

Supporting Information for

Ring Opening Hydrofluorination of 2,3- and 3,4-Epoxy Amines by HBF₄•OEt₂: Application to the Asymmetric Synthesis of (S,S)-3-Deoxy-3-fluorosafingol

Alexander J. Cresswell, Stephen G. Davies,* James A. Lee,
Melloney J. Morris, Paul M. Roberts, and James E. Thomson

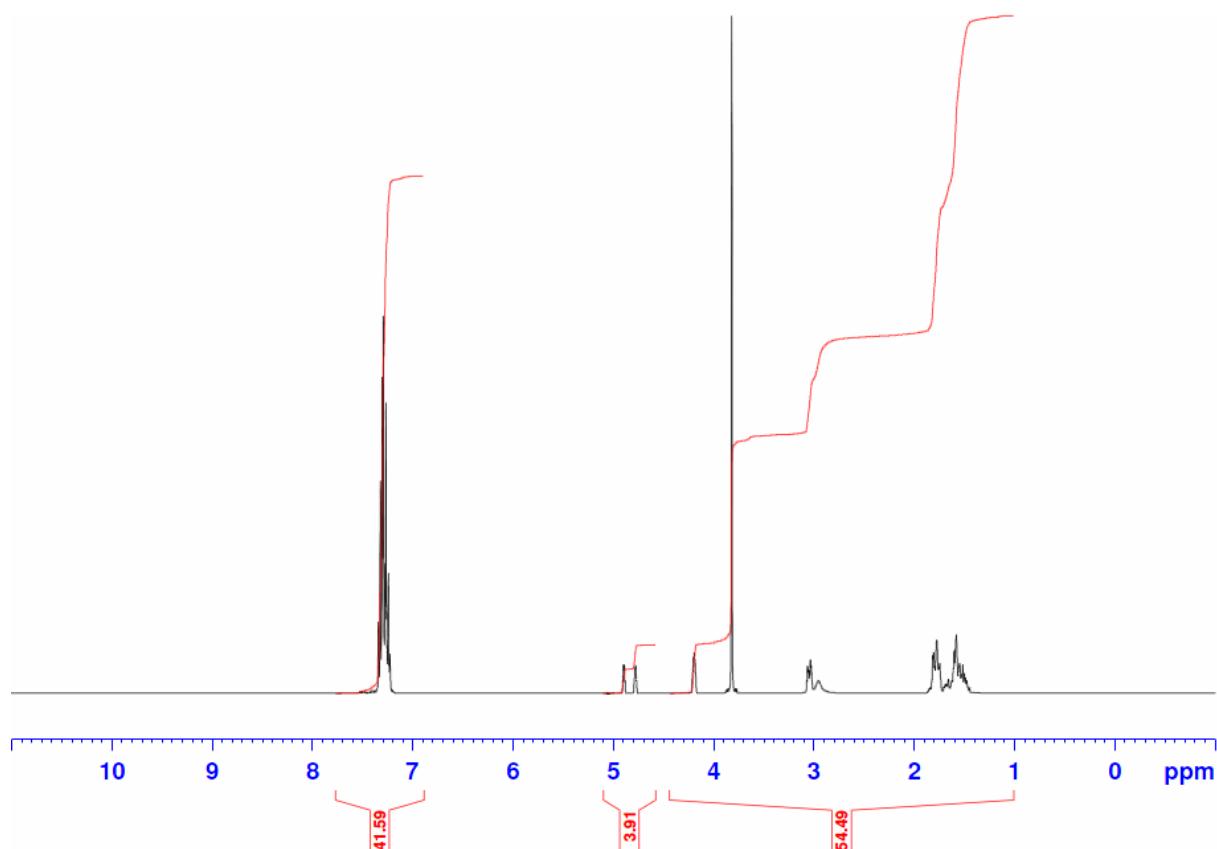
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University of Oxford, Mansfield Road, Oxford OX1 3TA, U.K.,
