Supporting Information

Glycolipids and a Polyunsaturated Fatty Acid Methyl Ester Isolated from the Marine Dinoflagellate *Karenia mikimotoi*

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Table of Contents

Figure S1. ^{1}H NMR Spectrum (500 MHz) of Monogalactosyldiacylglycerol (**1**) in CD_3OD

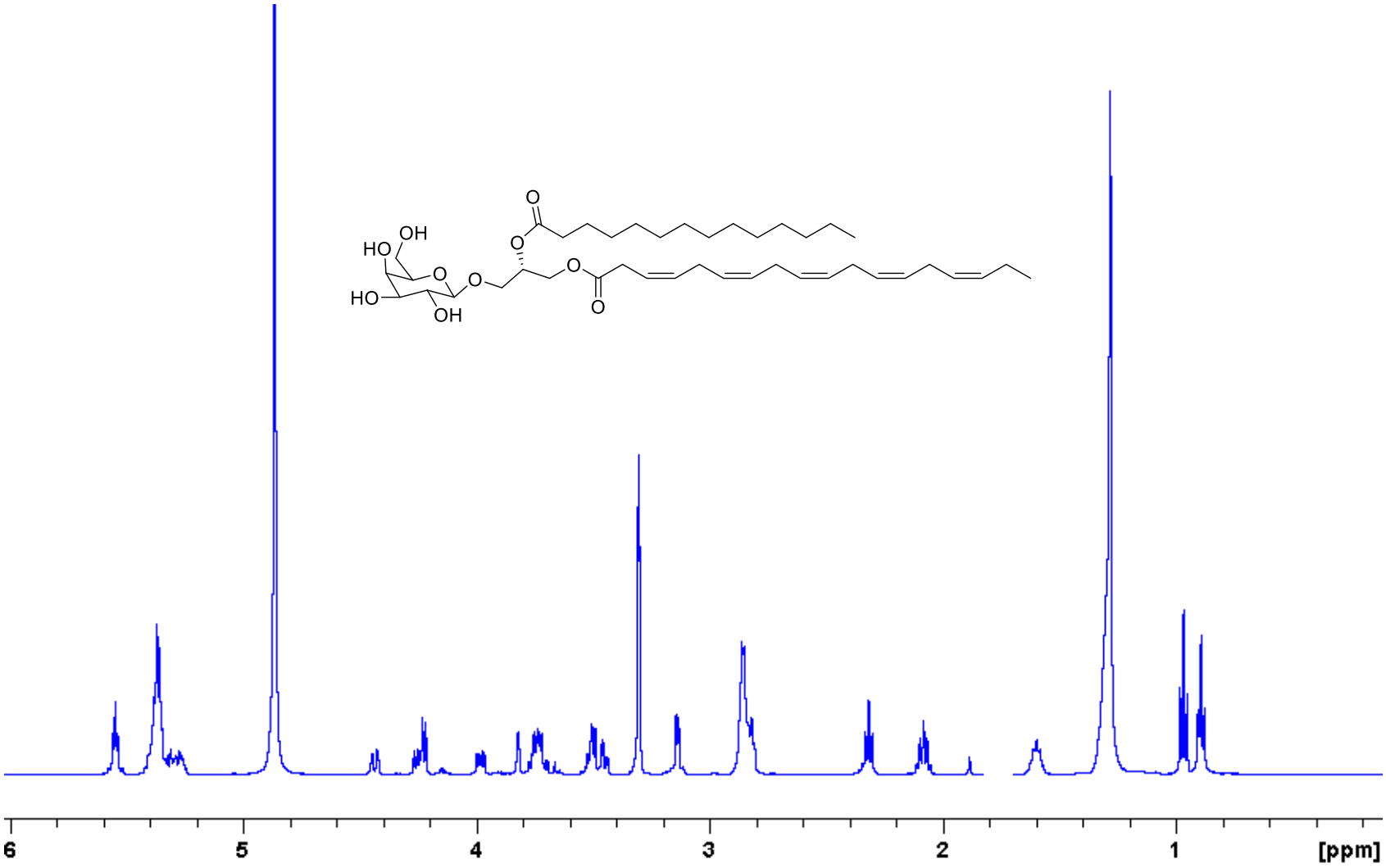

Figure S2. ^{13}C NMR Spectrum (125 MHz) of Monogalactosyldiacylglycerol (**1**) in CD_3OD

