Electronic Supplementary Material (ESI) for MedChemComm.

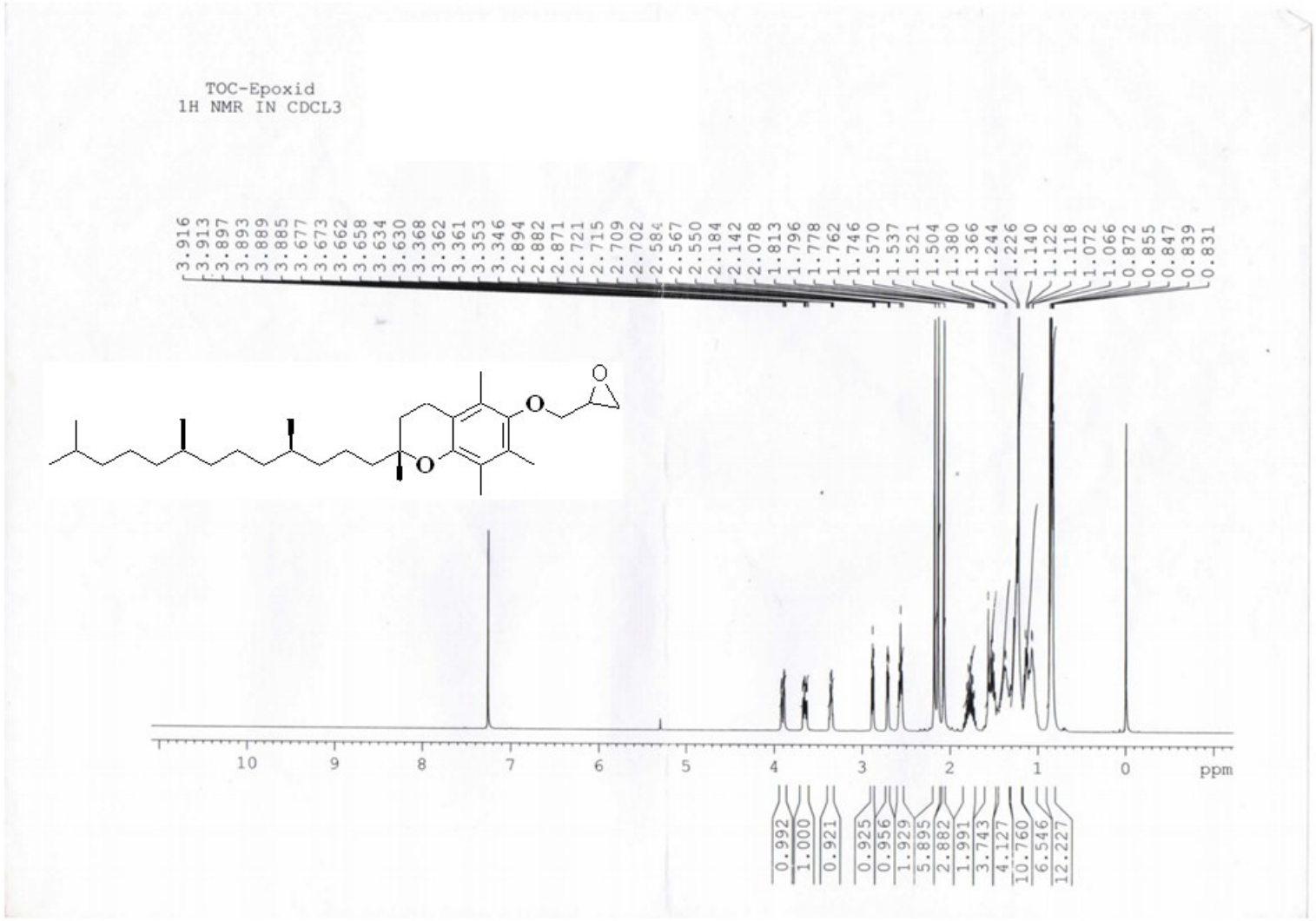
Hepatocellular Targeted α-Tocopherol based pH sensitive Galactosylated Lipid: Design, Synthesis and Transfection Studies

Muripiti Venkanna, Lohchania Brijesh, Srujan marepally, Srilakshmi.V. Patri*

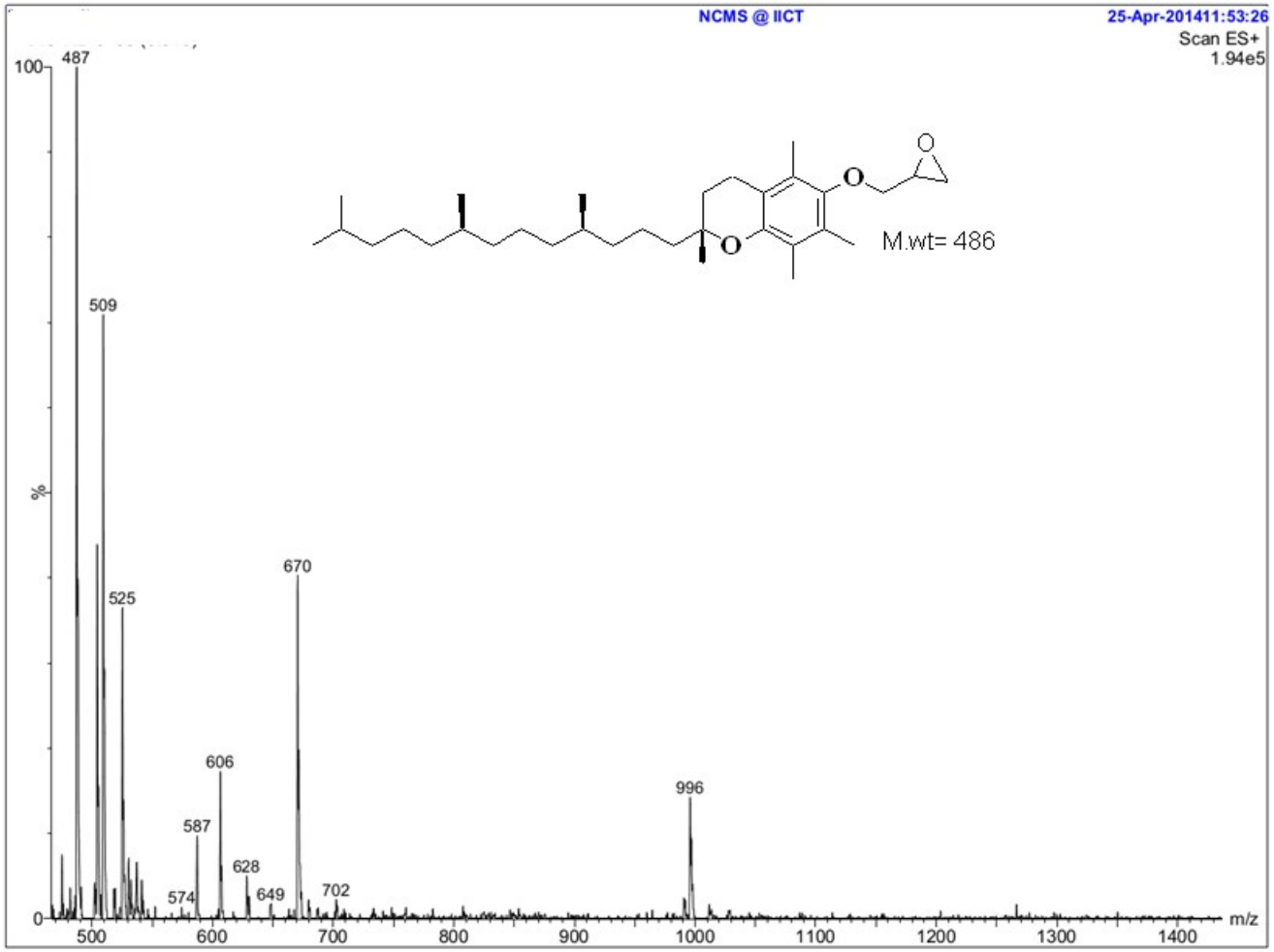
[1]National Institute of Technology, Warangal-506004, Telangana, India, [2] Centre for Stem Cells Research, Vellore, Tamil Nadu, India.