and Syngenta, Jealott's Hill International Research Centre,
Bracknell, Berkshire RG42 6EY, U.K.*

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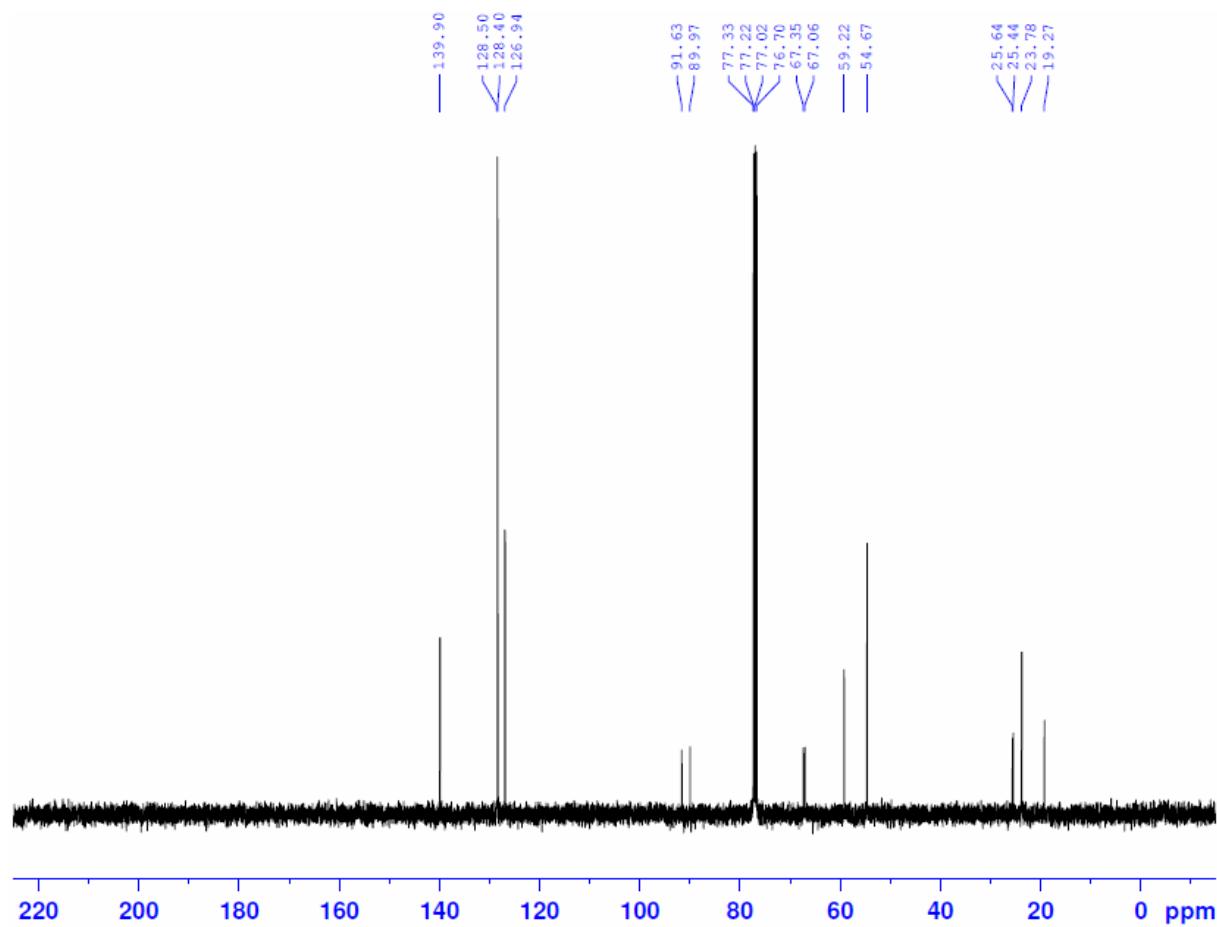