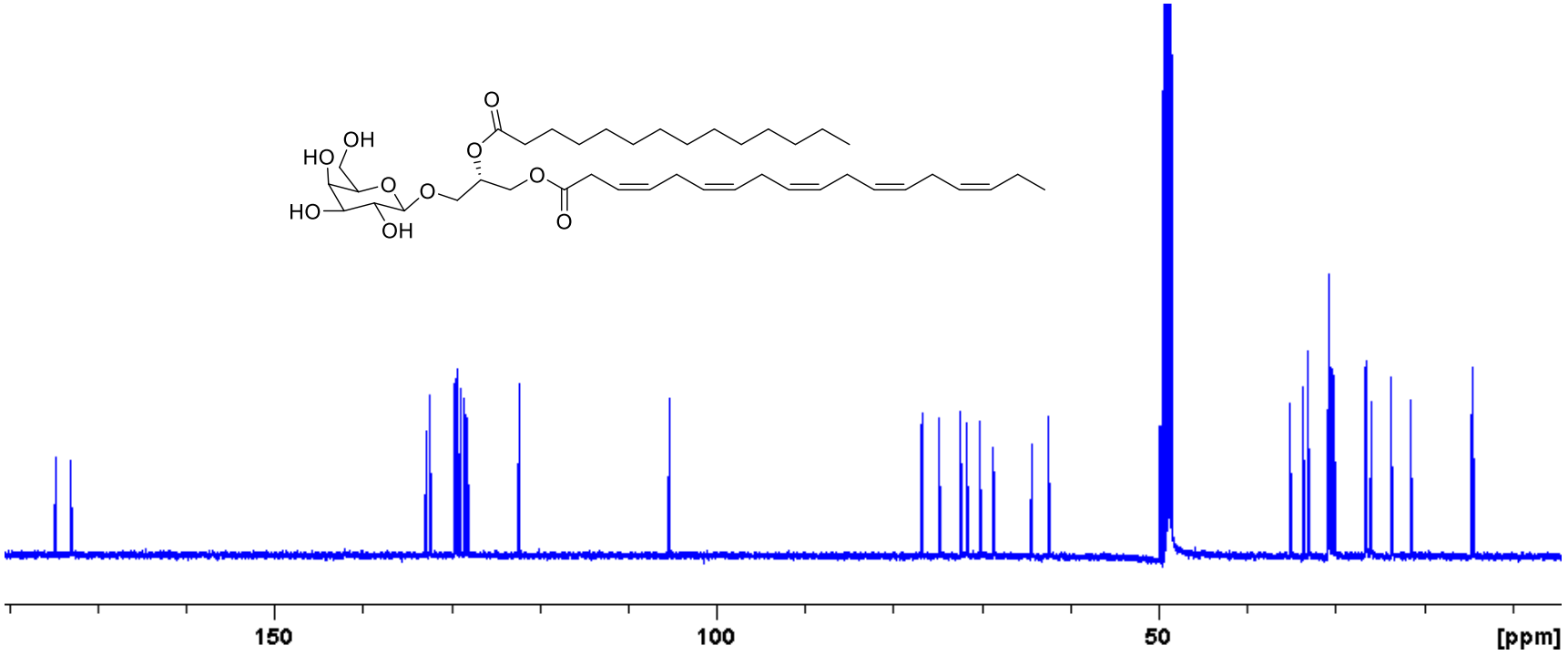

Figure S3. DEPT-135 (125 MHz) of Monogalactosyldiacylglycerol (**1**) in CD_3OD

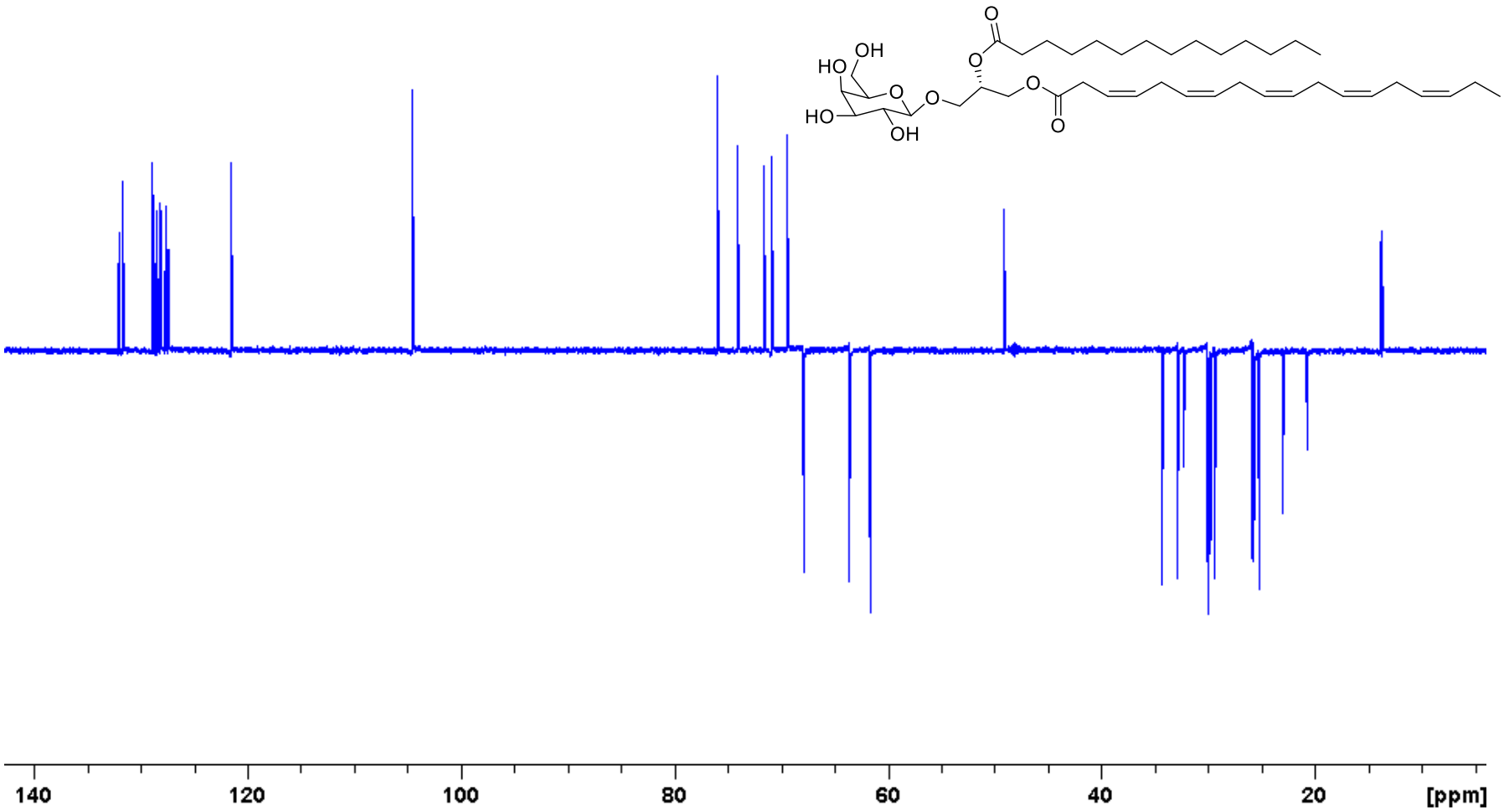

Figure S4. COSY Spectra (500 MHz) of Monogalactosyldiacylglycerol (**1**) in CD_3OD

