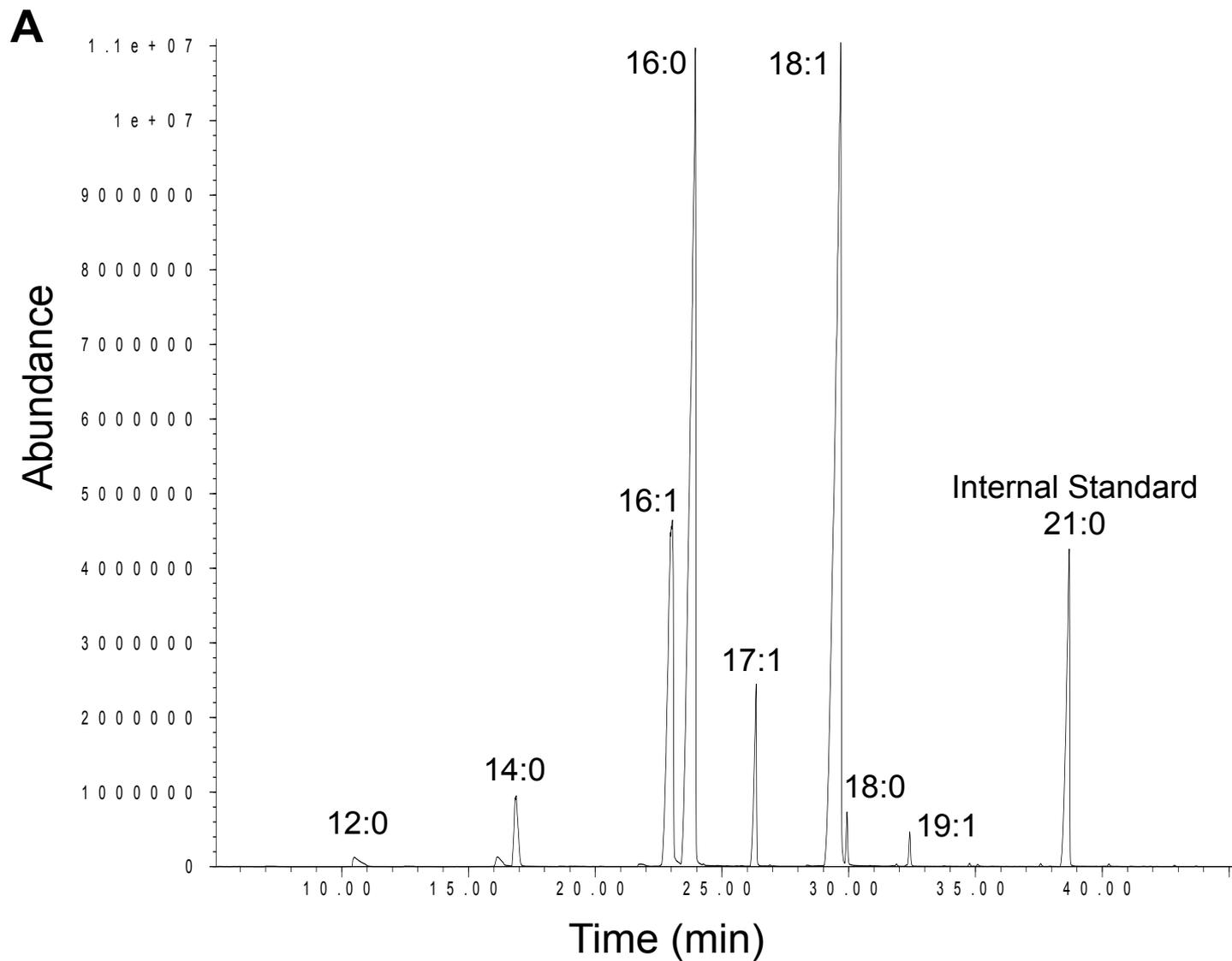
Production of Individual Fatty Acids

Temperature	Transformation	Fatty acid methyl esters (mg Fatty Acid / L Culture)								UFA:S FA
		12:0	14:0	16:1	16:0	17:1	18:1	18:0	19:1	
16 °C	pET200/D/lacZ (n=2)	0.32 ± 0.05	2.27 ± 0.94	8.08 ± 0.89	21.46 ± 3.04	5.27 ± 1.52	20.91 ± 0.45	0.35 ± 0.02	0.97 ± 0.28	1.4
	pDH1-DH2-UMA (n=2)	1.81 ± 1.12	8.86 ± 2.83	37.66 ± 10.72	83.67 ± 28.76	17.66 ± 6.91	73.85 ± 31.03	1.41 ± 0.92	2.63 ± 1.44	1.4