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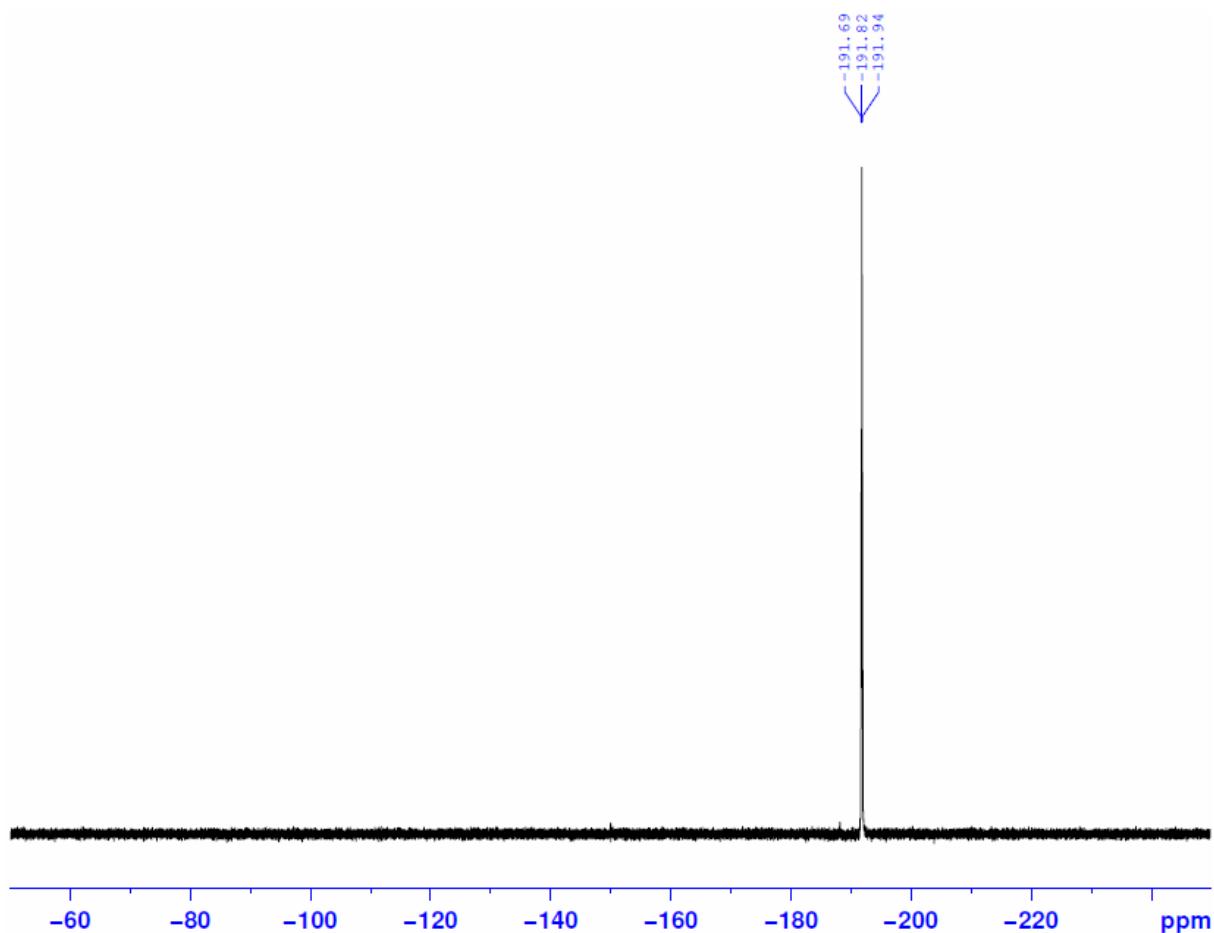
(RS,RS,RS)-2-(N,N-Dibenzylamino)-6-fluorocyclohexan-2-ol 9 (400 MHz ^1H , CDCl_3)



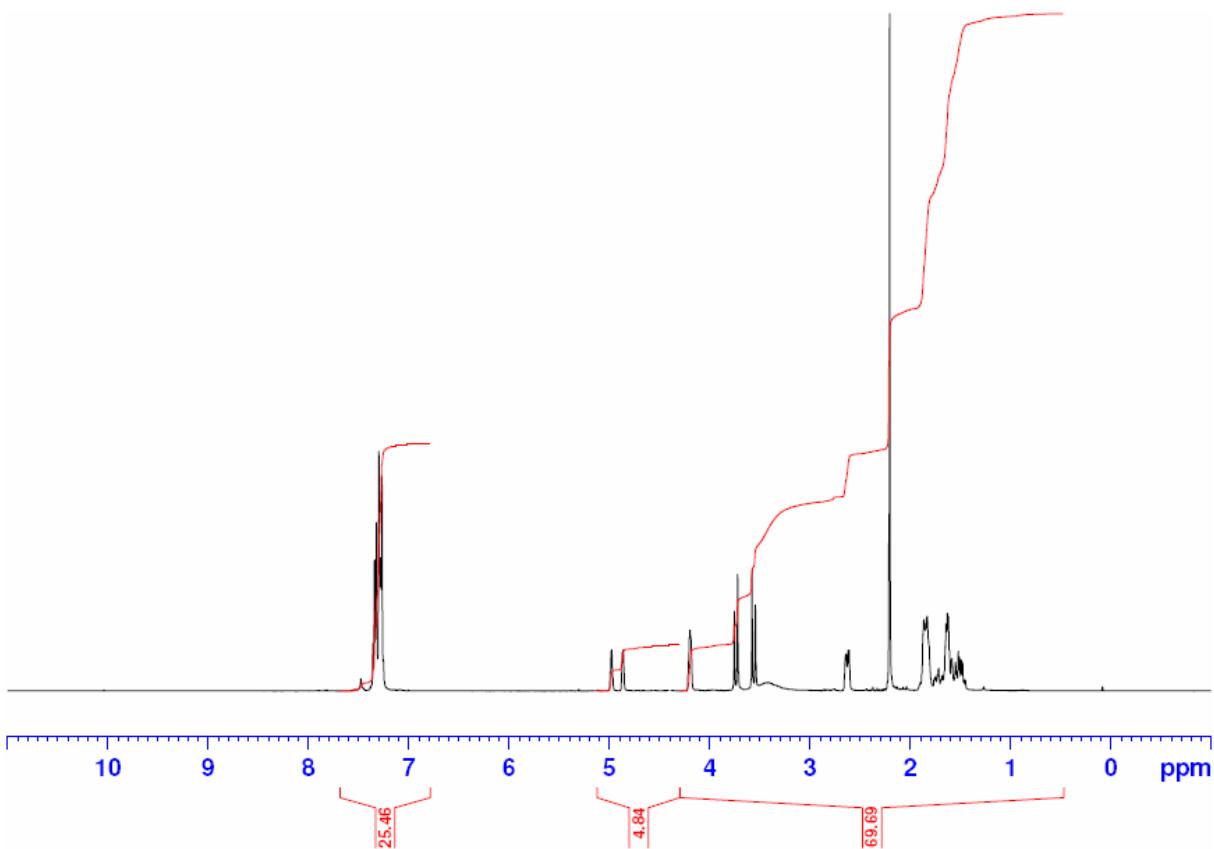