Email: patrisrilakshmi@gmail.com.

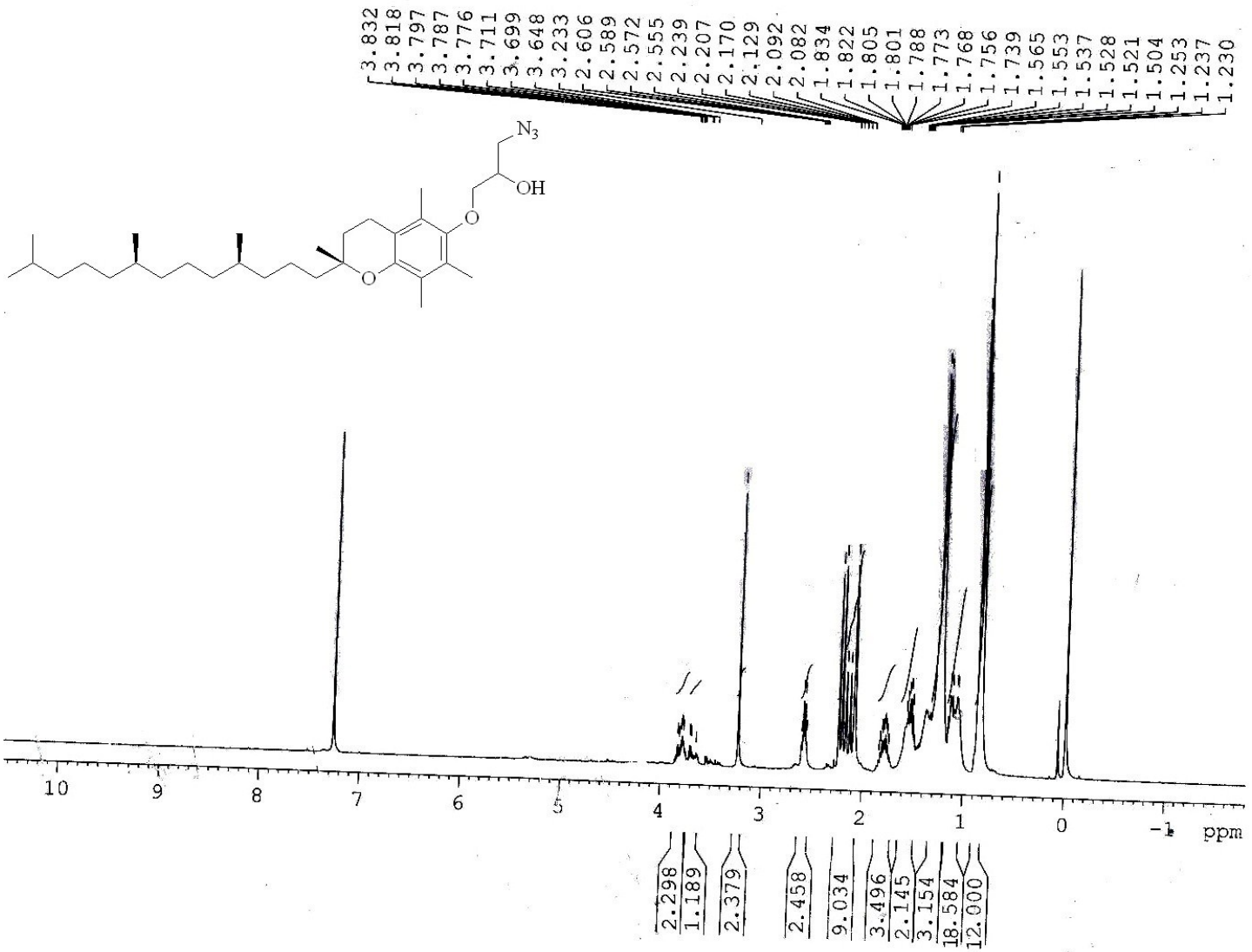
Spectral Data



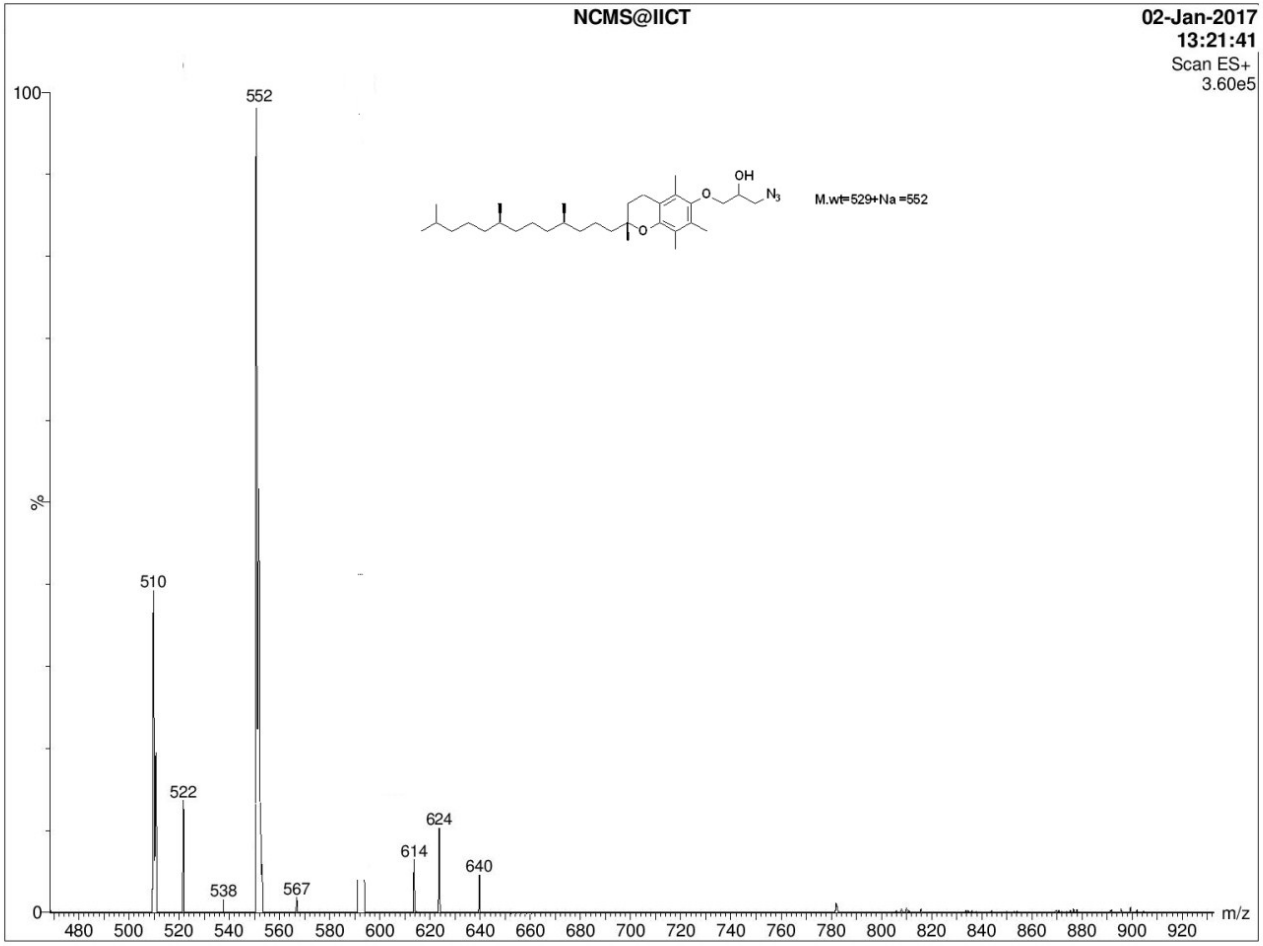