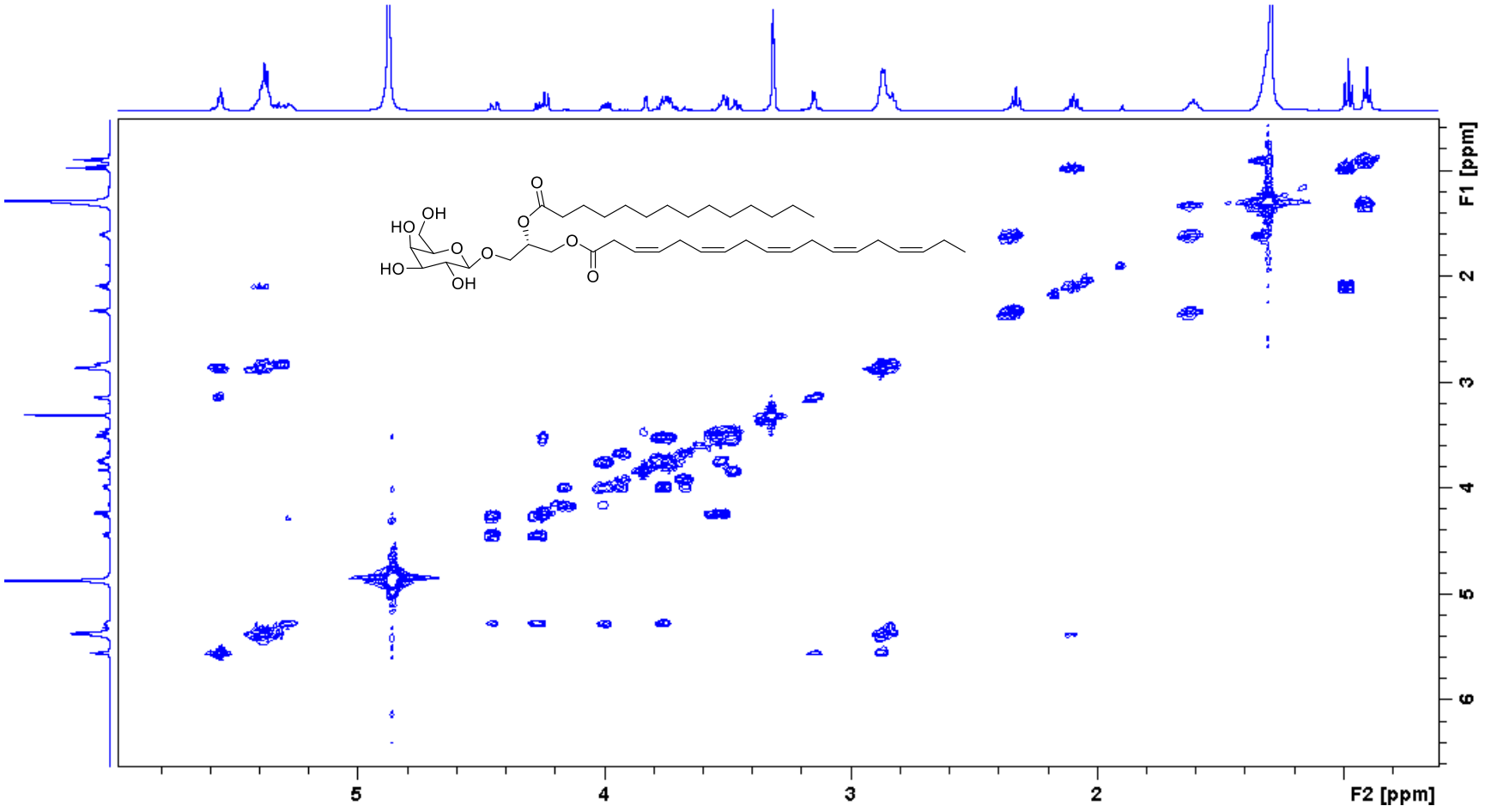

Figure S5. HSQC Spectra (500 MHz) of of Monogalactosyldiacylglycerol (**1**) in CD_3OD

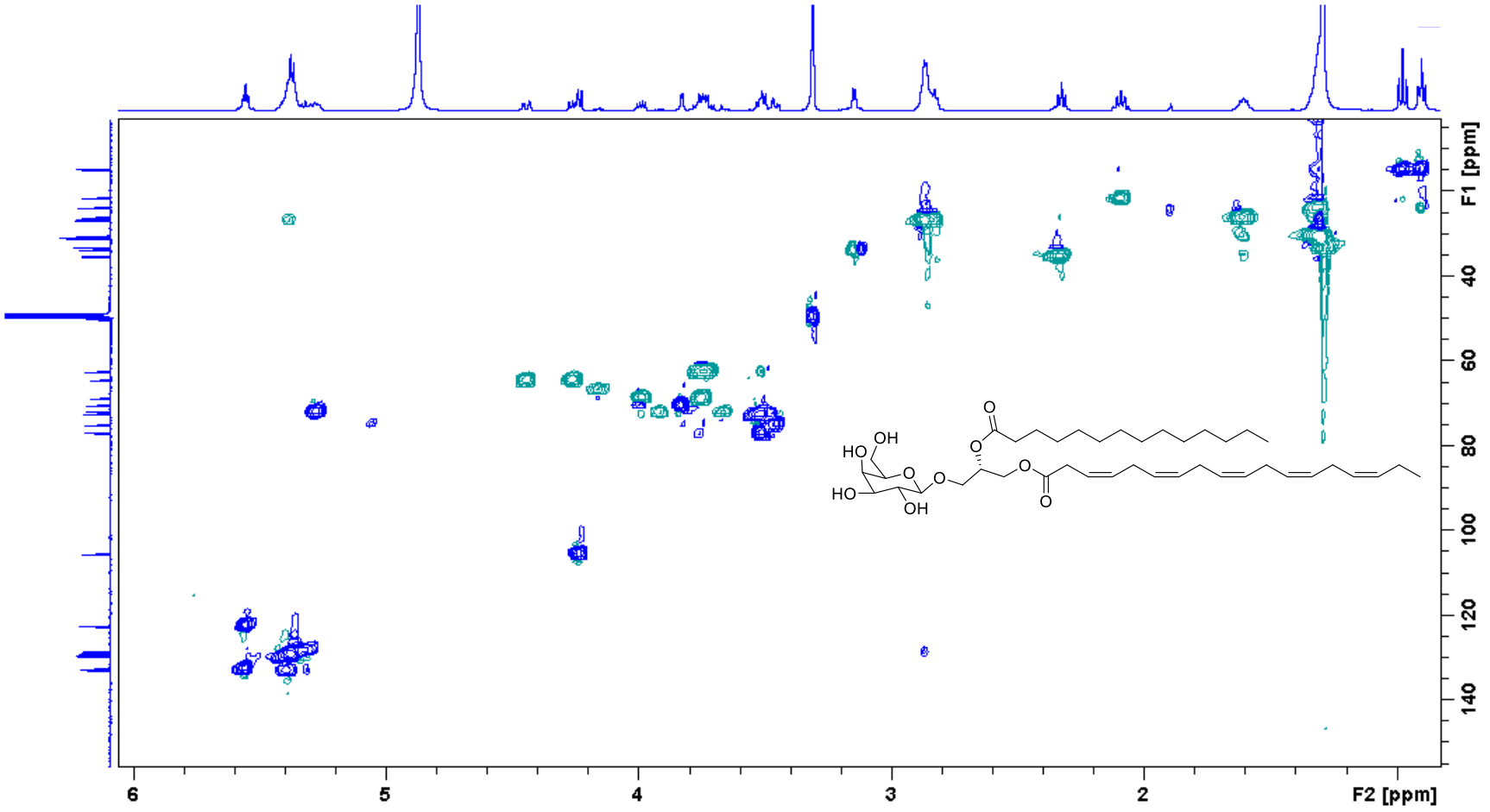

Figure S6. HMBC Spectra (500 MHz) of of Monogalactosyldiacylglycerol (**1**) in CD_3OD