22 °C	pET200/D/lacZ (n=3)	0.21 ± 0.04	0.63 ± 0.40	3.79 ± 1.52	12.06 ± 4.84	1.30 ± 0.50	14.72 ± 6.73	0.25 ± 0.15	0.21 ± 0.08	1.5
	pDH1-DH2-UMA (n=2)	0.70 ± 0.02	4.54 ± 0.80	13.34 ± 2.67	46.18 ± 6.67	4.97 ± 1.01	44.18 ± 4.54	0.85 ± 0.12	0.58 ± 0.09	1.2
30 °C	pET200/D/lacZ (n=3)	0.10 ± 0.03	0.53 ± 0.08	1.33 ± 0.40	6.39 ± 1.11	1.83 ± 0.41	3.90 ± 0.87	0.08 ± 0.02	0.85 ± 0.30	1.1
	pDH1-DH2-UMA (n=2)	0.10 ± 0.06	0.60 ± 0.11	1.88 ± 0.90	9.30 ± 2.25	2.61 ± 0.36	7.17 ± 3.00	0.13 ± 0.05	0.76 ± 0.18	1.2

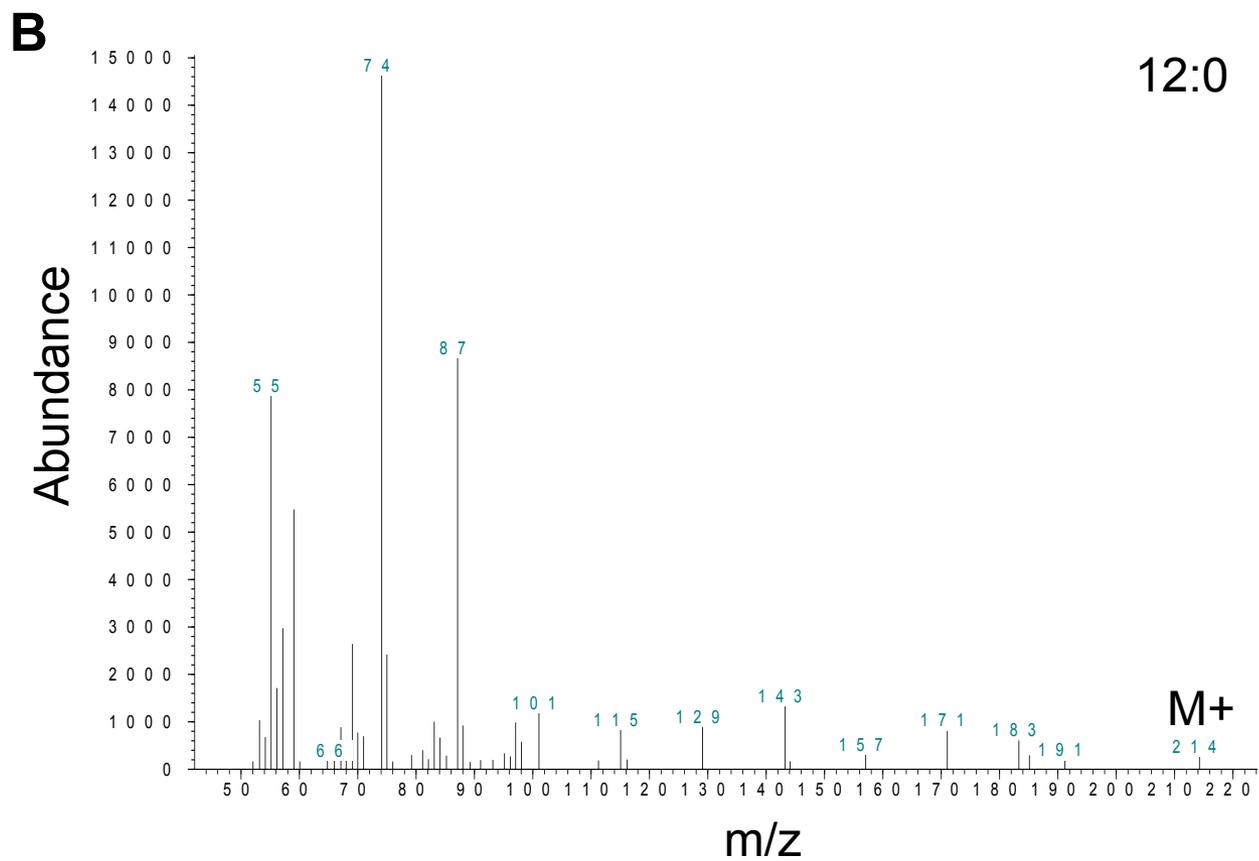
Table S2.