[1]H NMR Spectra of Intermediate 1A, Scheme 1A



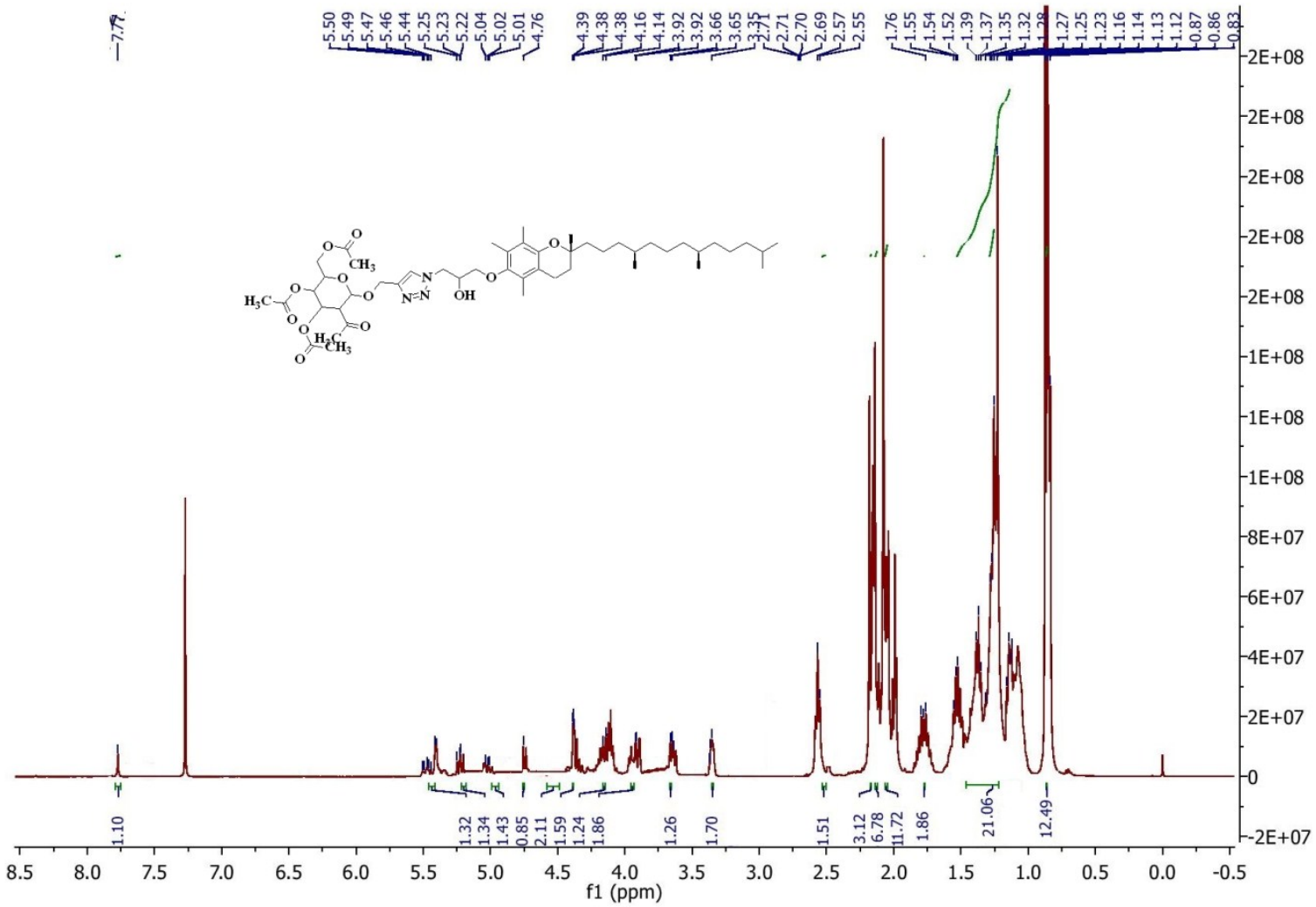
ESI-Mass Spectra of Intermediate 1A, Scheme 1A



