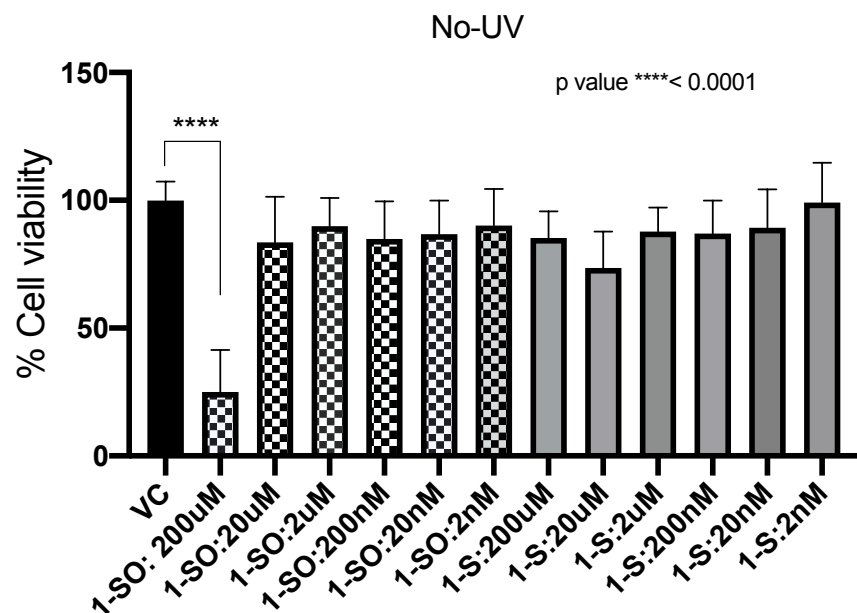
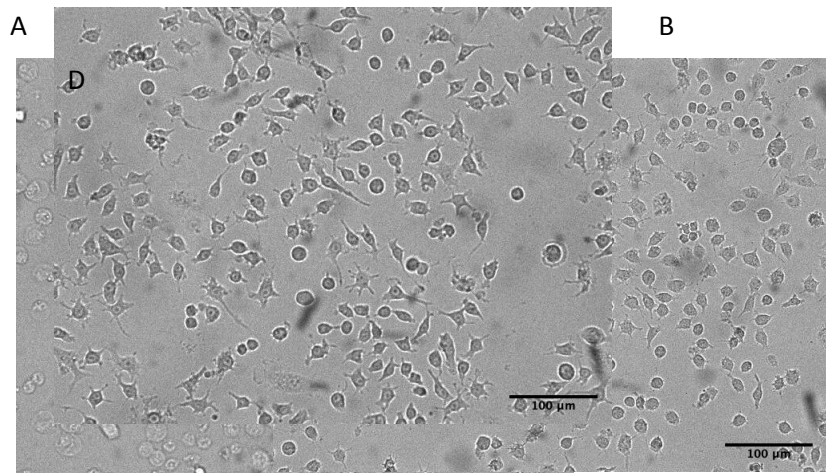
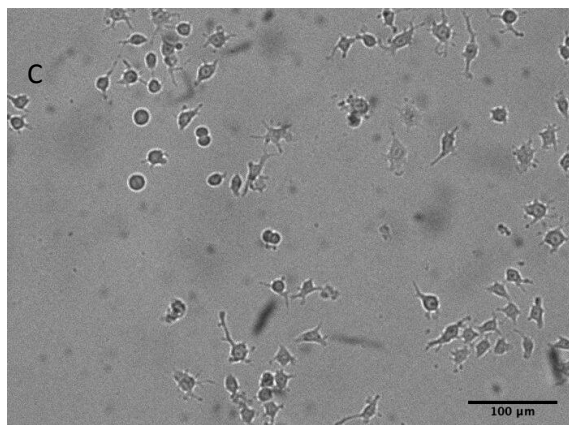


Supplemental Information for In Vitro Oxidations of Low-Density Lipoprotein and RAW 264.7  
Cells with Lipophilic O(<sup>3</sup>P)-Precursors

