

## *Supplementary Materials*

### **Screening and Research on Skin Barrier Damage Protective Efficacy of Different Mannosylerythritol Lipids.**

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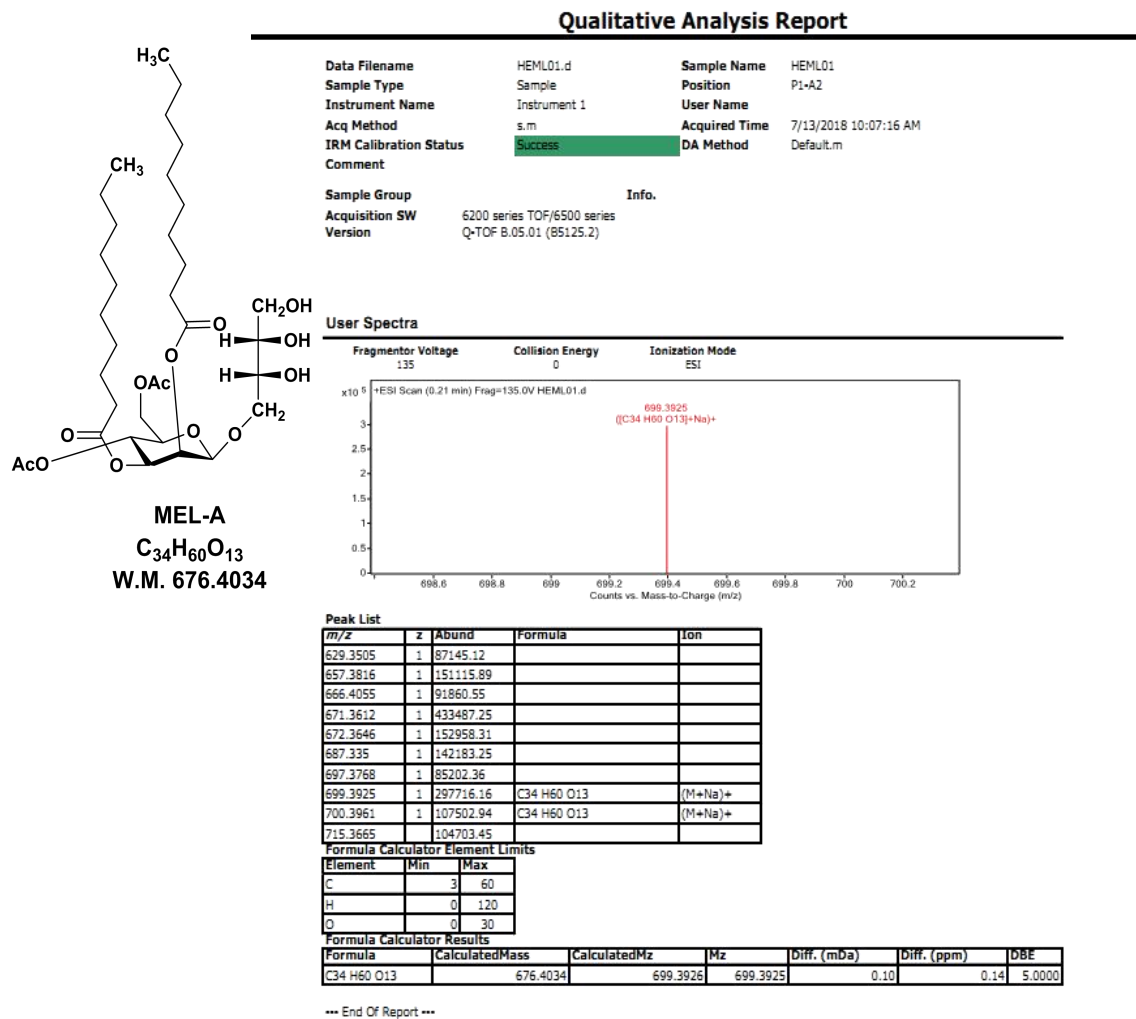
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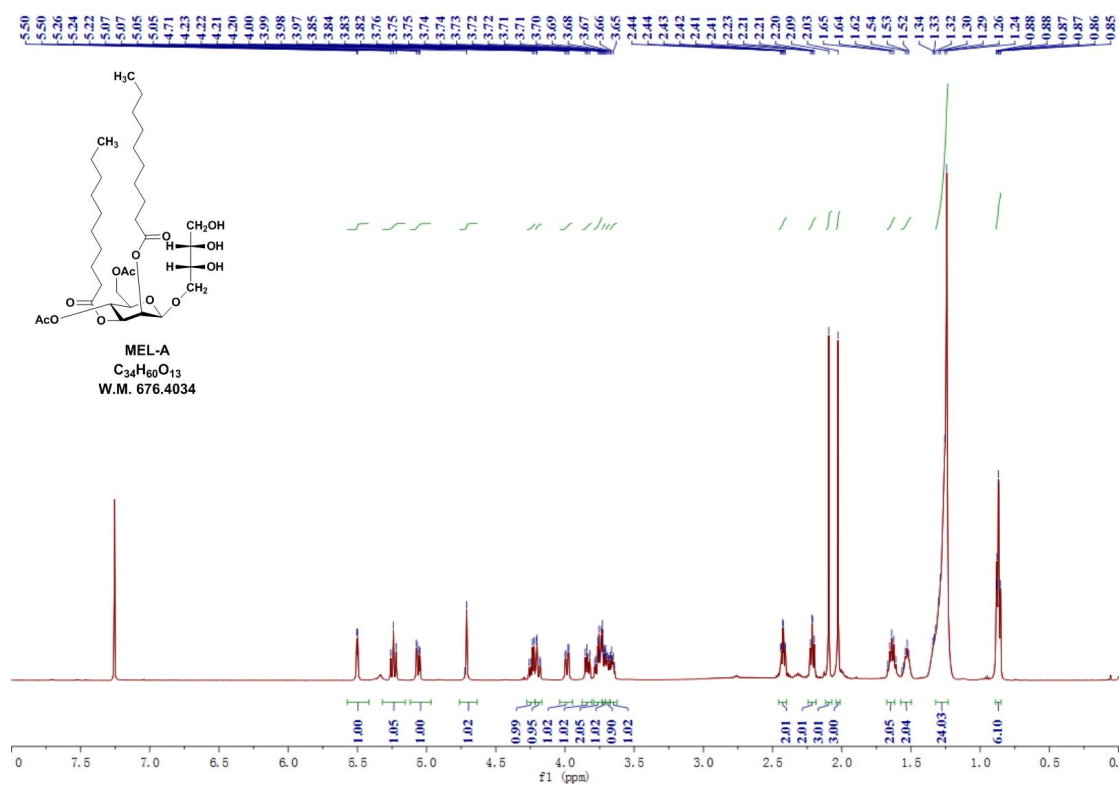
**Figure S8:**  $^1\text{H}$  NMR spectrum of **MEL-C** in  $\text{CDCl}_3$  (600 MHz).