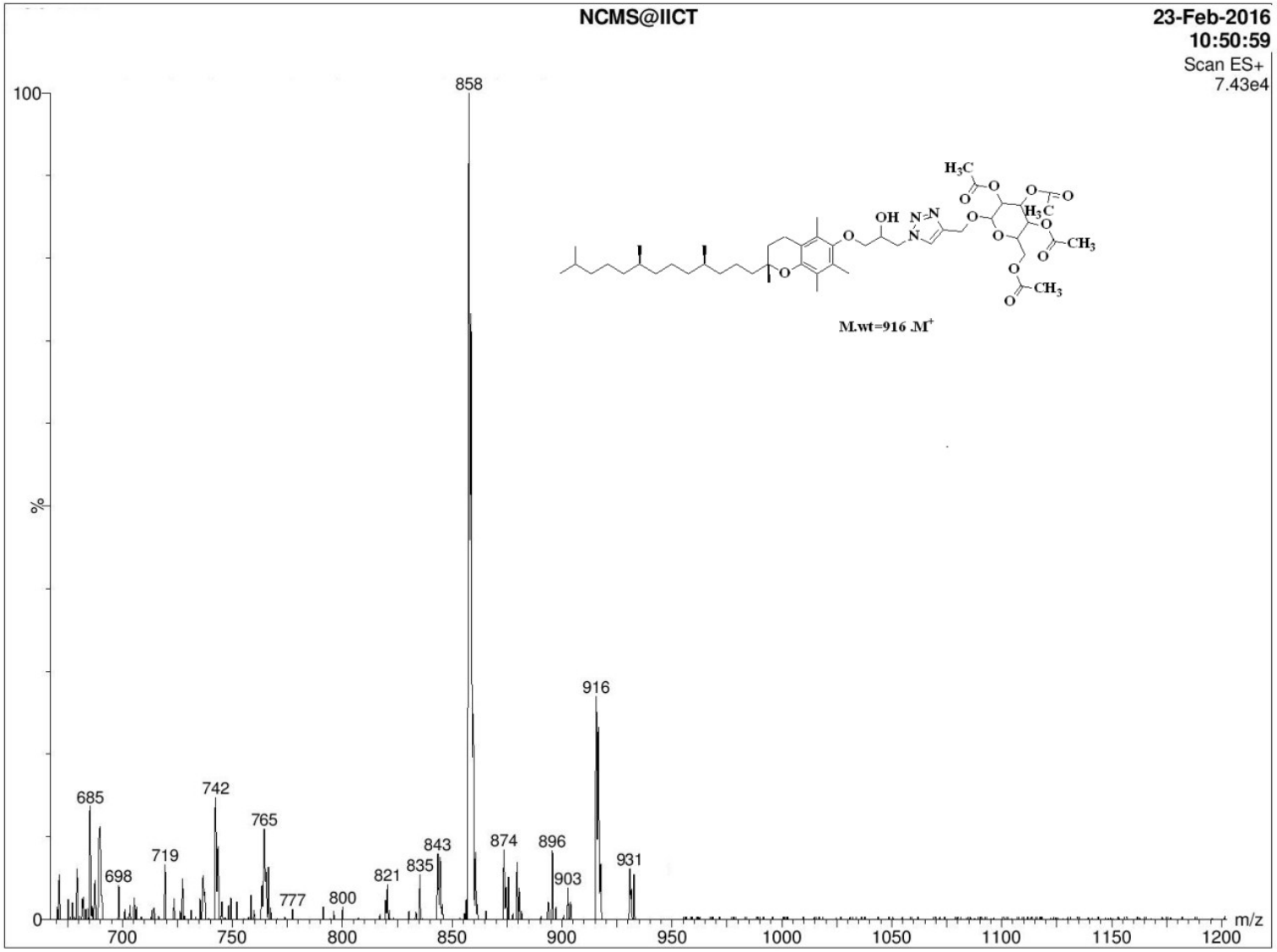
^{1}H NMR Spectra of Intermediate 2A, Scheme 1A



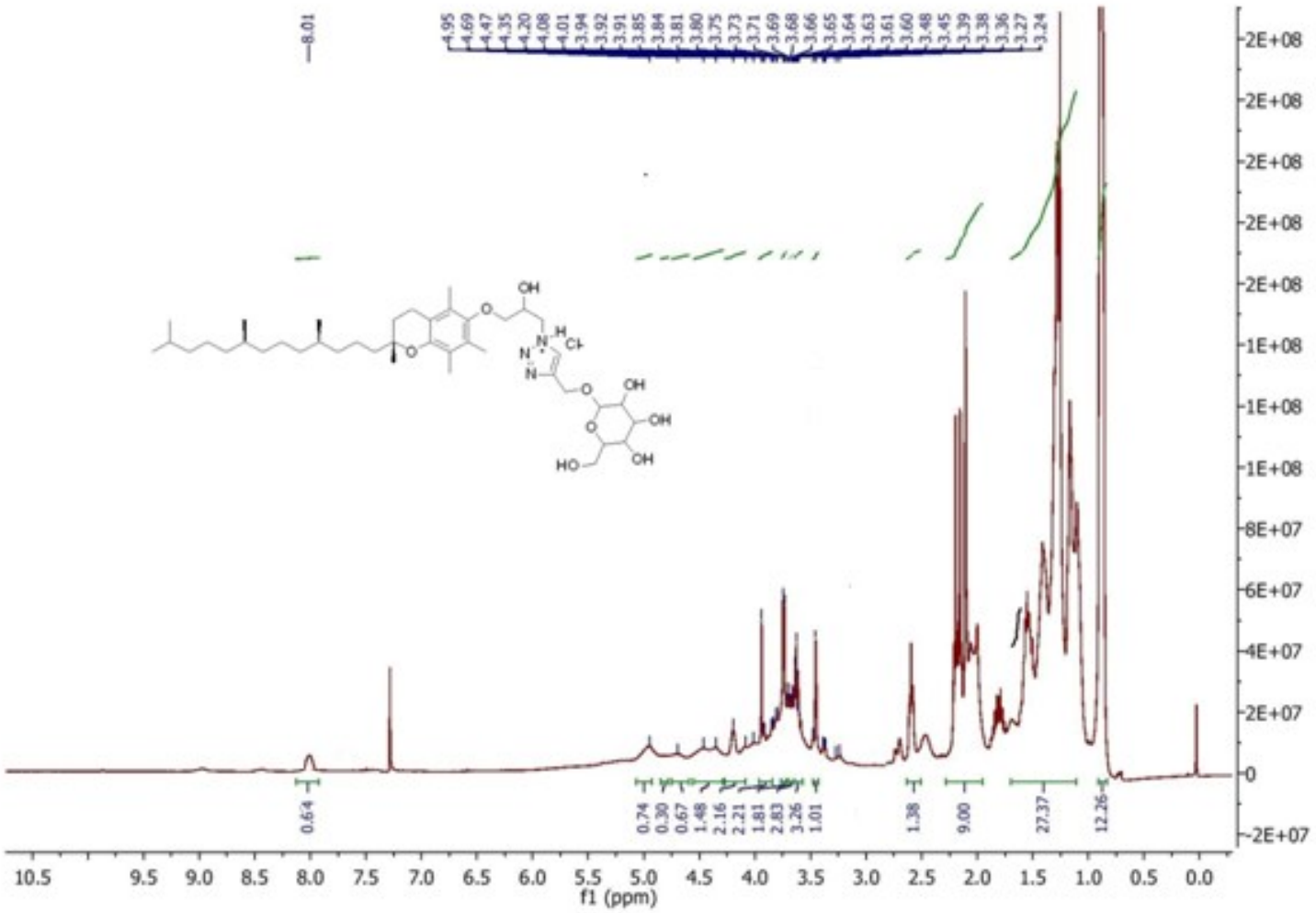
ESI-Mass Spectra of Intermediate 2A, Scheme 1A