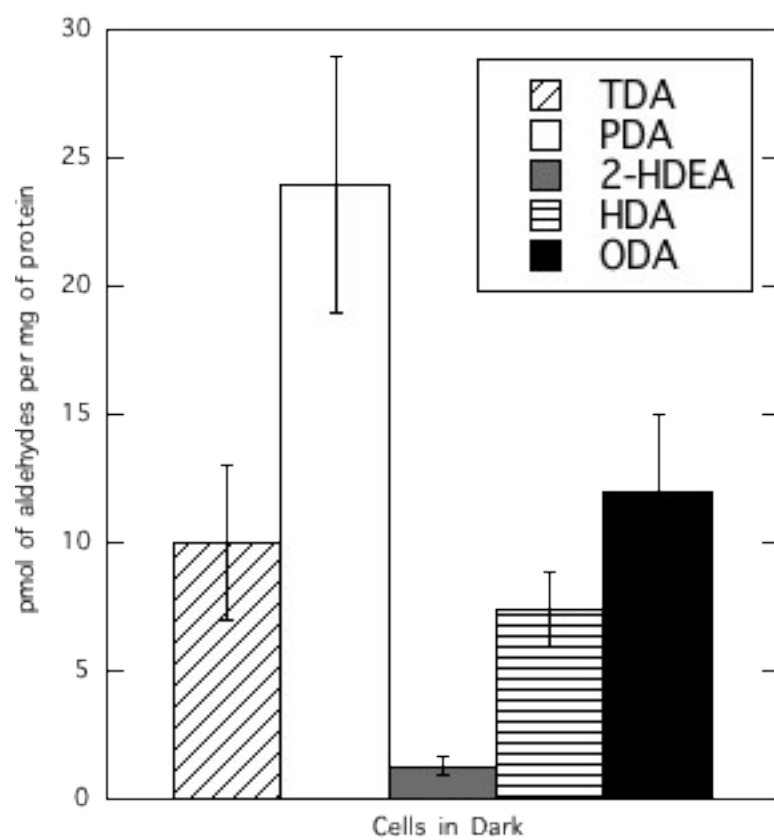
John T. Petroff II, Ankita Isor, Satyanarayana M. Chintala, Carolyn J. Albert, Jacob D. Franke,  
David Weinstein, Sara M. Omlid, Christopher K. Arnatt, David A. Ford, Ryan D. McCulla



**Figure S1:** Cell viability when cells were treated with 1-SO and 1-S as a function of concentration without UV-A irradiation. Error bars – 95% CI. Cell viability calculated as  $(Abs_{sample} - Abs_{blank}) * 100 / (Abs_{VC} - Abs_{blank})$ . N=10