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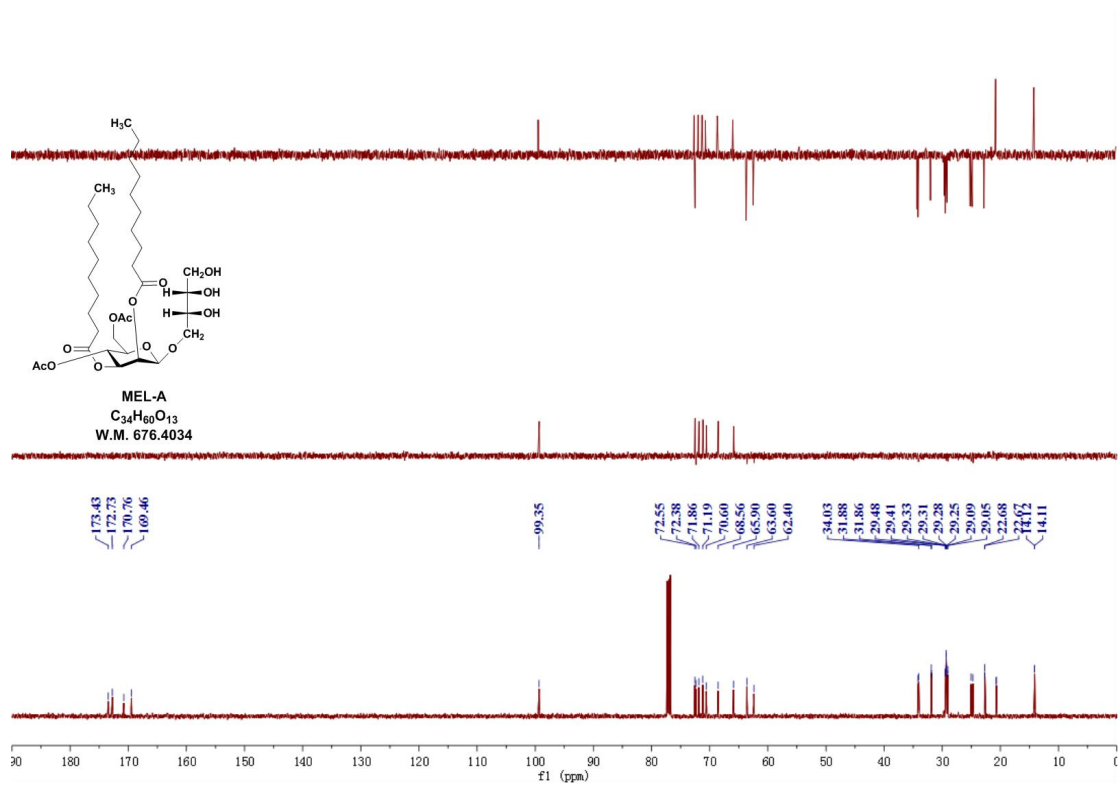
**Figure S1: HRESIMS of MEL-A**