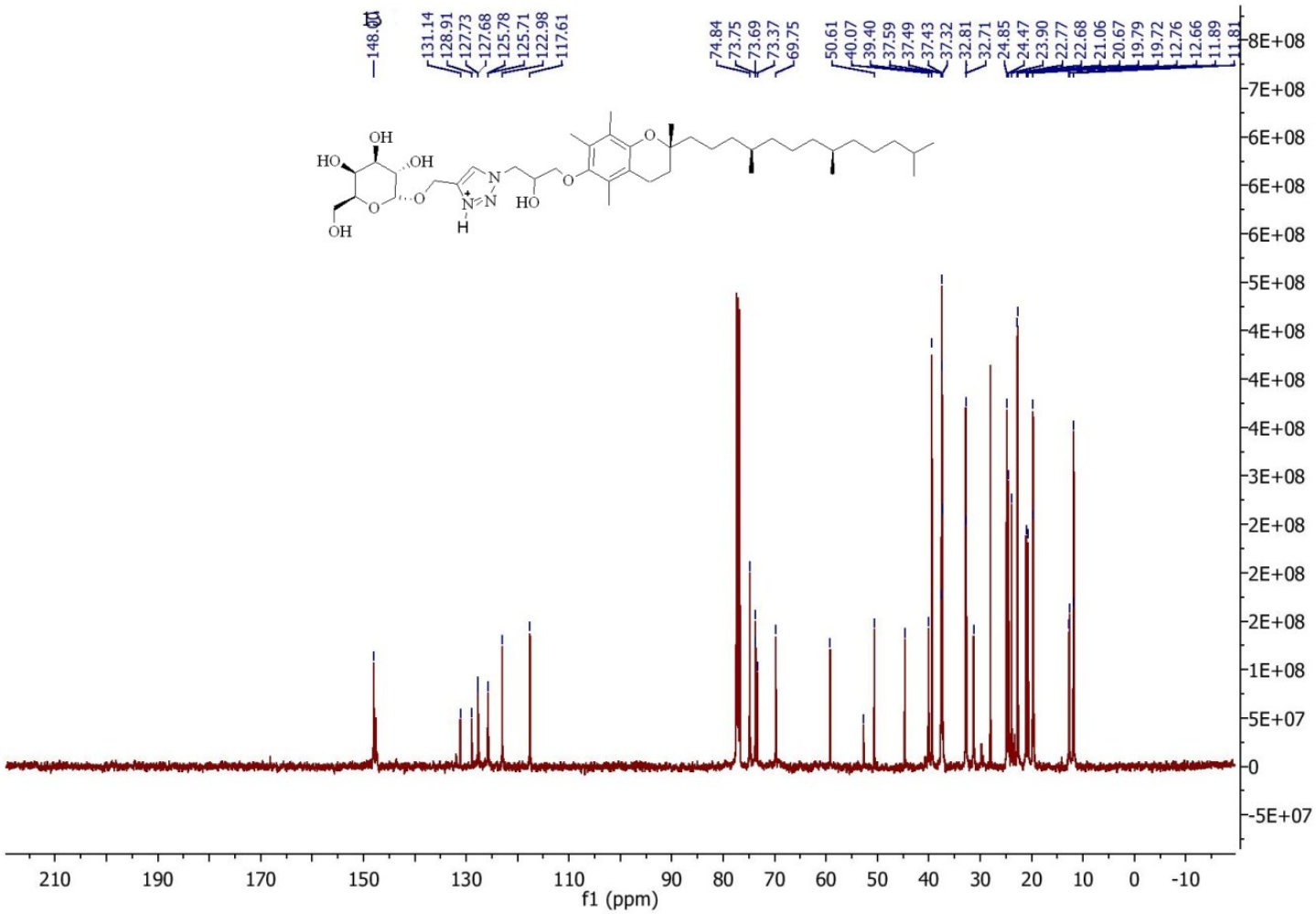
[1]H NMR Spectra of Intermediate 3A, Scheme 1A



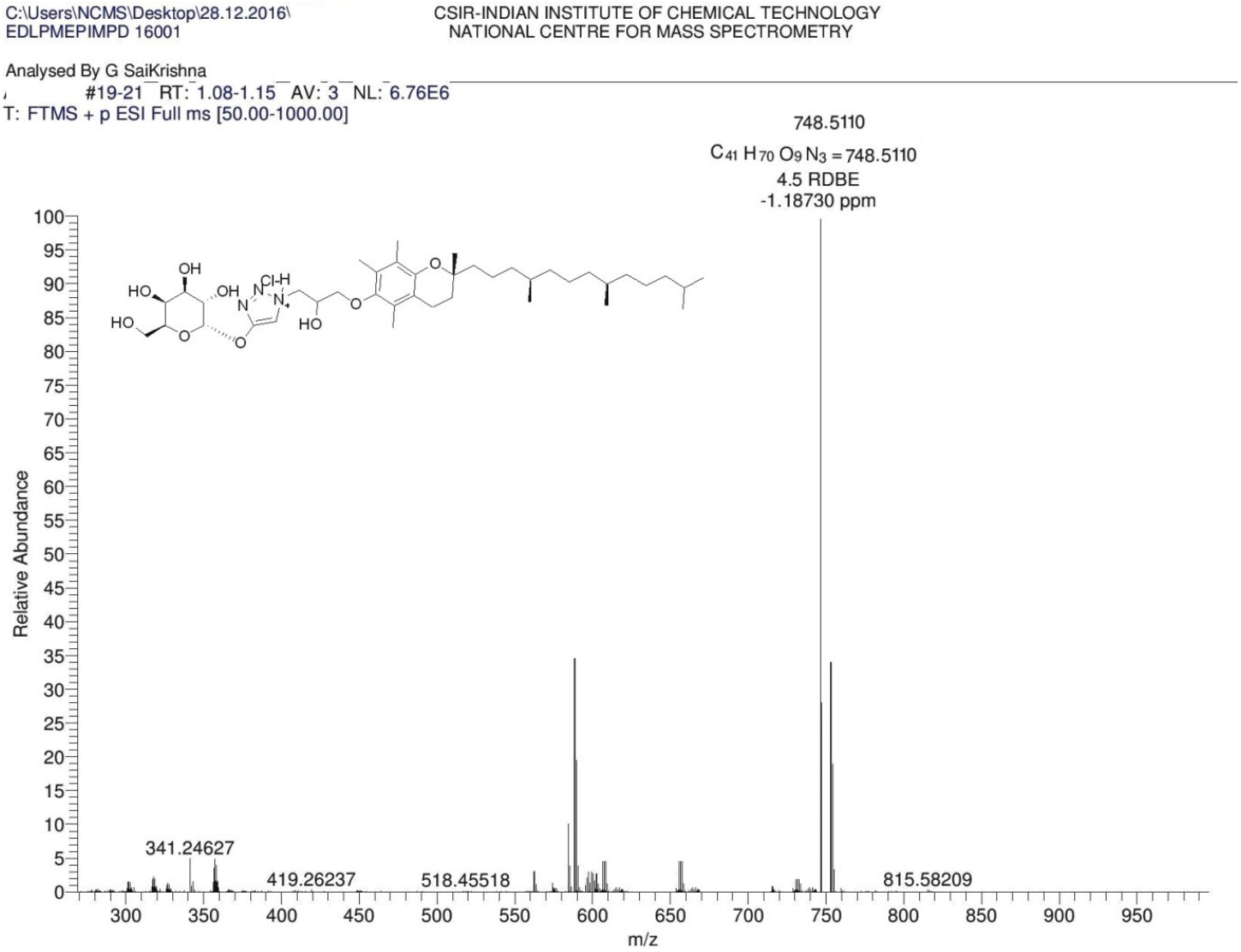
ESI-Mass Spectra of Intermediate 3A, Scheme 1A