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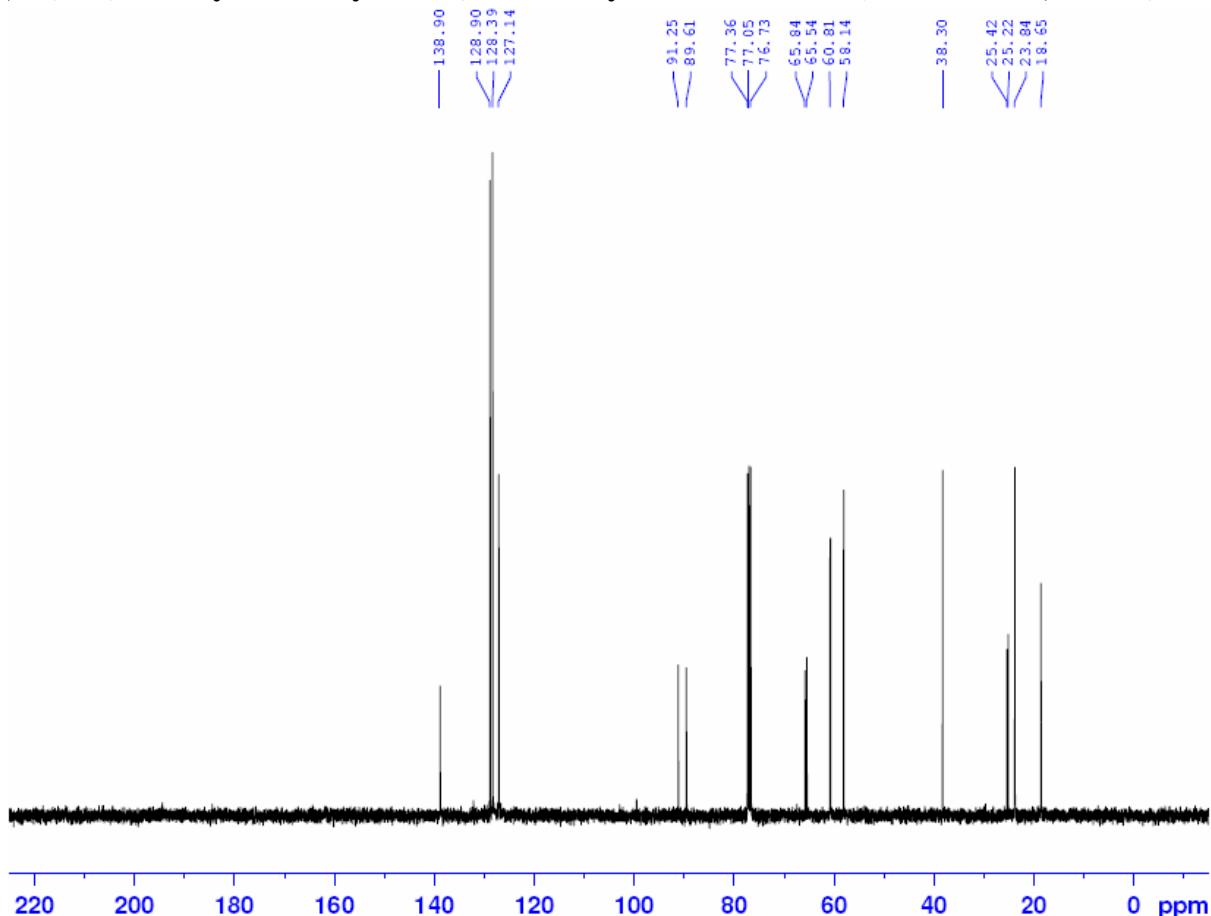
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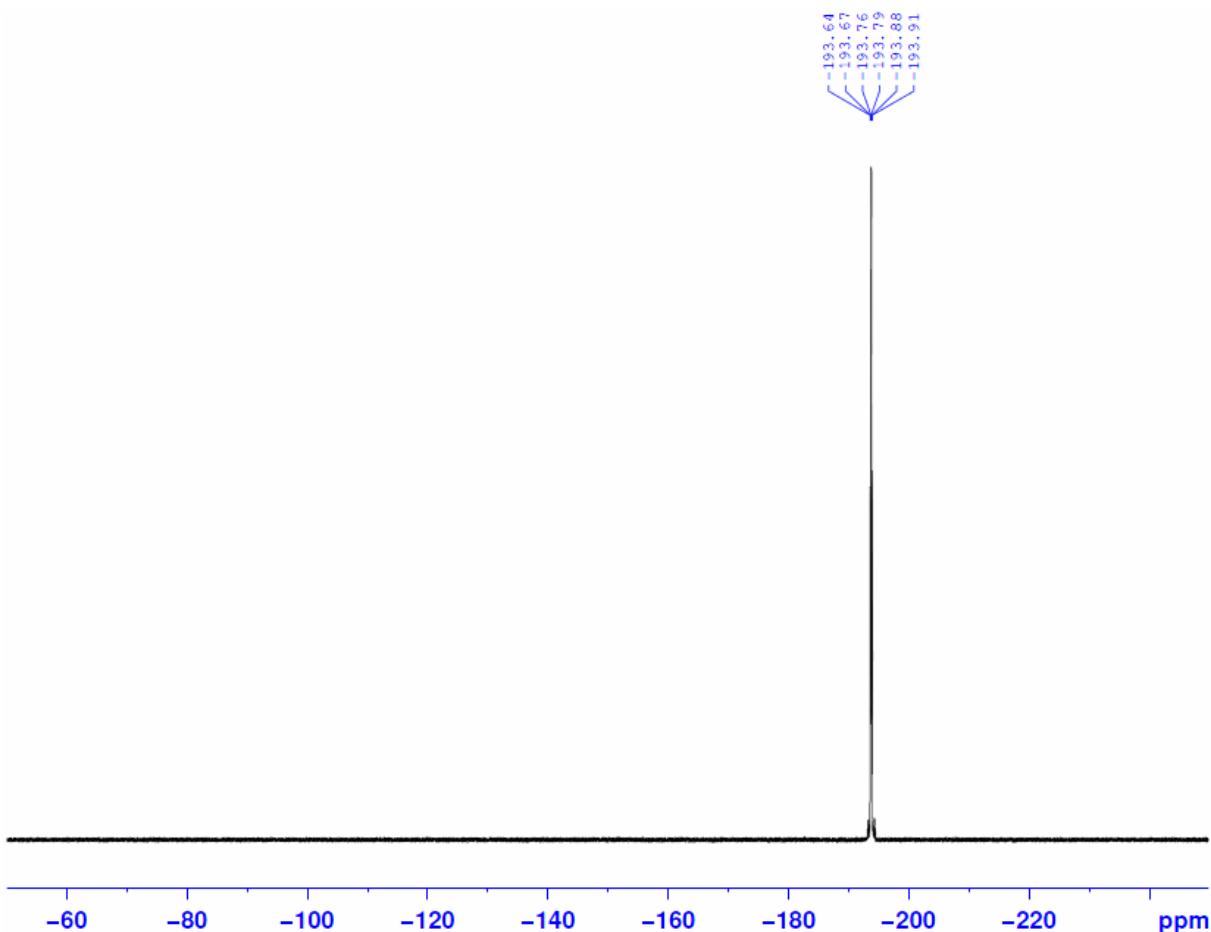
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