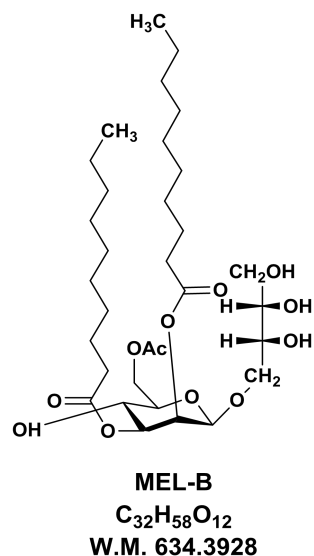
**Figure S2:**  $^1\text{H}$  NMR spectrum of **MEL-A** in  $\text{CDCl}_3$  (500 MHz).



**Figure S3:**  $^{13}\text{C}$  and DEPT NMR spectrum of **MEL-A** in  $\text{CDCl}_3$  (126 MHz).



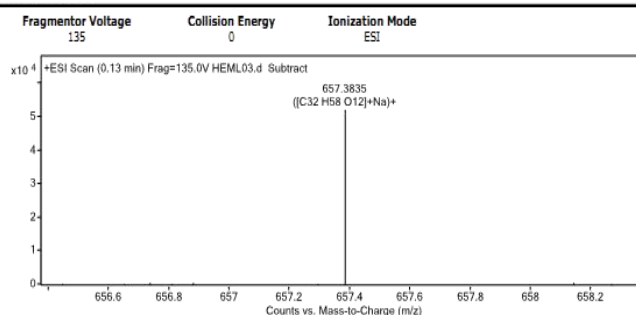
**Figure S4: HRESIMS of MEL-B**



## Qualitative Analysis Report

Data Filename	HEML03.d	Sample Name	HEML03
Sample Type	Sample	Position	P1-A3
Instrument Name	Instrument 1	User Name	
Acq Method	s.m	Acquired Time	7/13/2018 10:08:27 AM
IRM Calibration Status	Success	DA Method	Default.m
Comment			
Sample Group	Info.		
Acquisition SW	6200 series TOF/6500 series		
Version	Q-TOF B.05.01 (B5125.2)		

## User Spectra



## Peak List

m/z	z	Abund	Formula	Ion
102.129	1	81070.5		
274.2751	1	27670.45		
318.3018	1	27710.97		
629.3521	1	28813.09		
657.3835	1	52066.29	$C_{32}H_{58}O_{12}$	$(M+Na)^+$
671.3623	1	50138.6		
673.3585	1	26043.09		
687.337	1	24854.12		
699.3941	1	34777.34		
715.3686	1	21239.64		