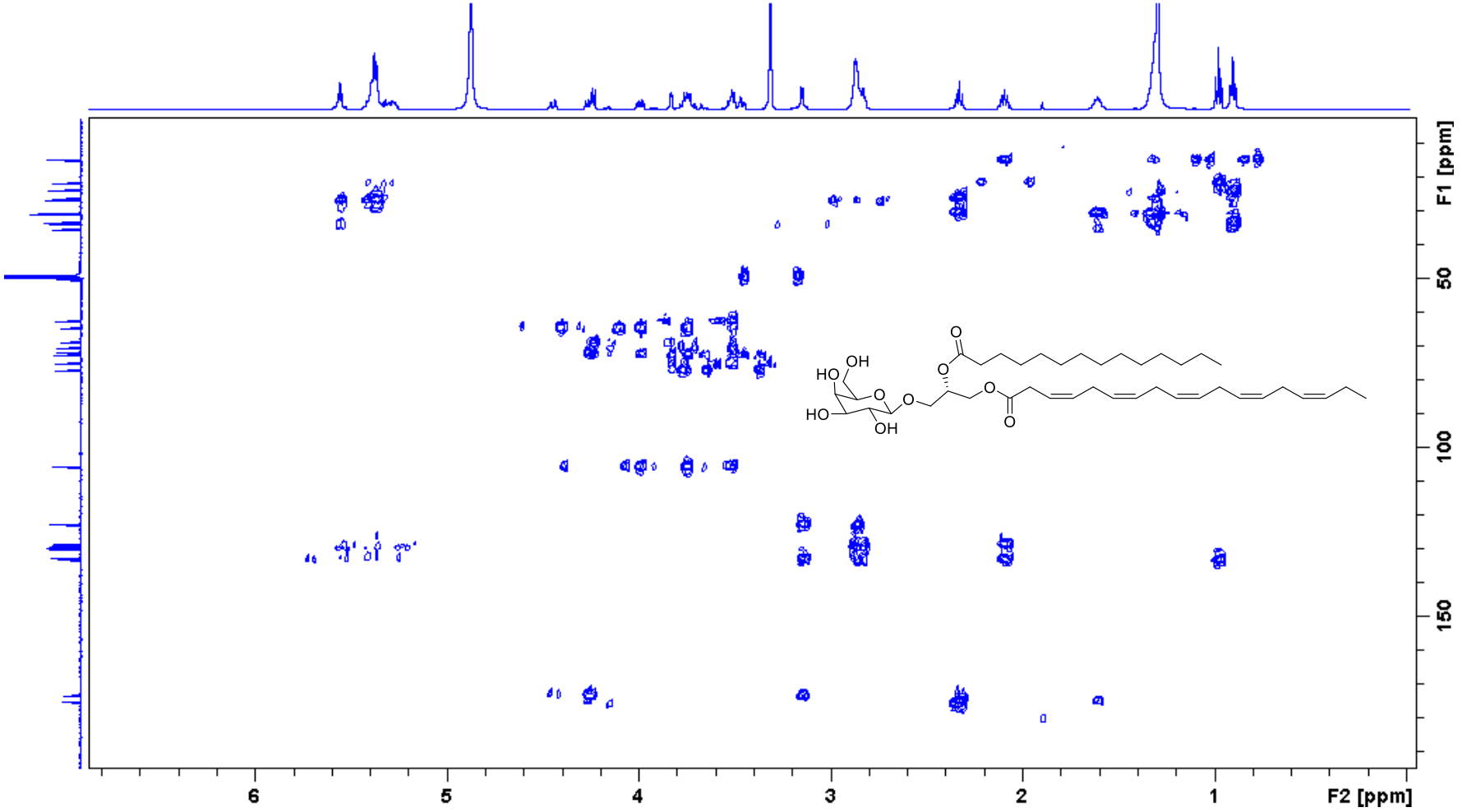

Figure S7. HRMSESITOF of Monogalactosyldiacylglycerol (**1**)

Single Mass Analysis
Tolerance = 4.0 PPM / DBE: min = 0.0, max = 50.0
Element prediction: Off
Number of isotope peaks used for i-FIT = 3
Monoisotopic Mass, Even Electron Ions
315 formula(e) evaluated with 2 results within limits (all results (up to 1000) for each mass)
Elements Used:

Mass	Calc. Mass	mDa	PPM	DBE	Formula	i-FIT	i-FIT Norm	Fit Conf %	C	H	O	Na
743.4727	743.4734	-0.7	-0.9	10.5	C43 H67 O10	444.9	1.606	20.07	43	67	10	
	743.4710	1.7	2.3	7.5	C41 H68 O10 Na	443.5	0.224	79.93	41	68	10	1

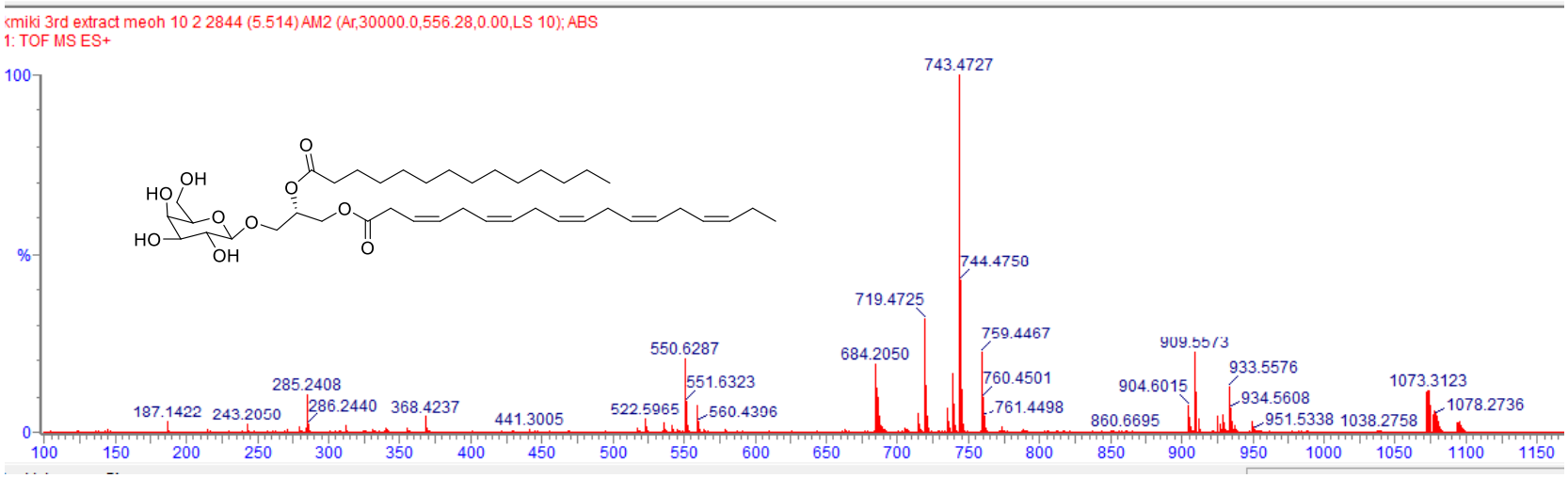

Figure S8. IR Spectra of Monogalactosyldiacylglycerol (**1**)