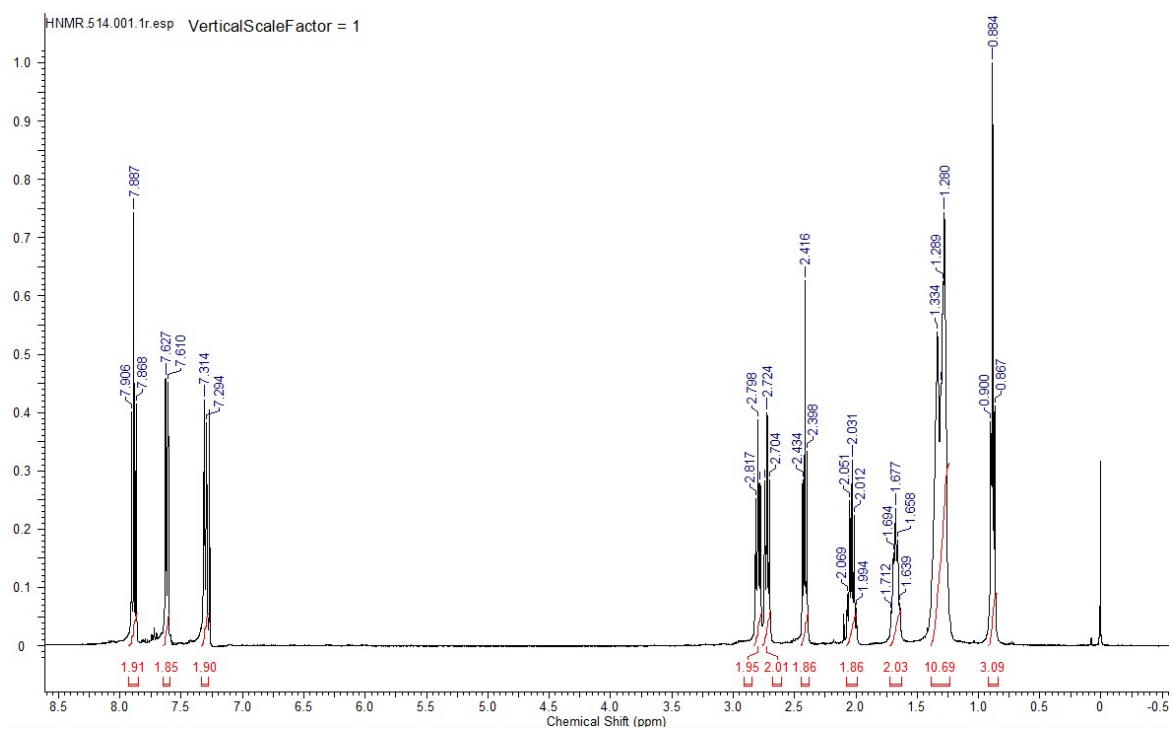


**Figure S2. Visualization of RAW 264.7 cells pre- and post-UV treatment.** Cells were plated on two 10X200 mm cell culture dishes (Cellstar by Grenier bio-one) in 5mL media (cell density 88,000 cells/mL) and incubated for 24 hours. One culture dish was irradiated in a Luzchem photoreactor with 14 UV-A LZC bulbs for 2 hours and a control dish was wrapped in foil and kept adjacent to the photoreactor. The dishes were then visualized using a Olympus BX60 Microscope and images were captured at 200X magnification. **A.** Cells prior to irradiation (plate 1). **B.** Cells prior to irradiation (plate 2) **C.** Cells after 2 hours irradiation (plate 1). **D.** Cells kept in dark for 2 hours (plate 2)

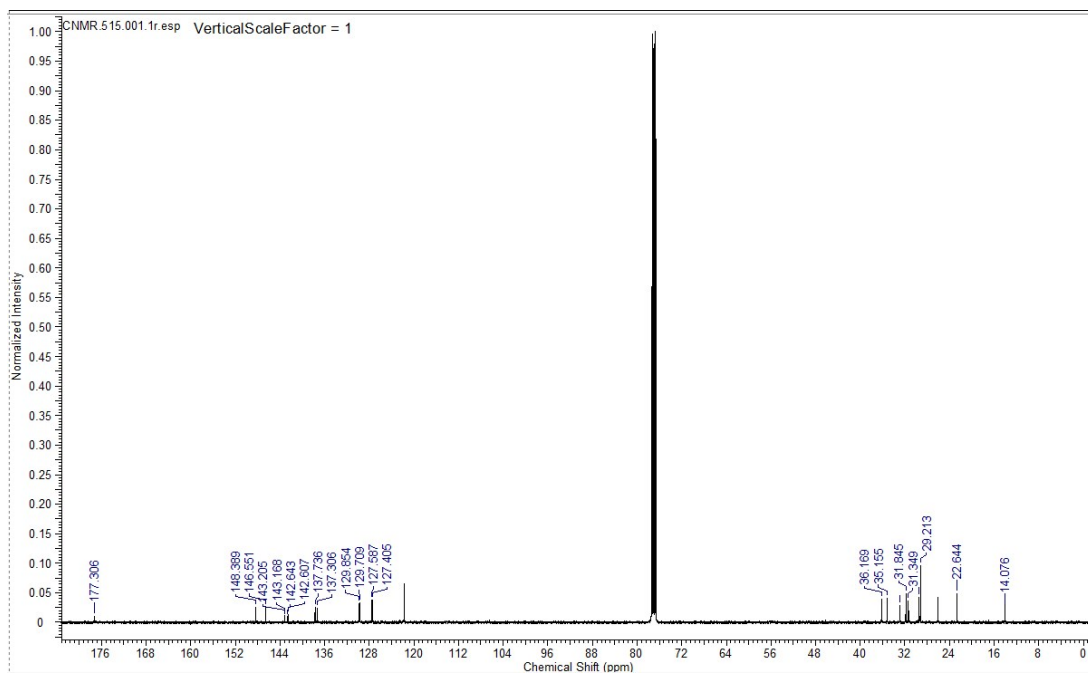


**Figure S3.** Amount of oxidized lipid product arising from RAW 264.7 cells after irradiation without any additional compounds.