## Formula Calculator Element Limits

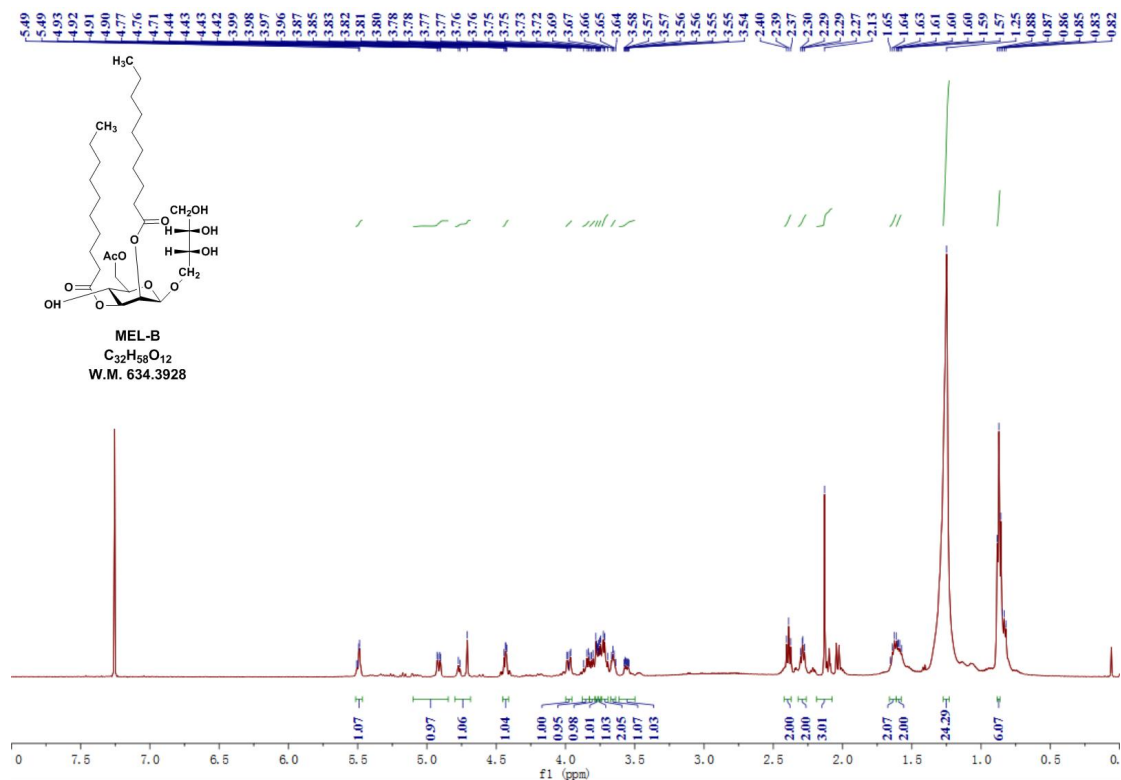
Element	Min	Max
C	3	60
H	0	120
O	0	30

## Formula Calculator Results

Formula	CalculatedMass	CalculatedMz	Mz	Diff. (mDa)	Diff. (ppm)	DBE
$C_{32}H_{58}O_{12}$	634.3928	657.3820	657.3835	-1.50	-2.28	4.0000