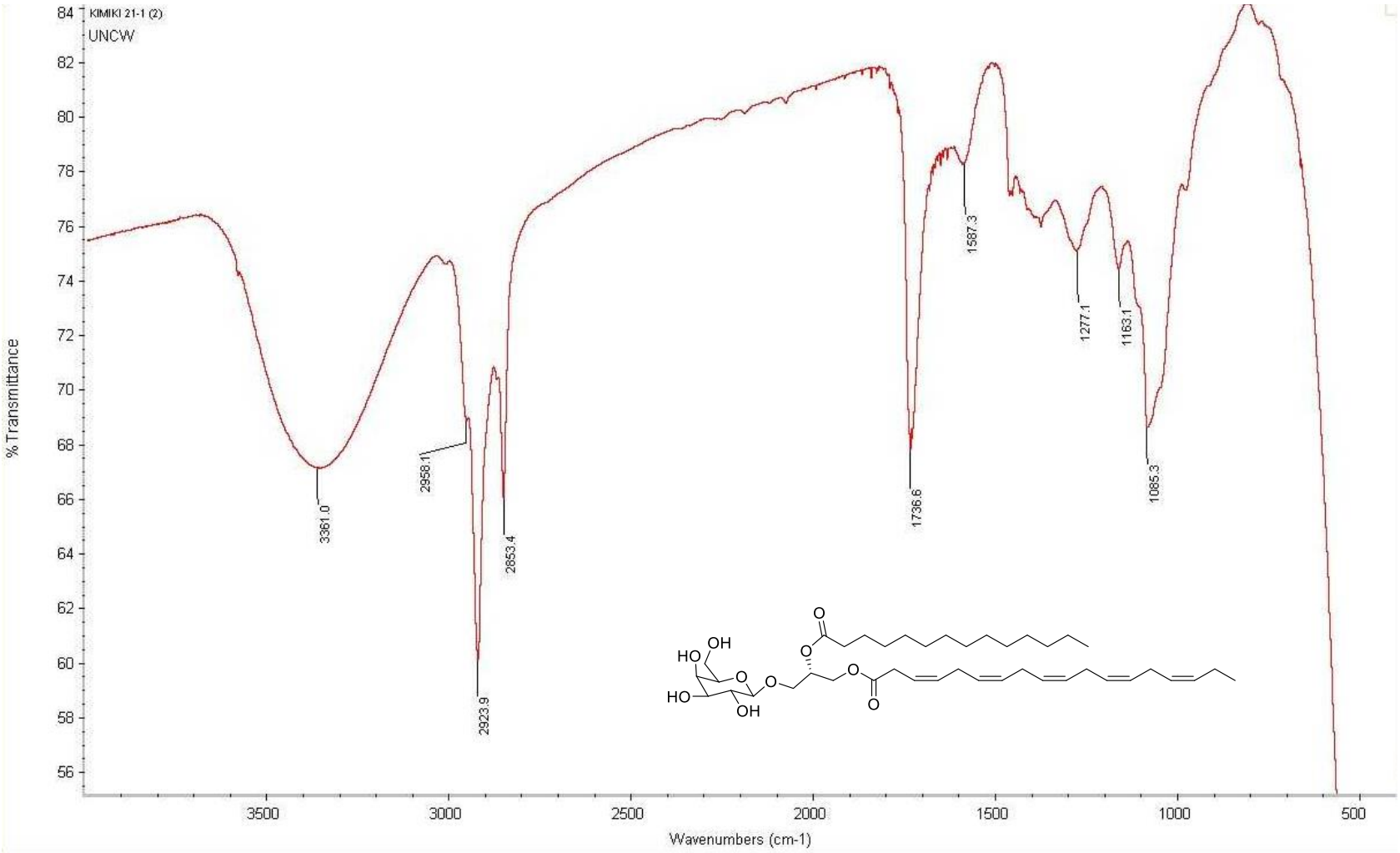

Figure S9. Fragmentation ESI-MS of the monogalactosyldiacylglycerol (**1**)