Production of Individual Fatty Acids										
Experimental Condition	Transformant	Fatty acid methyl esters (mg Fatty Acid / L Culture)								
		12:0	14:0	16:1	16:0	17:1	18:1	18:0	19:1	UFA:S FA
No Glycerol	pET200/D/lacZ (n=3)	0.08 ± 0.04	0.72 ± 0.17	3.05 ± 0.69	6.73 ± 1.41	0.70 ± 0.17	4.81 ± 1.42	0.19 ± 0.08	0.10 ± 0.05	1.1
	pDH1-DH2-UMA (n=3)	2.42 ± 1.89	6.08 ± 3.73	15.57 ± 7.90	34.01 ± 16.22	3.30 ± 1.71	17.85 ± 7.57	0.75 ± 0.58	0.34 ± 0.22	0.9
0.4 % Glycerol	pET200/D/lacZ (n=3)	0.21 ± 0.04	0.63 ± 0.40	3.79 ± 1.52	12.06 ± 4.84	1.30 ± 0.50	14.72 ± 6.73	0.25 ± 0.15	0.21 ± 0.08	1.5
	pDH1-DH2-UMA (n=2)	0.70 ± 0.02	4.54 ± 0.80	13.34 ± 2.67	46.18 ± 6.67	4.97 ± 1.01	44.18 ± 4.54	0.85 ± 0.12	0.58 ± 0.09	1.2
No IPTG	pET200/D/lacZ (n=2)	0.99 ± 0.25	11.27 ± 1.72	1.83 ± 0.60	46.66 ± 0.03	22.81 ± 0.30	17.49 ± 7.32	0.47 ± 0.09	16.25 ± 0.42	1.0