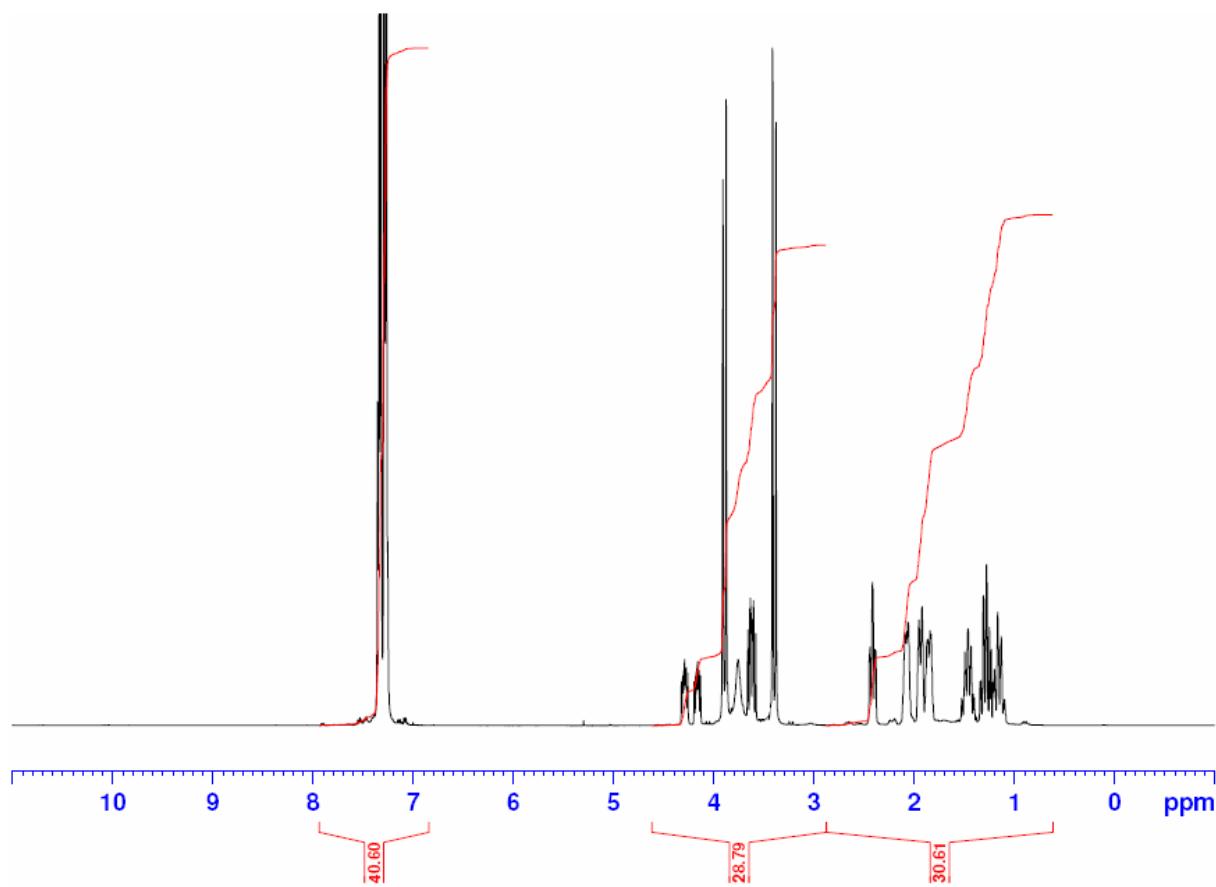
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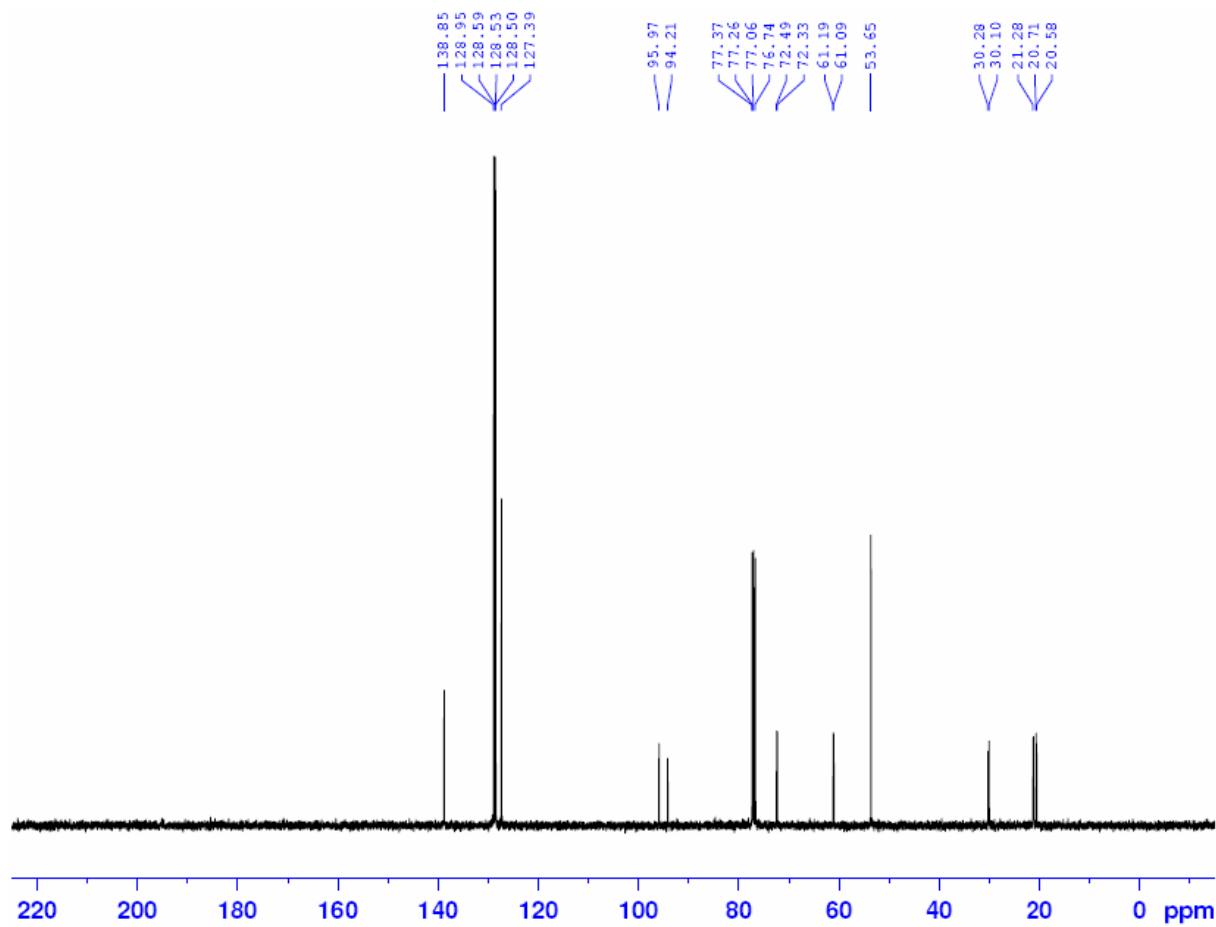
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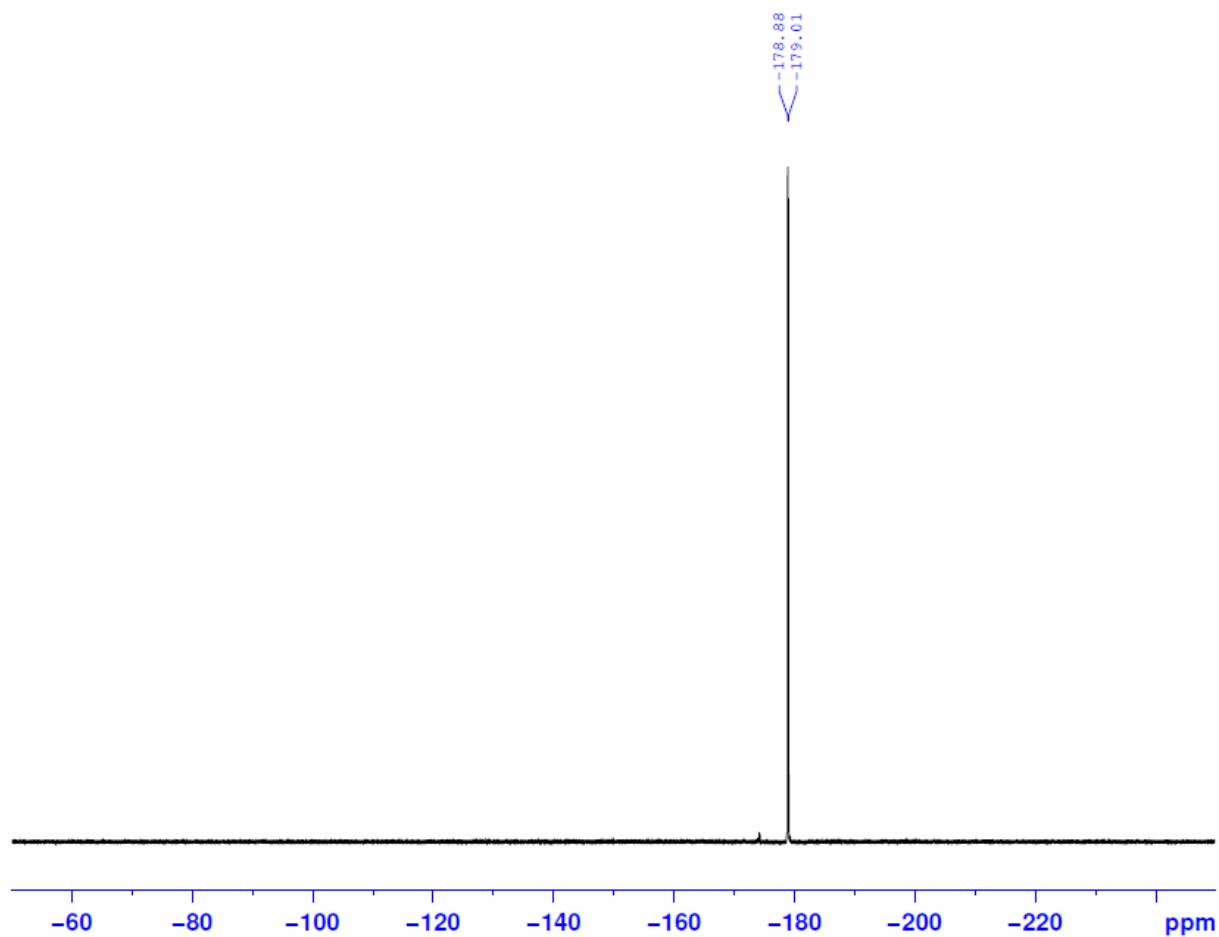