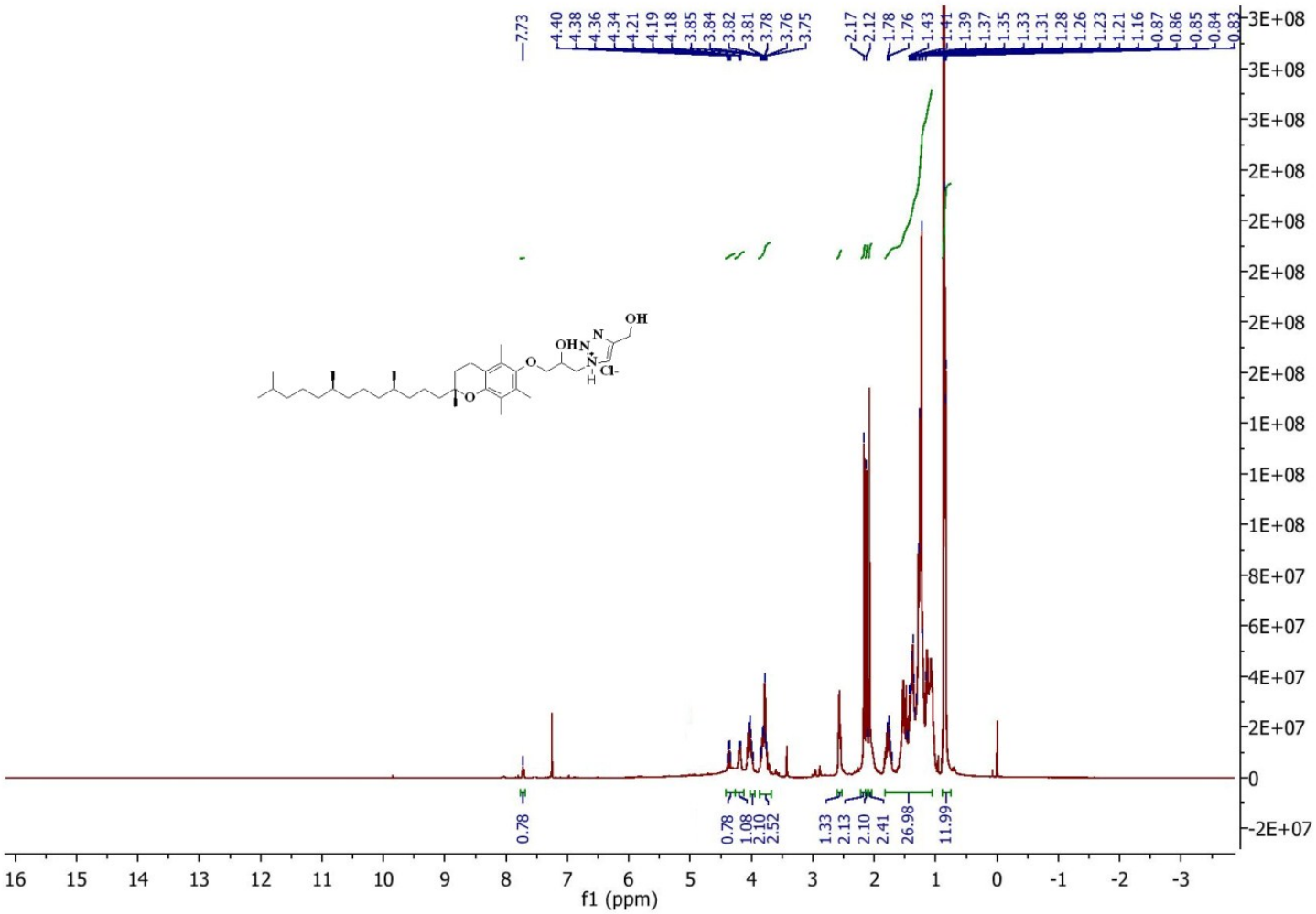
^{1}H NMR Spectra of Lipid 1 (Toc-Gal), Scheme 1A



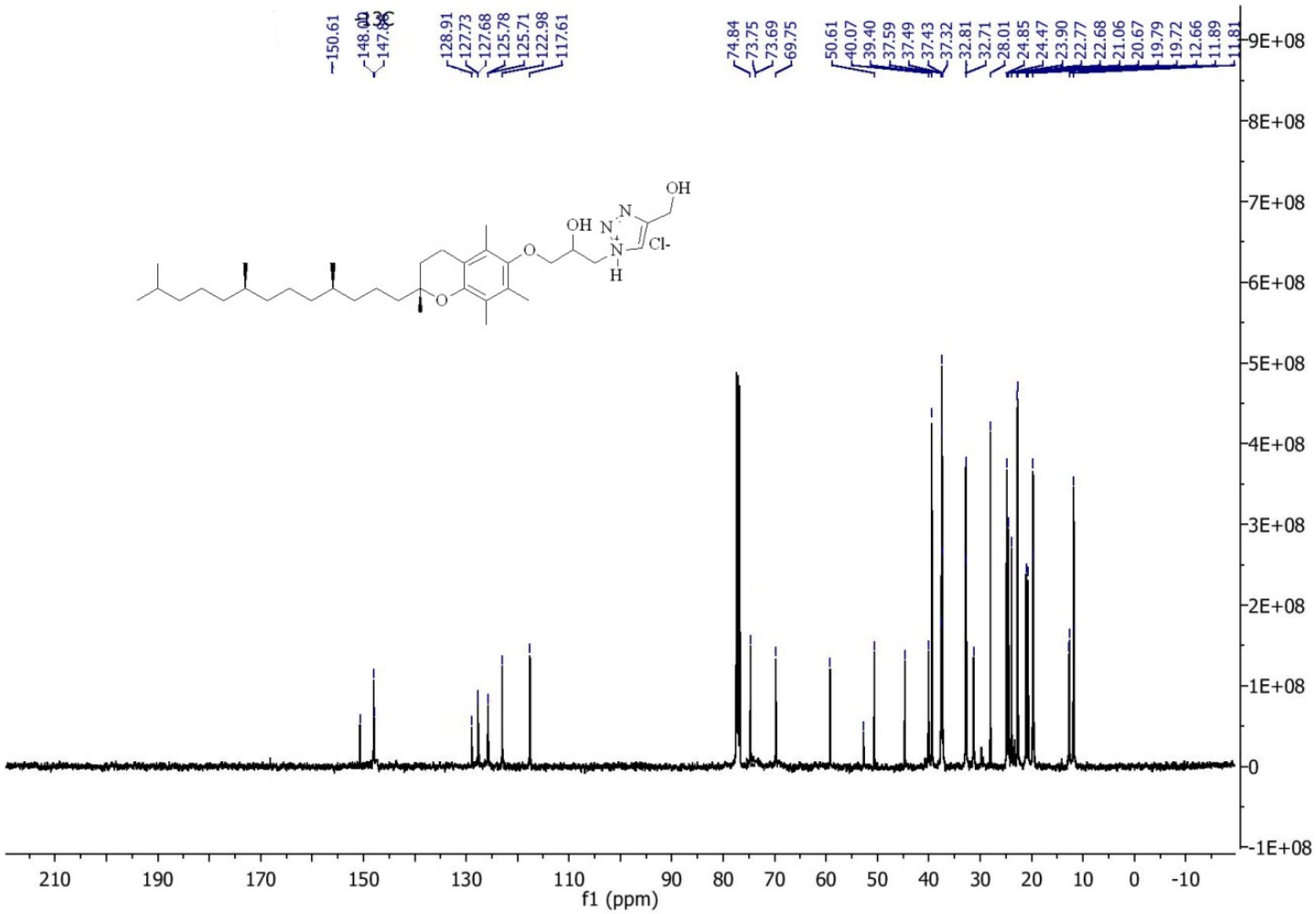
^{13}C NMR Spectra of Lipid 1 (Toc-Gal), Scheme 1A