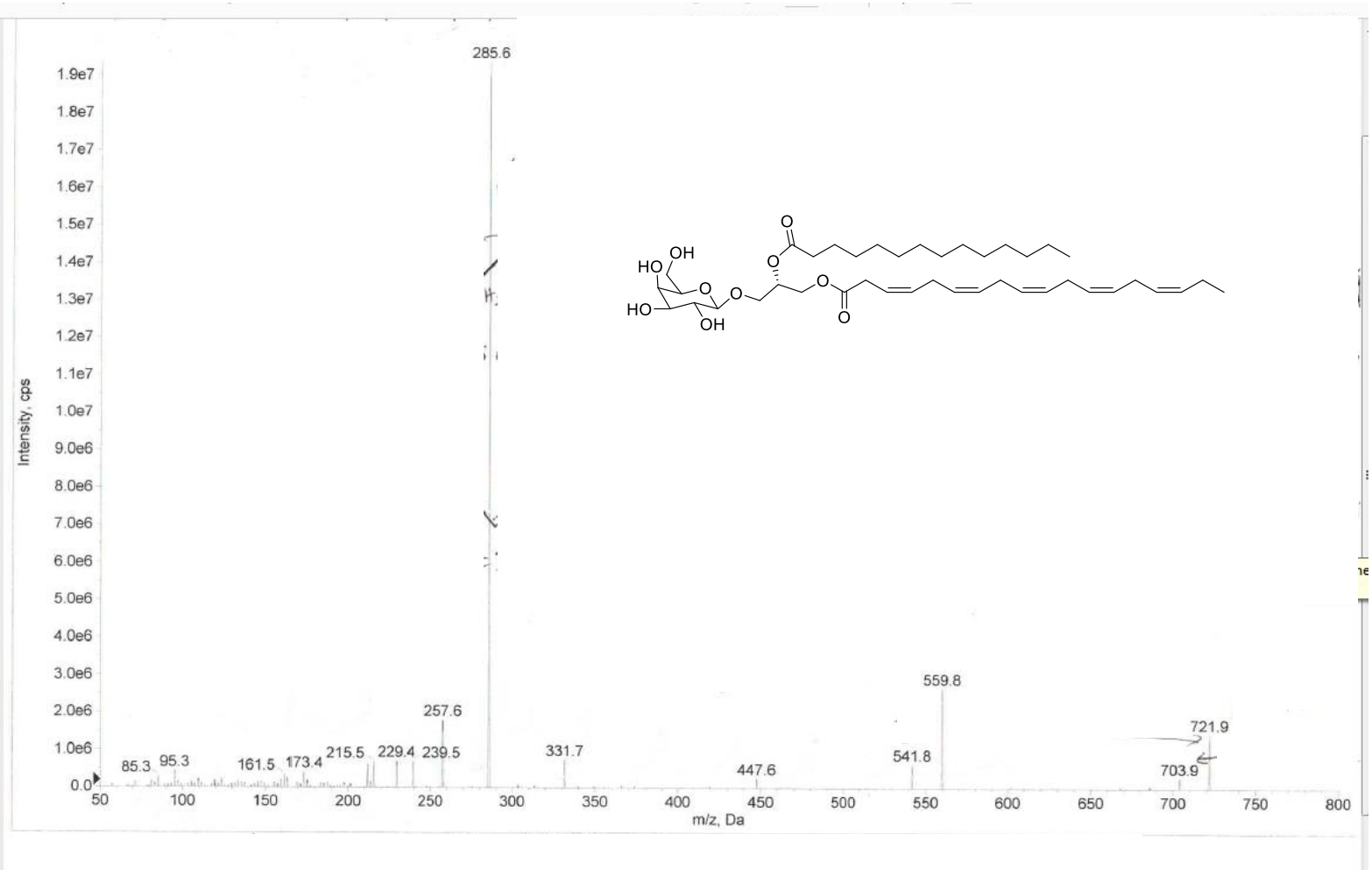

Figure S10. ^{1}H NMR Spectrum (500 MHz) of Monogalactosylmonoacylglycerol **(2)** in CD_3OD

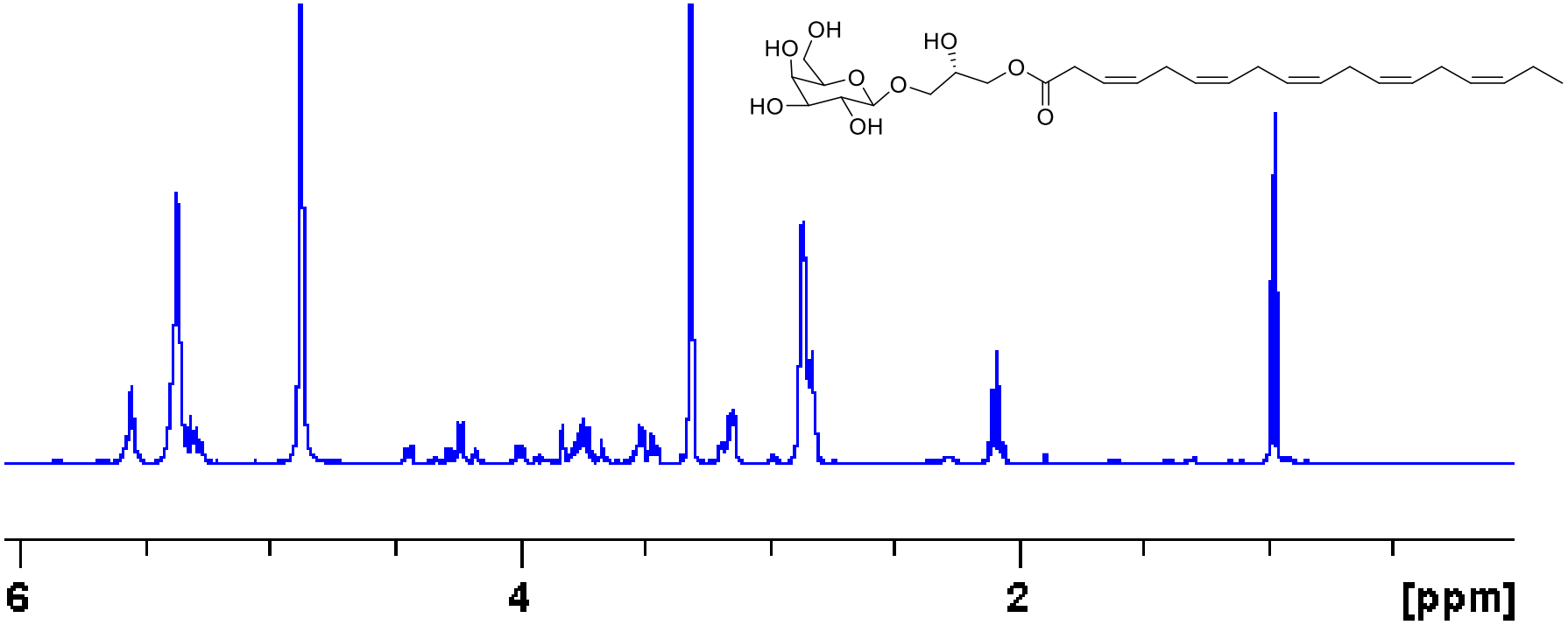

Figure S11. ^{13}C NMR Spectrum (125 MHz) of Monogalactosylmonoacylglycerol **(2)** in CD_3OD