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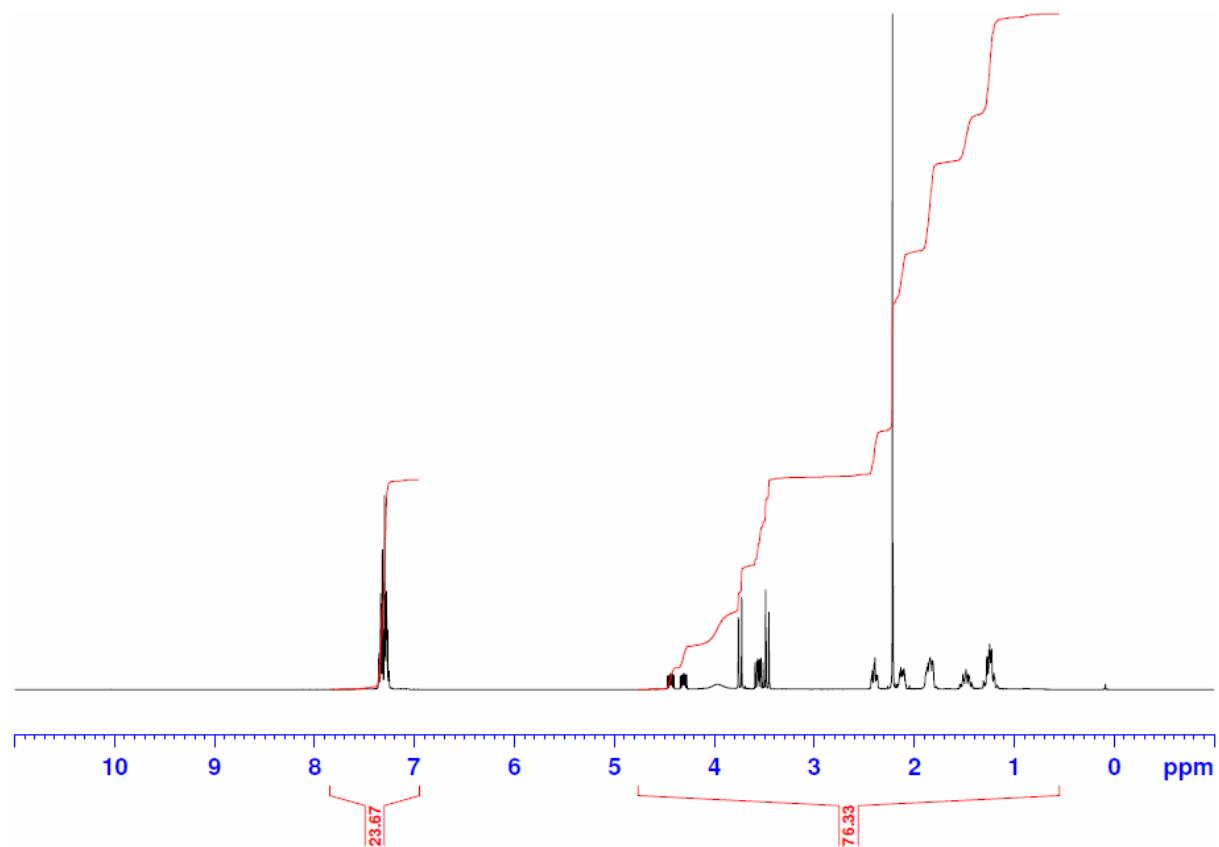
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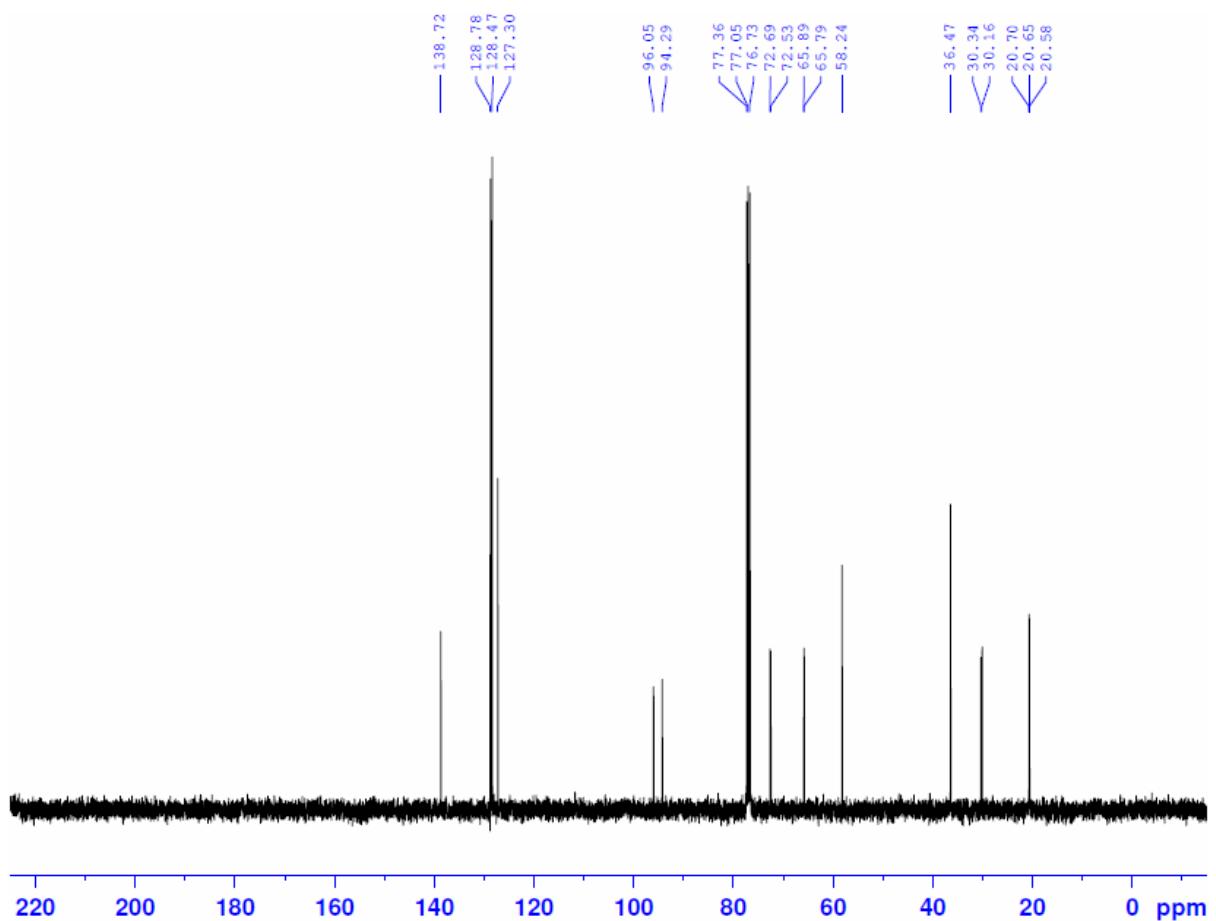