## HNMR for 1-SO

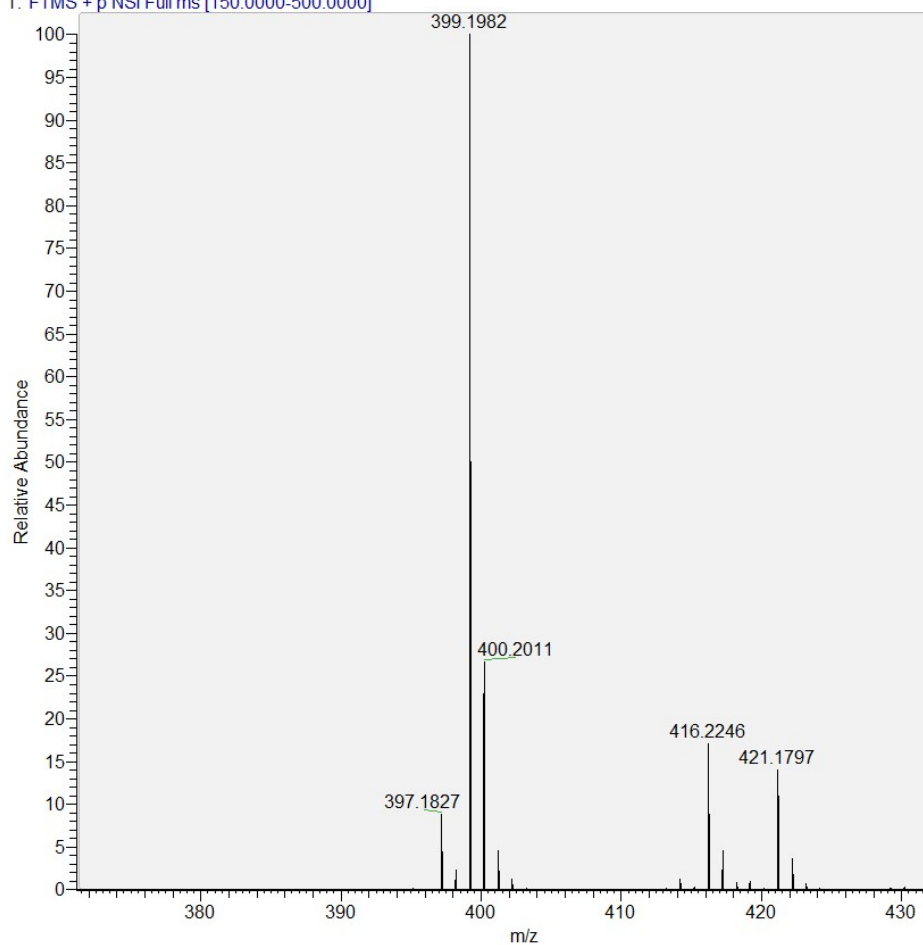


## CNMR for 1-SO

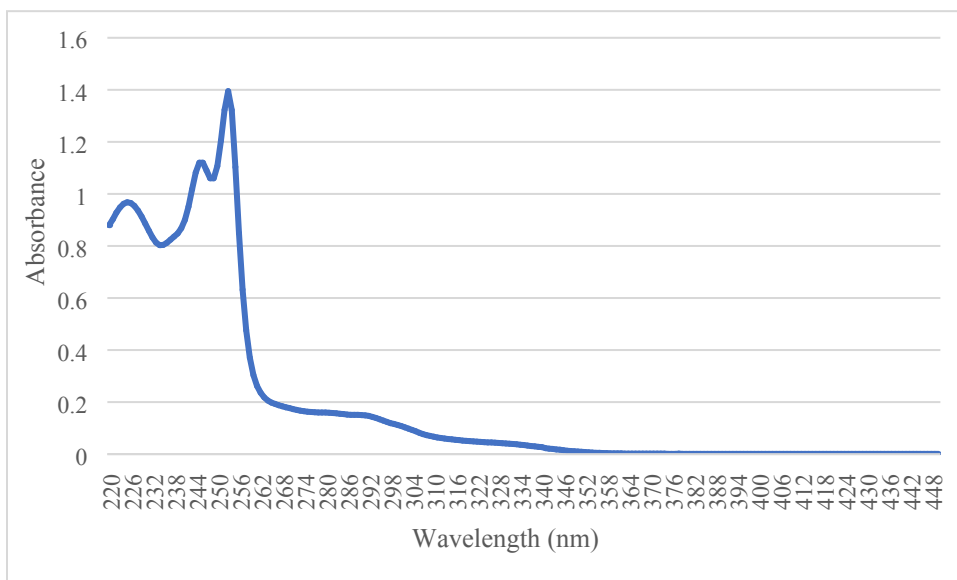


## HRMS for 1-SO