	pDH1-DH2-UMA (n=2)	2.19 ± 1.25	15.41 ± 4.81	5.24 ± 0.75	76.20 ± 10.59	27.80 ± 1.86	42.25 ± 16.23	0.86 ± 0.28	12.58 ± 1.04	1.1
1 mM IPTG	pET200/D/lacZ (n=3)	0.21 ± 0.04	0.63 ± 0.40	3.79 ± 1.52	12.06 ± 4.84	1.30 ± 0.50	14.72 ± 6.73	0.25 ± 0.15	0.21 ± 0.08	1.5
	pDH1-DH2-UMA (n=2)	0.70 ± 0.02	4.54 ± 0.80	13.34 ± 2.67	46.18 ± 6.67	4.97 ± 1.01	44.18 ± 4.54	0.85 ± 0.12	0.58 ± 0.09	1.2

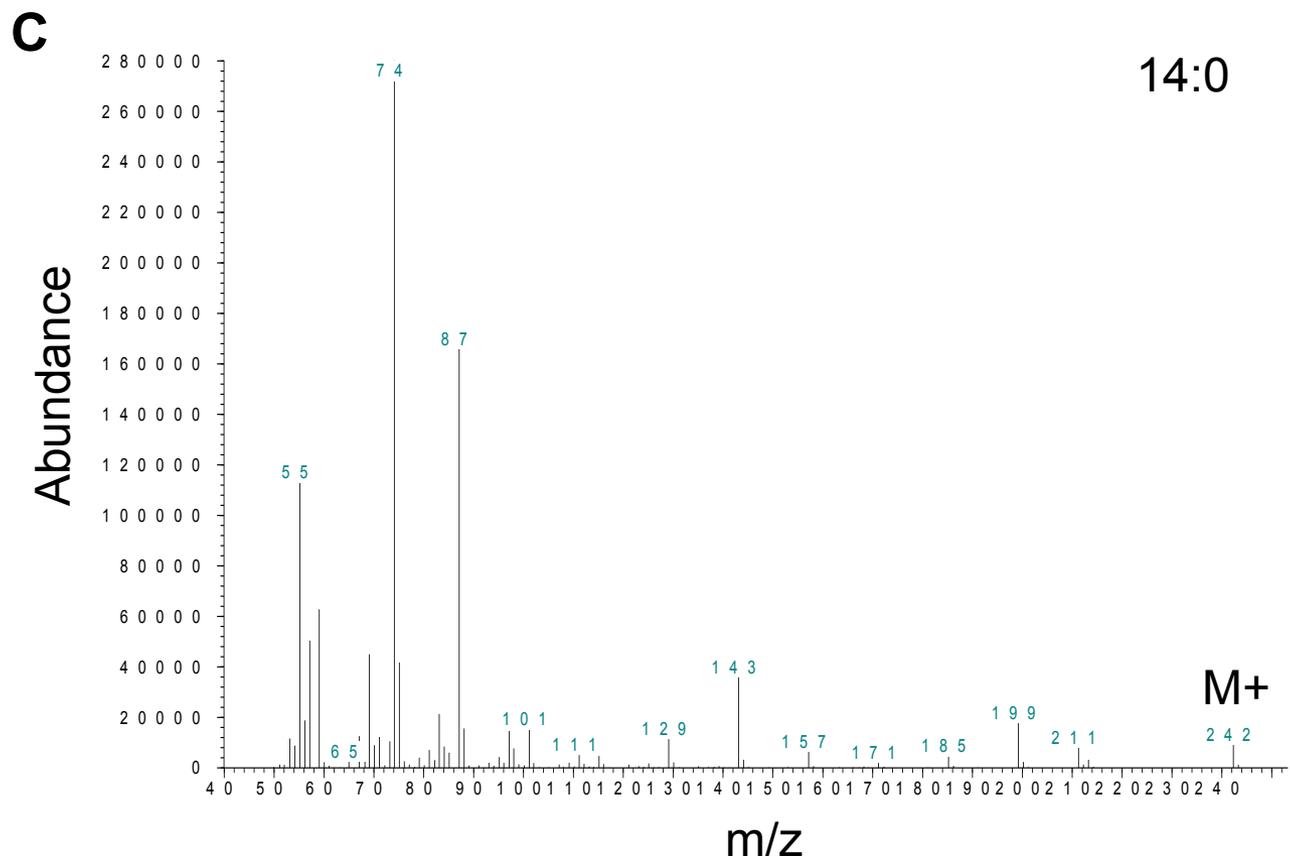
Supplementary figure 1



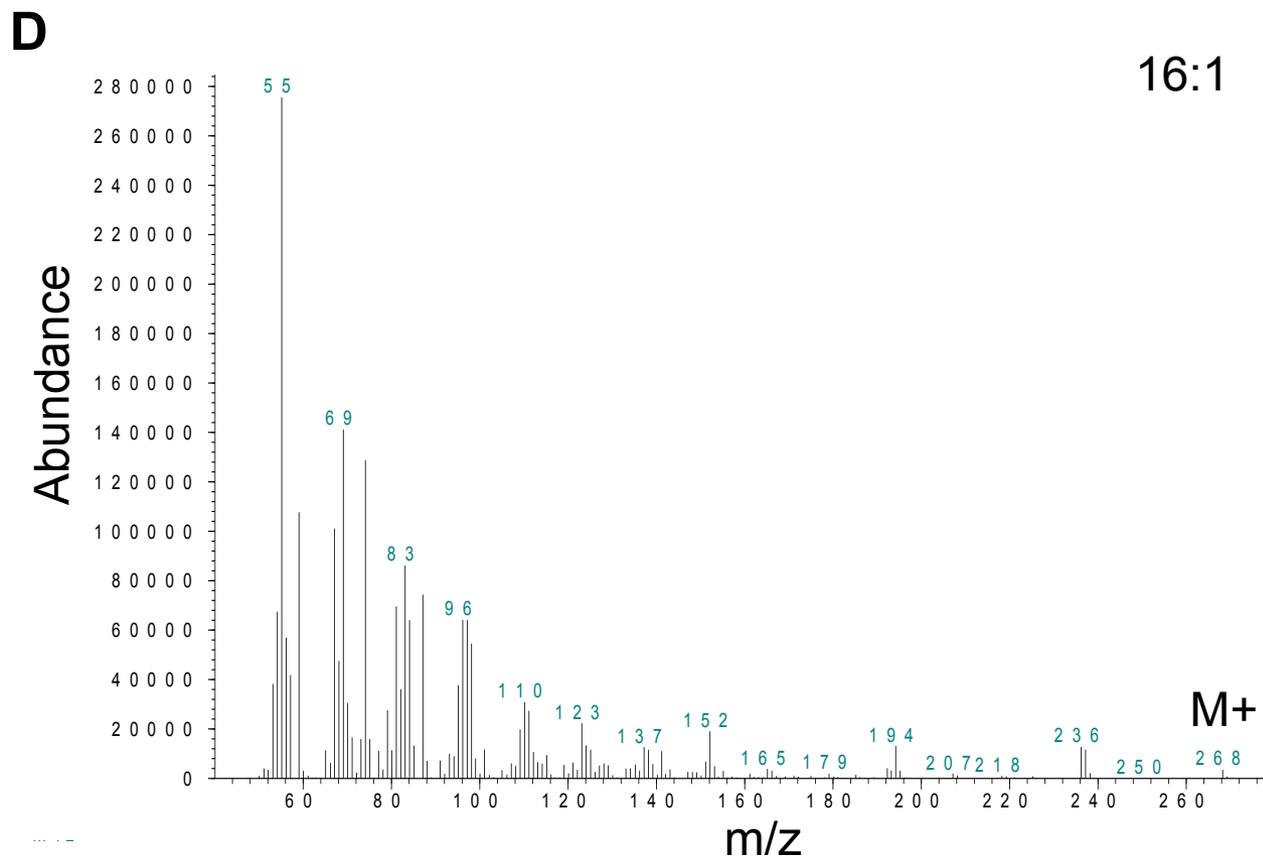
Supplementary figure 1