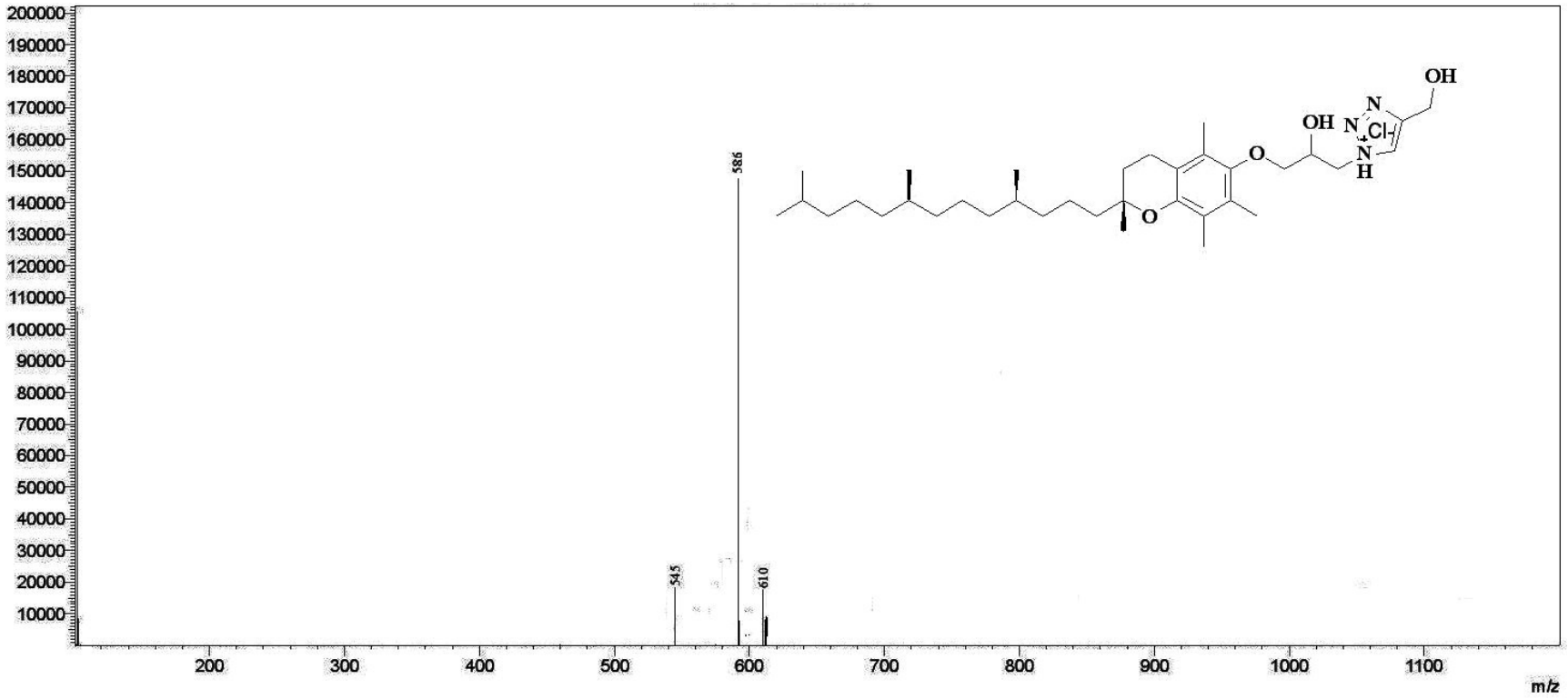
HRMS-Mass Spectra of Lipid 1 (Toc-Gal), Scheme 1A