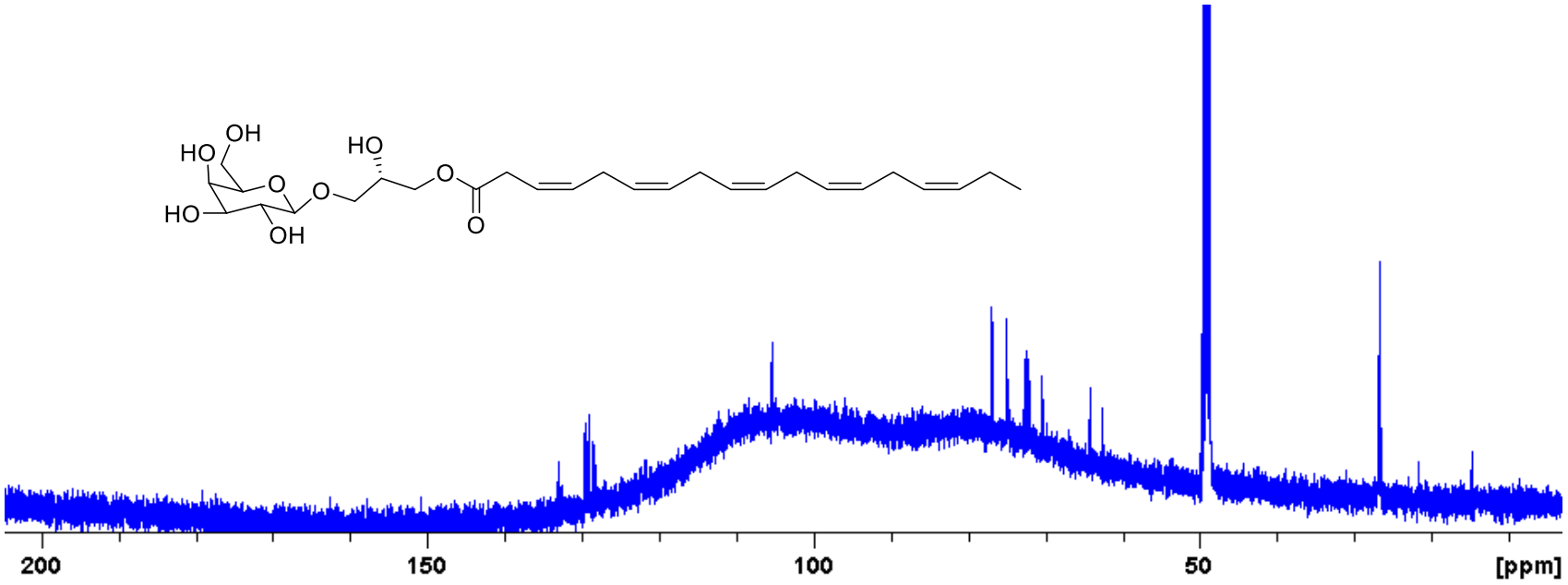

Figure S12. HRMSESITOF of Monogalactosylmonoacylglycerol **(2)**

Single Mass Analysis

Tolerance = 4.0 PPM / DBE: min = 0.0, max = 50.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Odd and Even Electron Ions

208 formula(e) evaluated with 1 results within limits (all results (up to 1000) for each mass)

Elements Used:

Mass	Calc. Mass	mDa	PPM	DBE	Formula	i-FIT	i-FIT Norm	Fit Conf %	C	H	O	Na
533.2727	533.2727	0.0	0.0	6.5	C27 H42 O9 Na	276.3	n/a	n/a	27	42	9	1

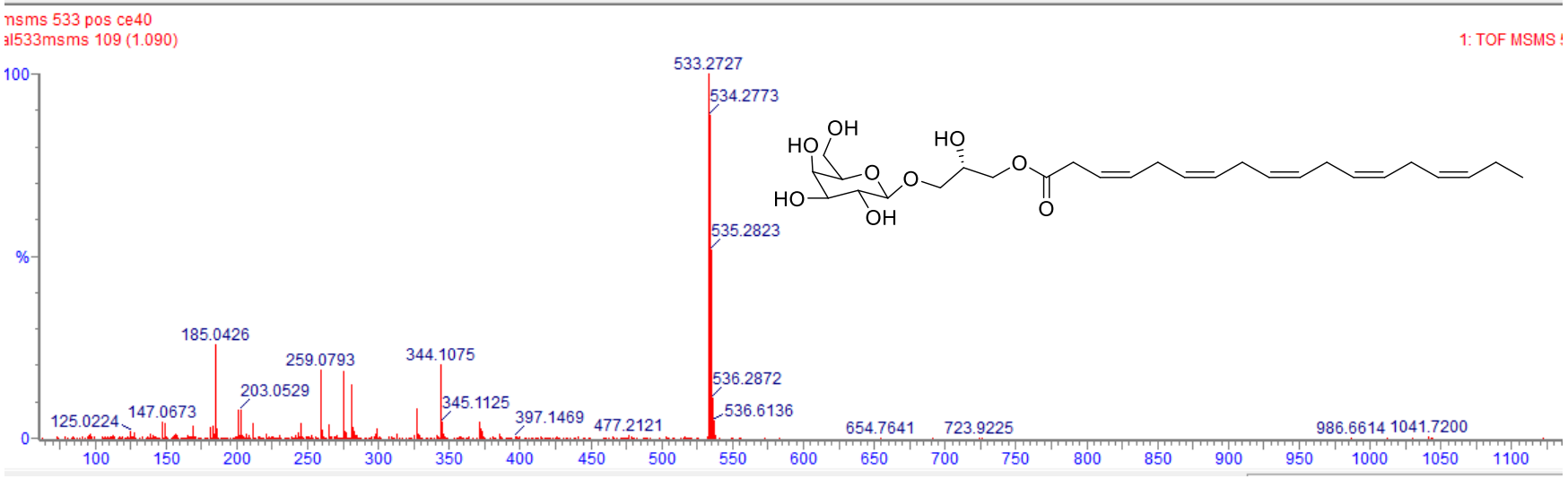

Figure S13. ^{1}H NMR Spectrum (500 MHz) of Polyunsaturated fatty acid methyl ester (**3**) in CD_3OD