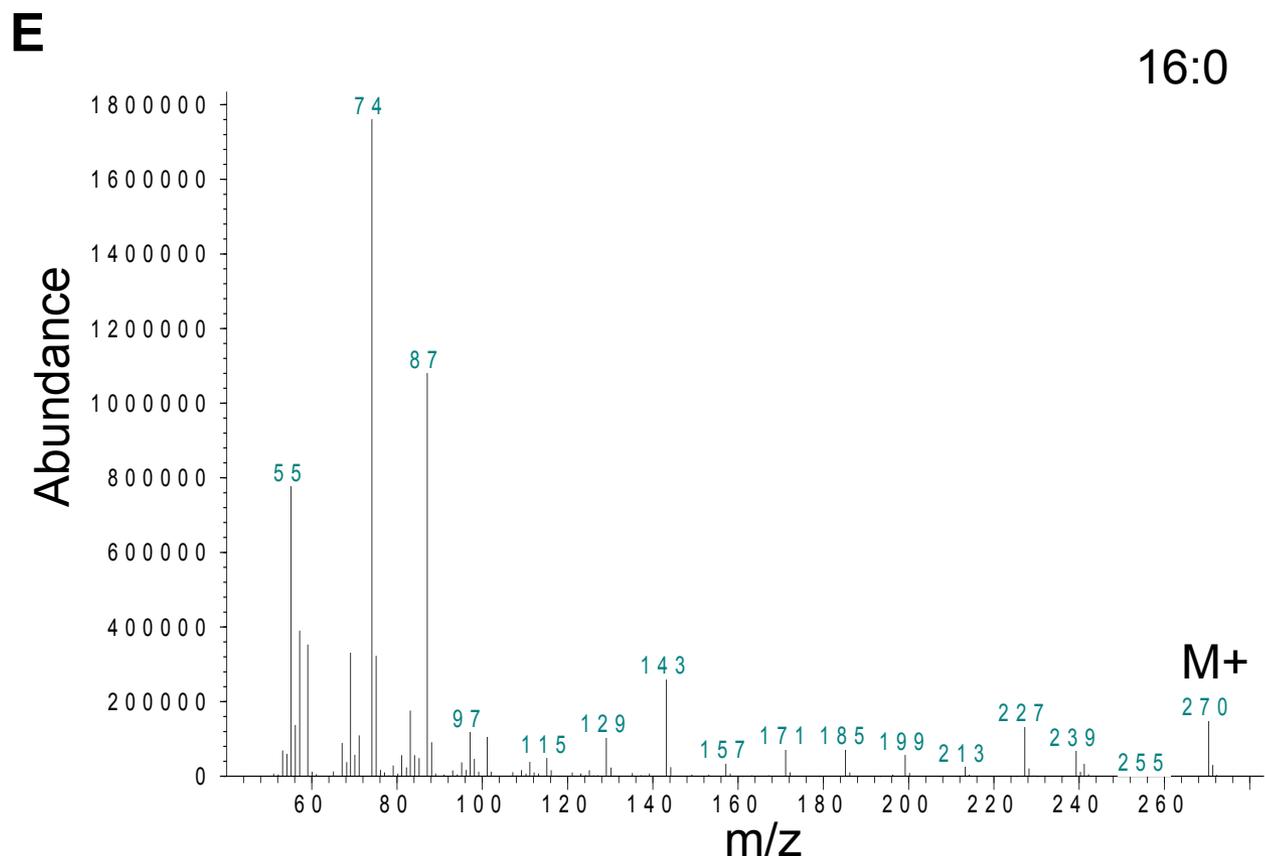
Supplementary figure 1



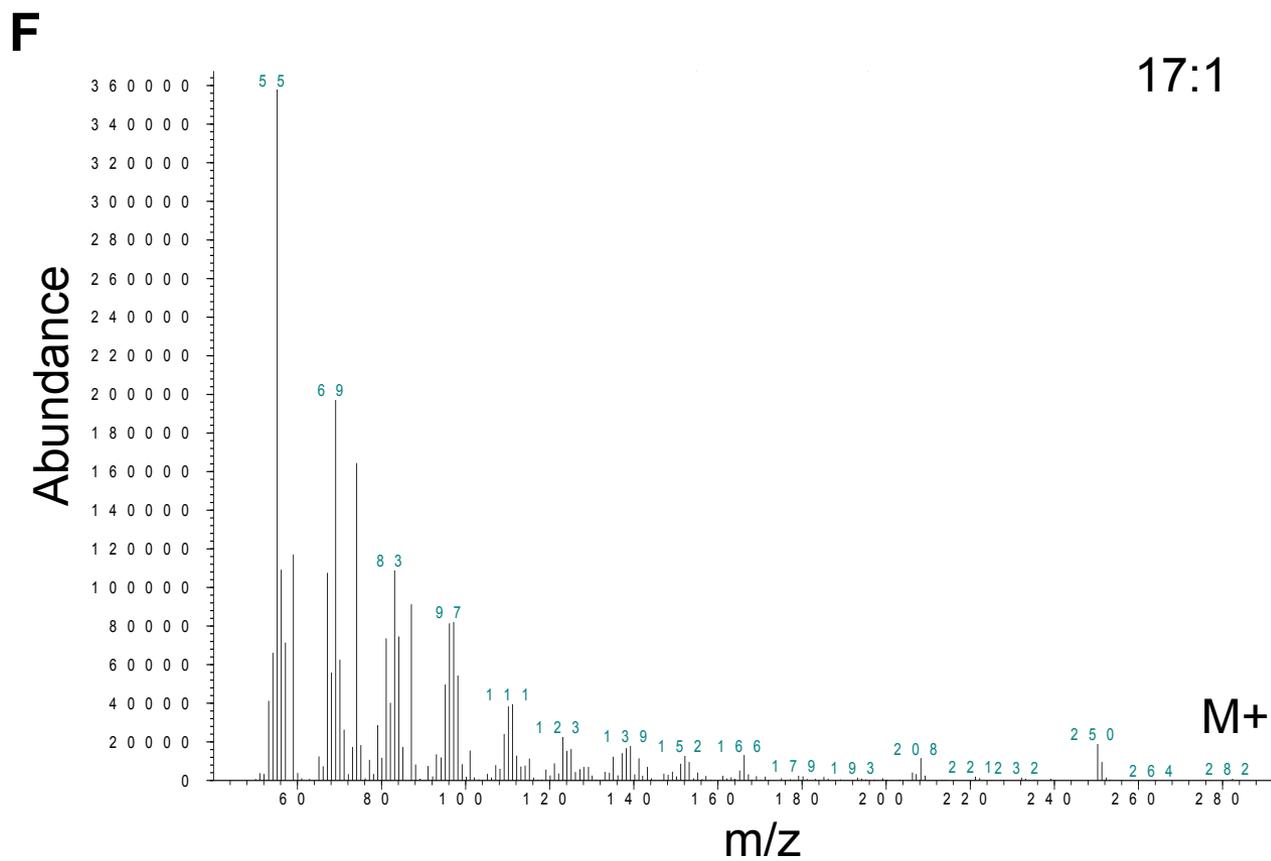
Supplementary figure 1



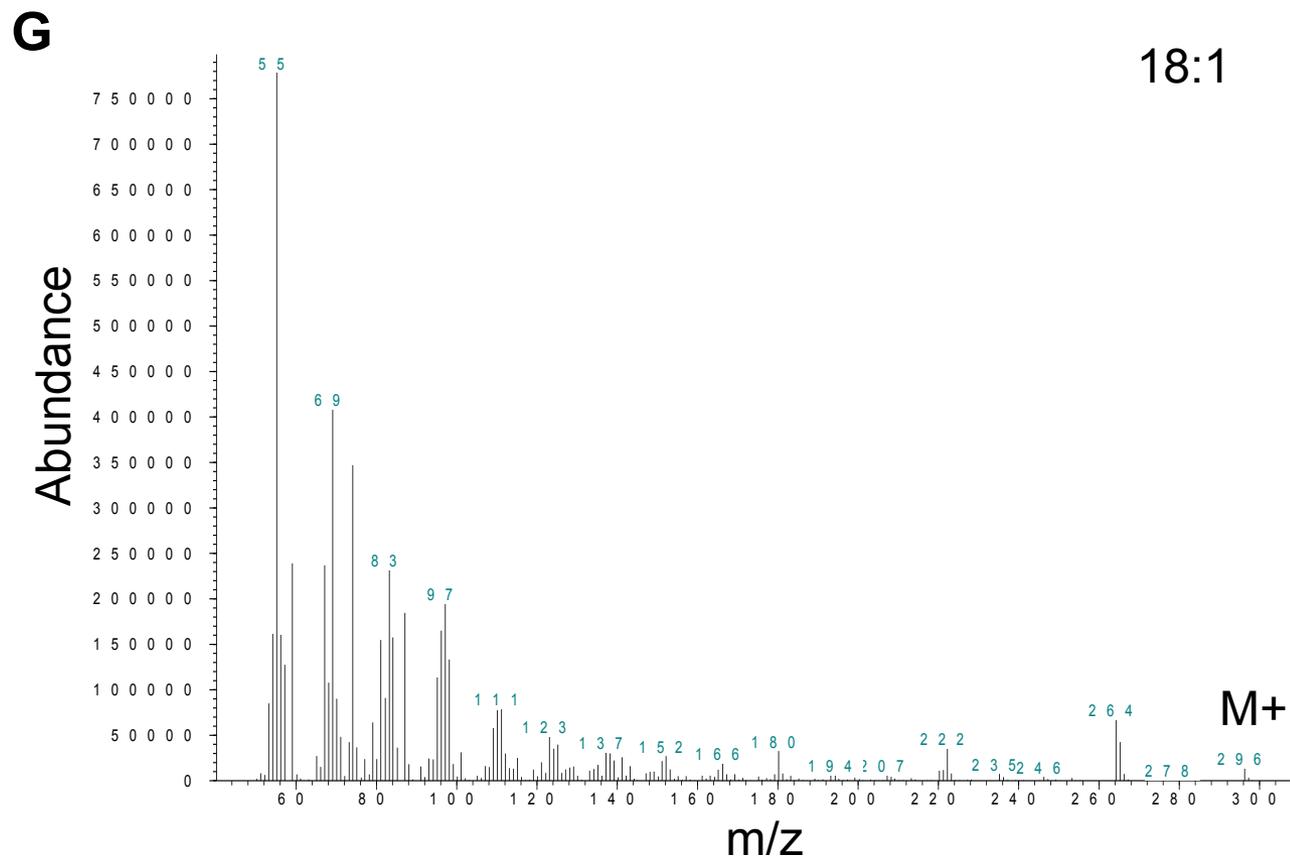
Supplementary figure 1



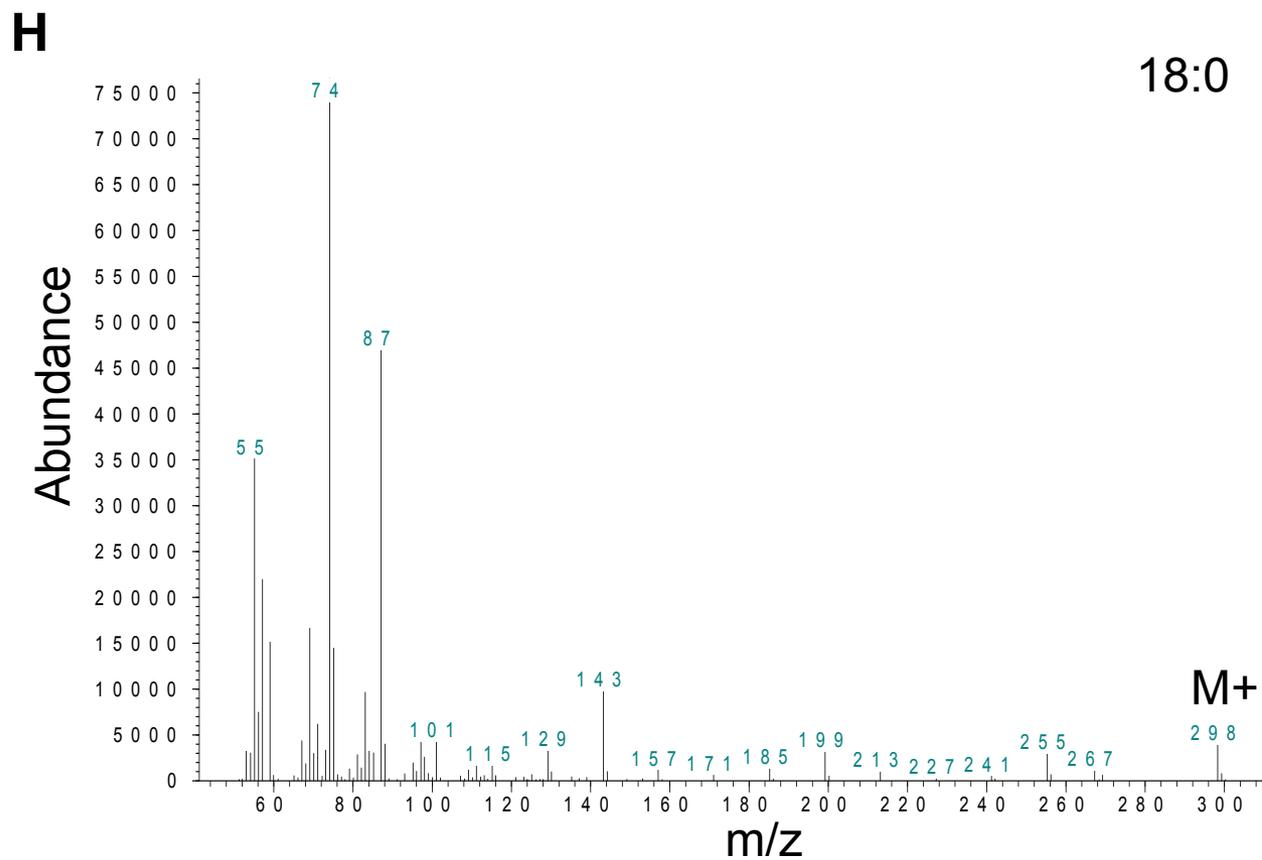
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