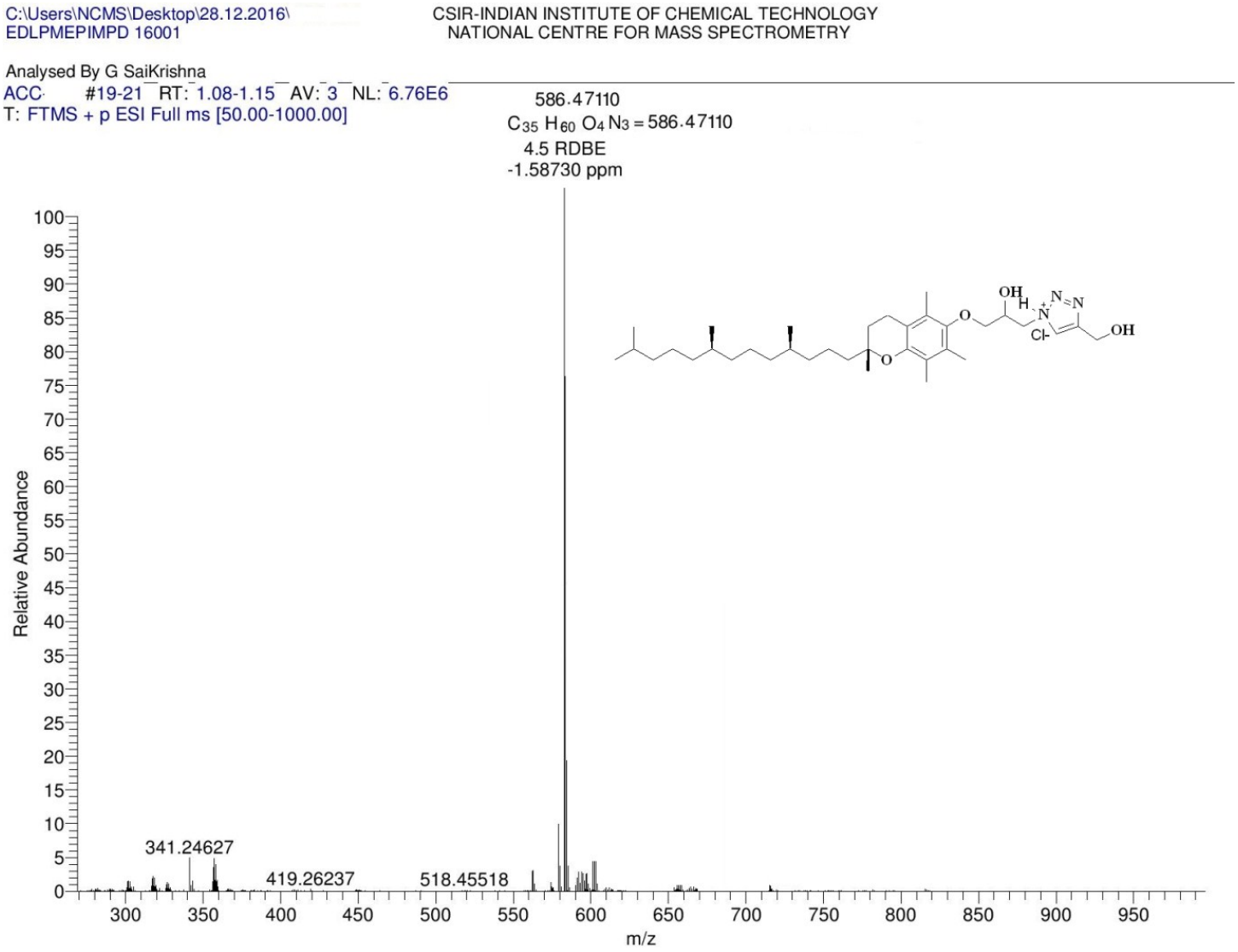
^{1}H NMR Spectra of Control Lipid 2 (Toc-OH), Scheme 1B



^{13}C NMR Spectra of Control Lipid 2 (Toc-OH), Scheme 1B



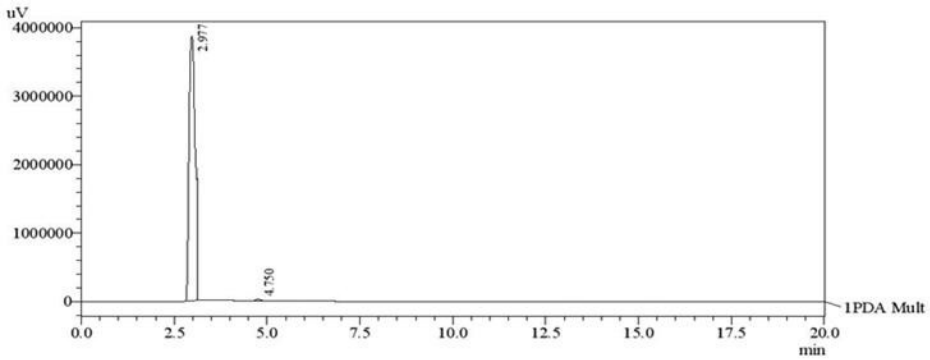
ESI-Mass Spectra of Control Lipid 2 (Toc-OH), Scheme 1B



HRMS-Mass Spectra of Control Lipid 2 (Toc-OH), Scheme 1B

HPLC Profiles of Lipids 1 & 2 (Toc-Gal, Toc-OH)

Lipid 1 (Toc-Gal-H)



Lipid 2 (Toc-OH)

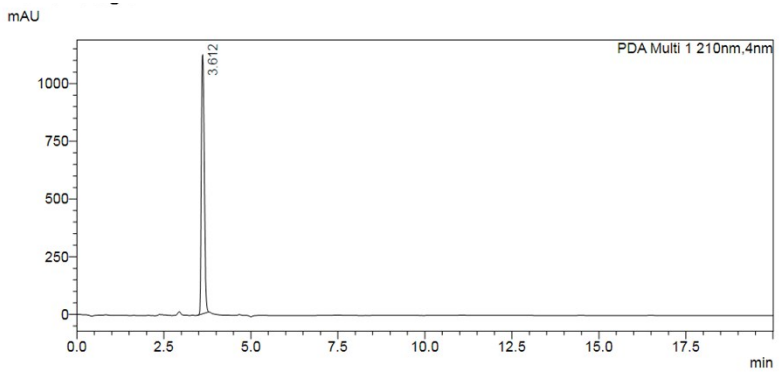


Figure **X**. RP-HPLC Chromatograms for Lipids **1** & **2 (Toc-Gal, Toc-OH)** obtained using 100% methanol as mobile phase.

HPLC Conditions:

System:	Shimadzu Lab Solutions
Column:	Microsorb® 100, RP-18e (10 µm), 125 x 4 mm
Mobile Phase:	100% Methanol.
Flow Rate:	1.0 mL/min
Typical Column Pressure:	50-55 Bars
Detection:	UV at 263 nm

Gel Retardation assay:

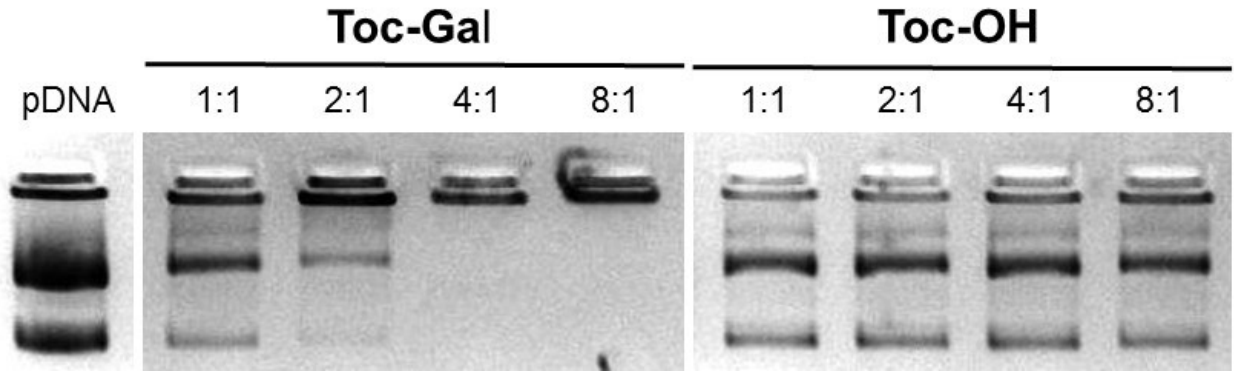


Figure S1: Electrophoretic gel patterns for lipoplex-associated DNA in agarose gel retardation assay. Toc-Gal and Toc-OH with cholesterol as co-lipid at 1:1 molar ratio (1 mM)