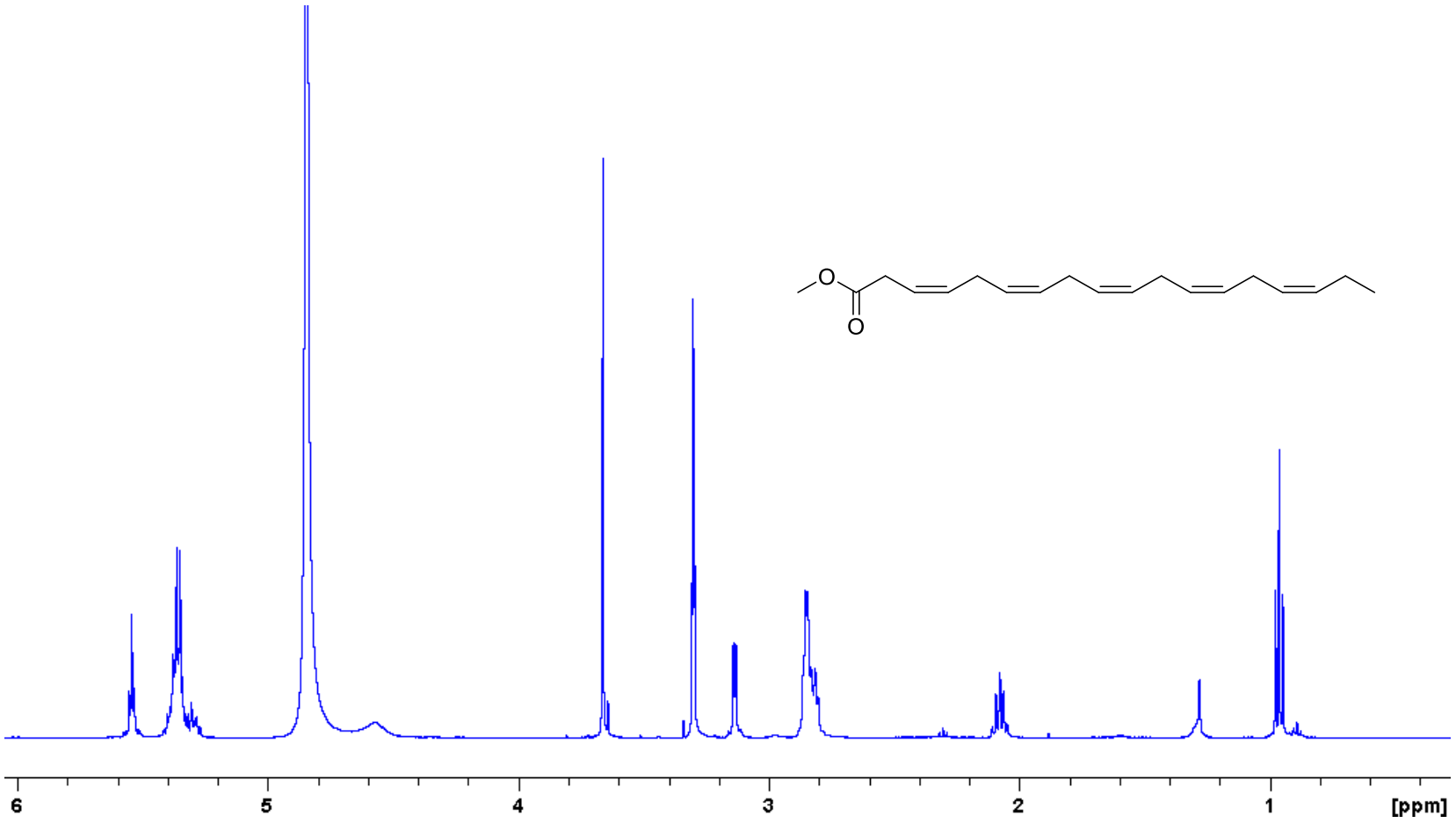

Figure S14. ^{13}C NMR Spectrum (125 MHz) of Polyunsaturated fatty acid methyl ester (**3**) in CD_3OD

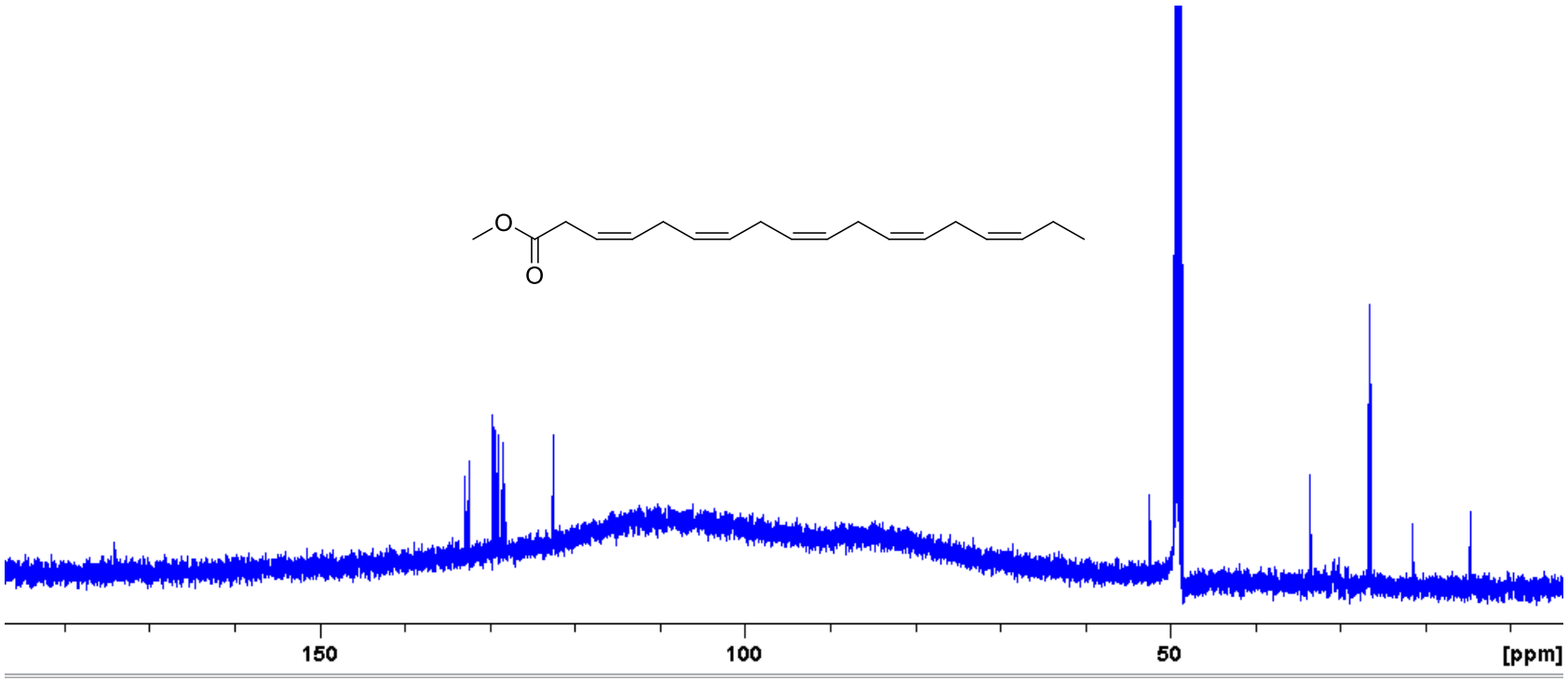

Figure S15. HRMSESITOF of Polyunsaturated fatty acid methyl ester (**3**)