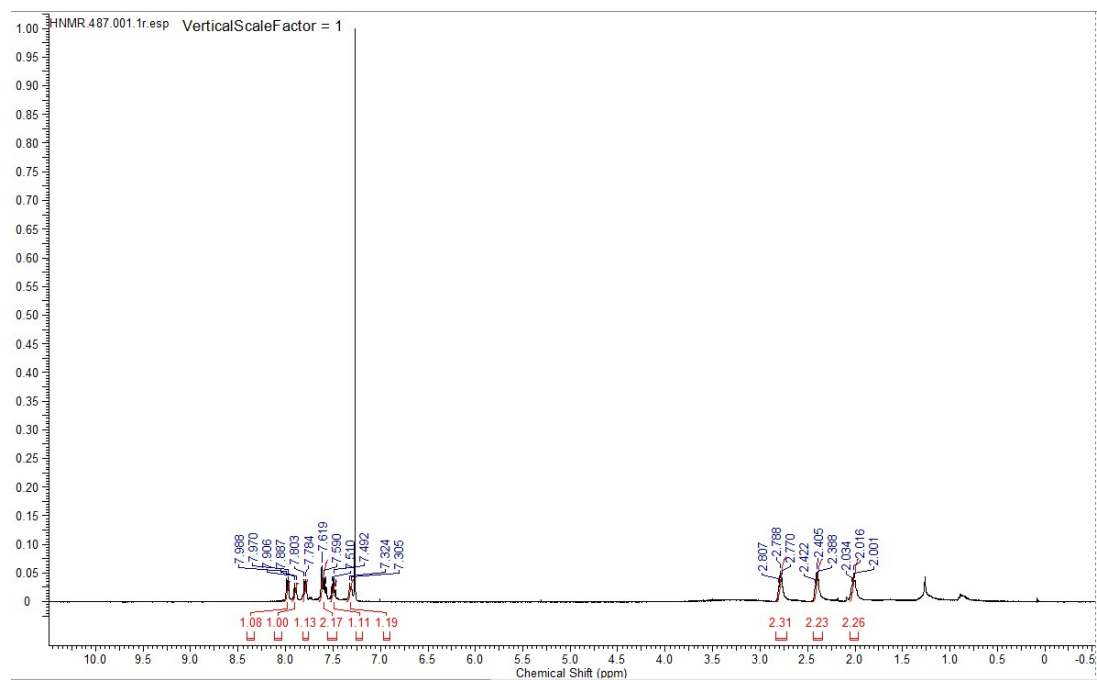
2octyl8butanoicacidDBTO\_20190219161629 #2147-2405 RT: 4.99-5.59 AV: 259 NL: 1.50E8  
T: FTMS + p NSI Full ms [150.0000-500.0000]