--- End Of Report ---

**Figure S5:**  $^1\text{H}$  NMR spectrum of **MEL-B** in  $\text{CDCl}_3$  (500 MHz).



**Figure S6:**  $^{13}\text{C}$  and DEPT NMR spectrum of **MEL-B** in  $\text{CDCl}_3$  (126 MHz).

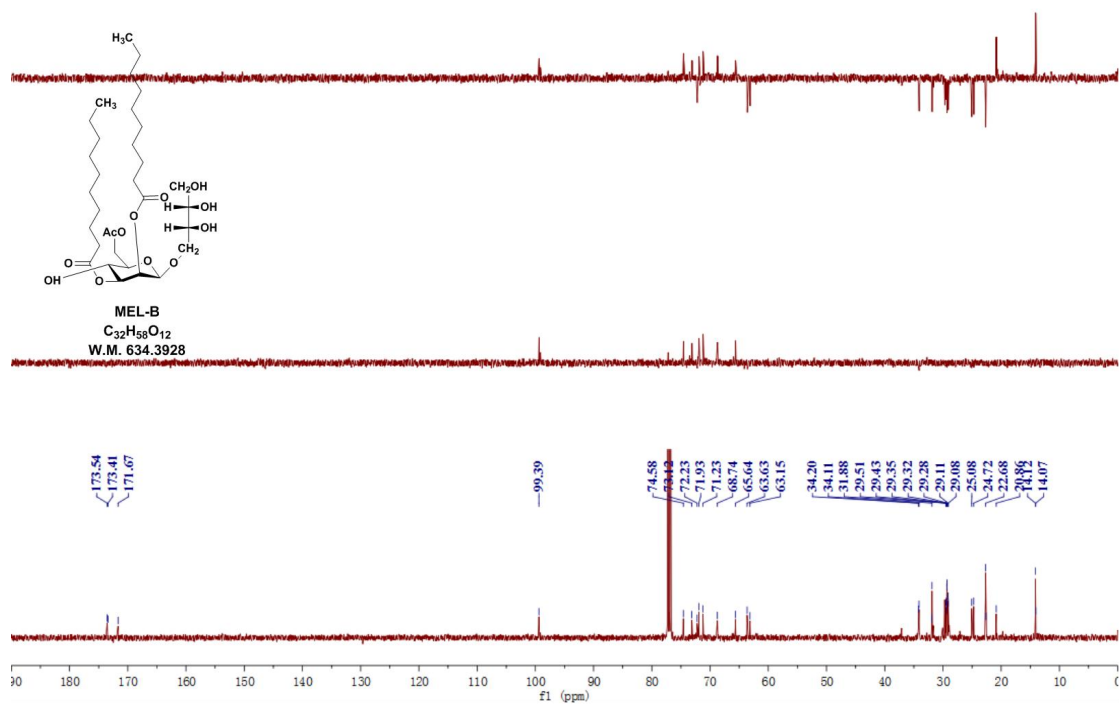
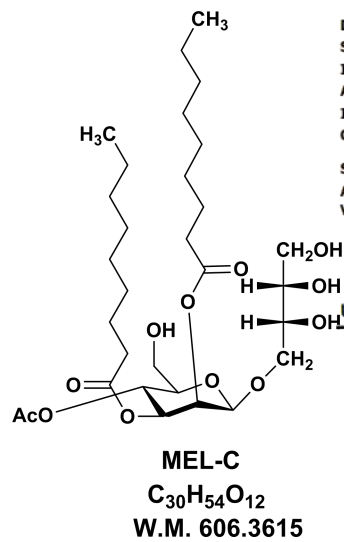


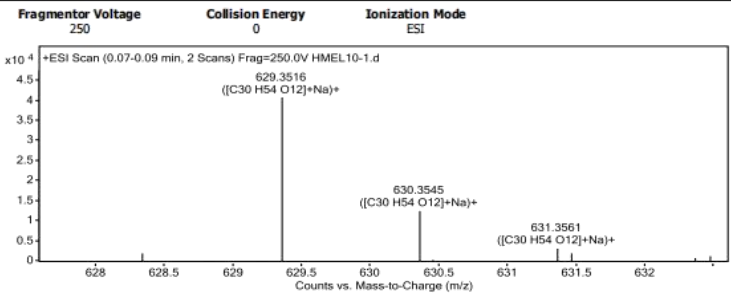
Figure S7: HRESIMS of MEL-C



Qualitative Analysis Report

Data Filename	HMEL10-1.d	Sample Name	HMEL10-1
Sample Type	Sample	Position	P1-A1
Instrument Name	Instrument 1	User Name	
Acq Method	s.m	Acquired Time	9/9/2020 2:36:49 PM
IRM Calibration Status	Success	DA Method	Default.m
Comment			
Sample Group	Info.		
Acquisition SW	6200 series TOF/6500 series		
Version	Q-TOF B.05.01 (B5125.2)		