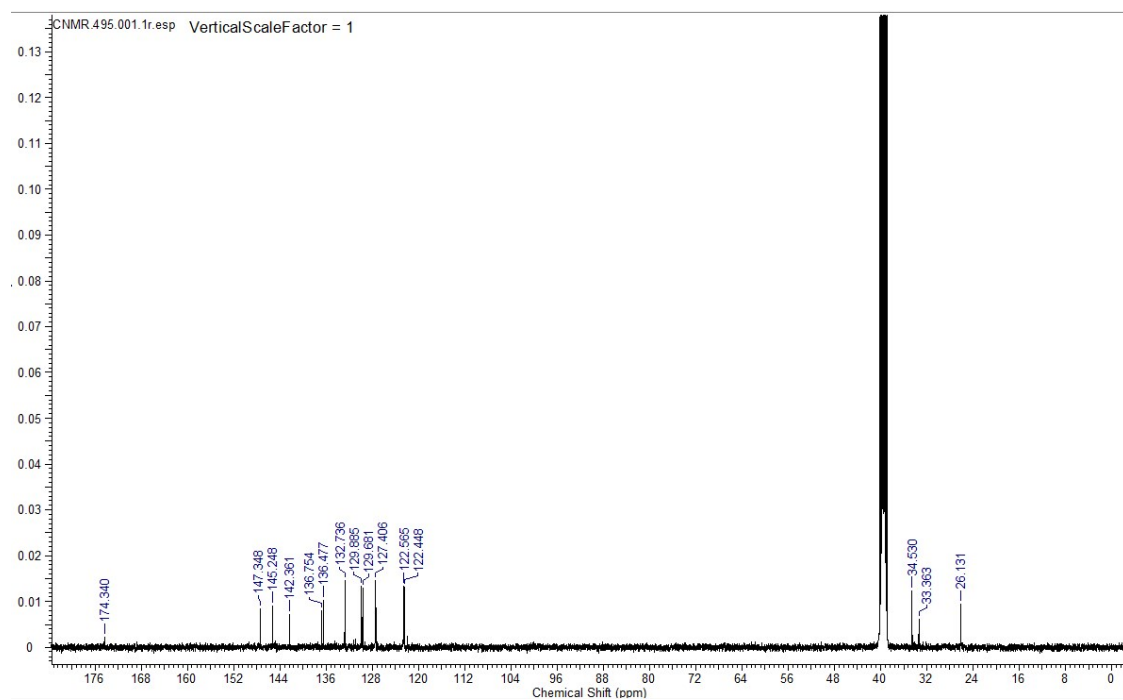
### UV/Vis of **1-SO**



### HNMR for **2-SO**

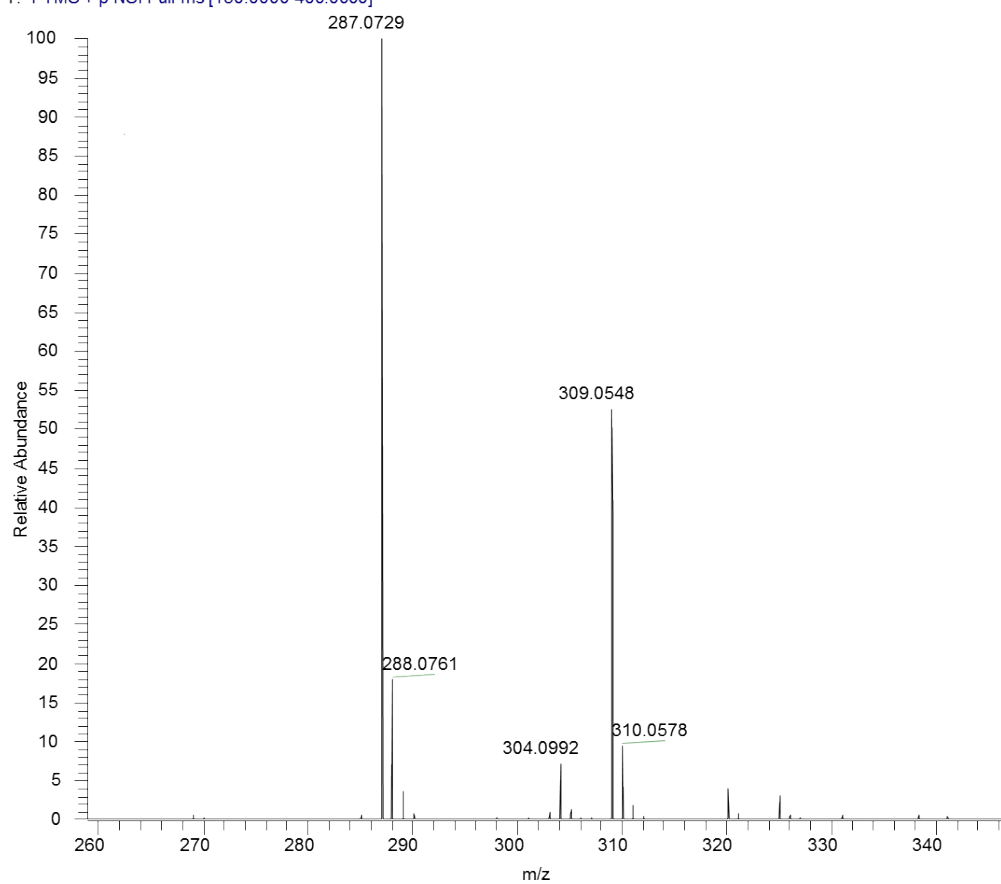


## CNMR for 2-SO



## HRMS for 2-SO

GF8AGAIN #3707-4113 RT: 8.61-9.56 AV: 407 SB: 1063 3.16-3.78, 4.22-6.08 NL: 4.44E8  
T: FTMS + p NSI Full ms [150.0000-400.0000]



### UV/Vis for 2-SO