User Spectra



Peak List

m/z	z	Abund
545.2579	1	73056.17
657.383	1	107804.38
671.3625	1	241115.44
672.3656	1	81602.03
697.378	1	88028.43
699.3933	1	537962.63
700.3971	1	196029.84
701.3994	1	44330.29
715.3669	1	45312.07
809.5022	1	44510.05

Formula Calculator Element Limits

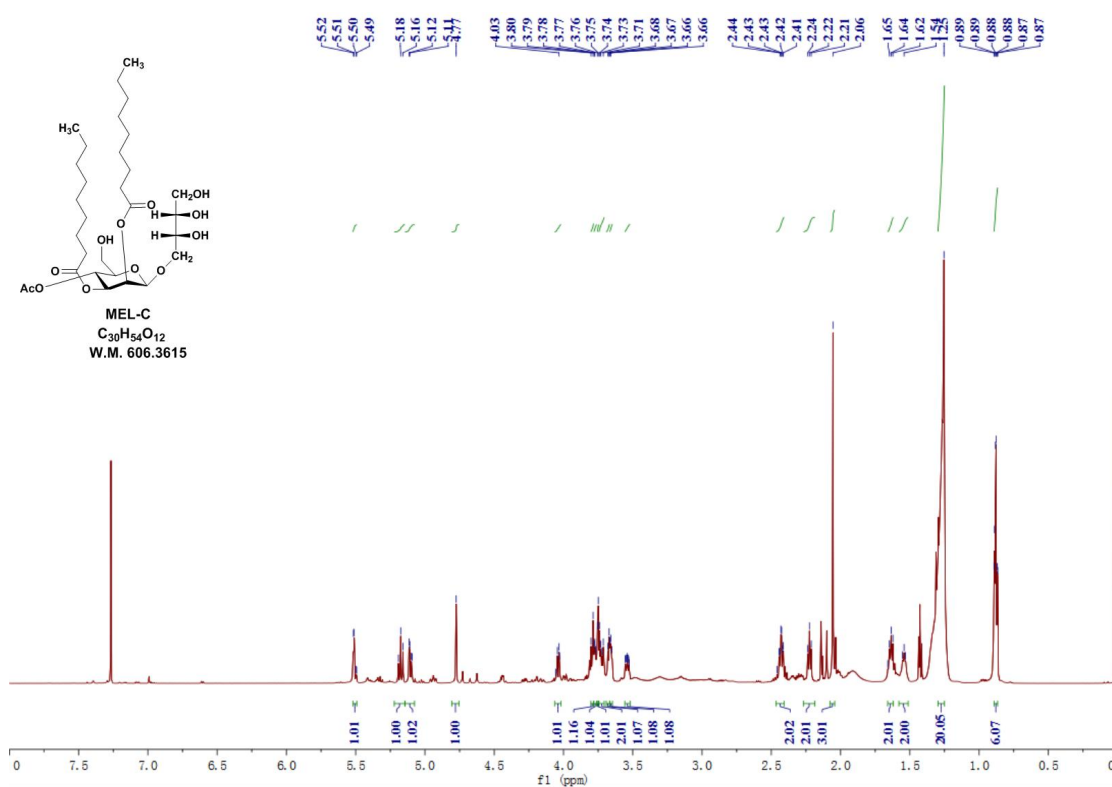
Element	Min	Max
C	3	60
H	0	120
O	0	30

Formula Calculator Results

Formula	CalculatedMass	CalculatedMz	Mz	Diff. (mDa)	Diff. (ppm)	DBE
C <sub>30</sub> H <sub>54</sub> O <sub>12</sub>	606.3615	629.3507	629.3516	-0.90	-1.43	4.0000

--- End Of Report ---

**Figure S8:**  $^1\text{H}$  NMR spectrum of **MEL-C** in  $\text{CDCl}_3$  (600 MHz).



**Figure S9:**  $^{13}\text{C}$  and DEPT NMR spectrum of **MEL-C** in  $\text{CDCl}_3$  (151 MHz).