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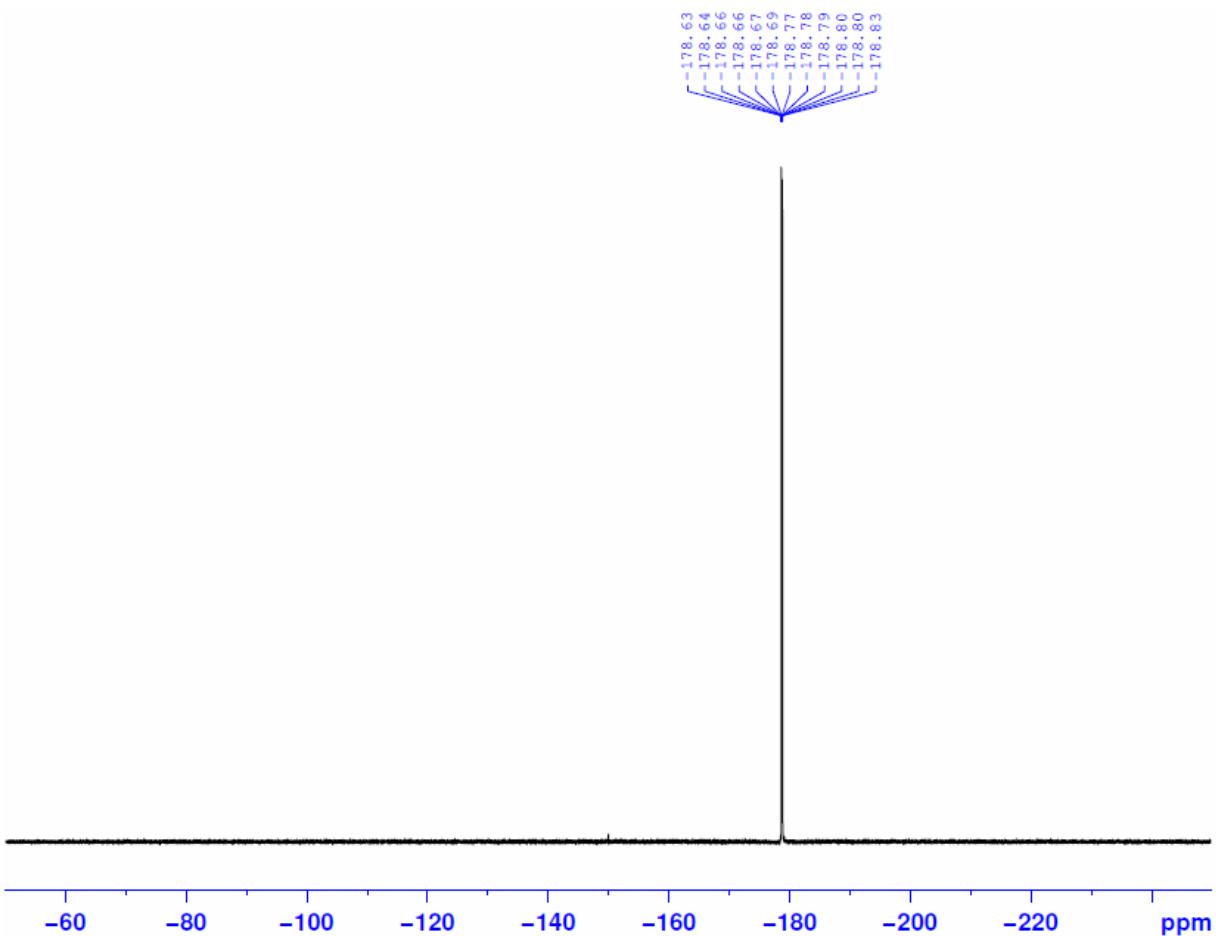
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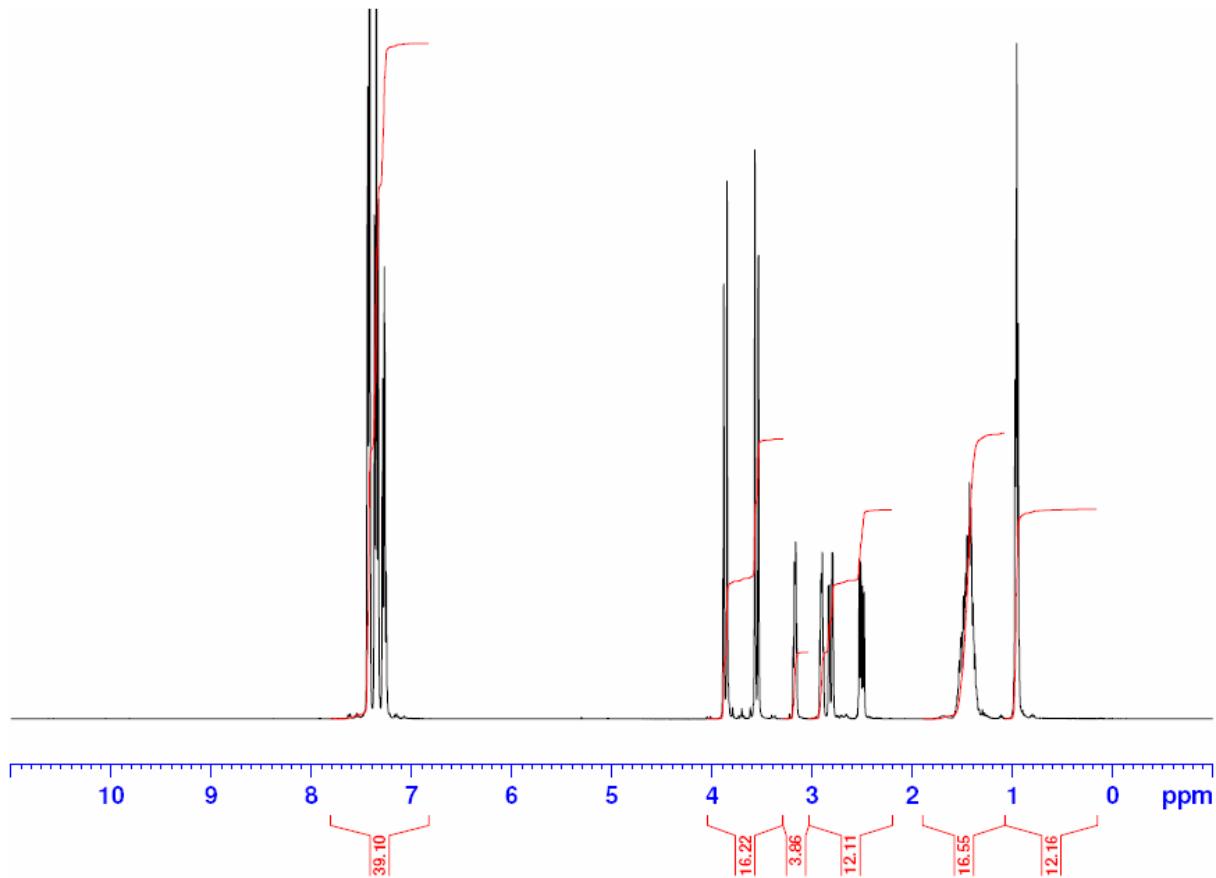
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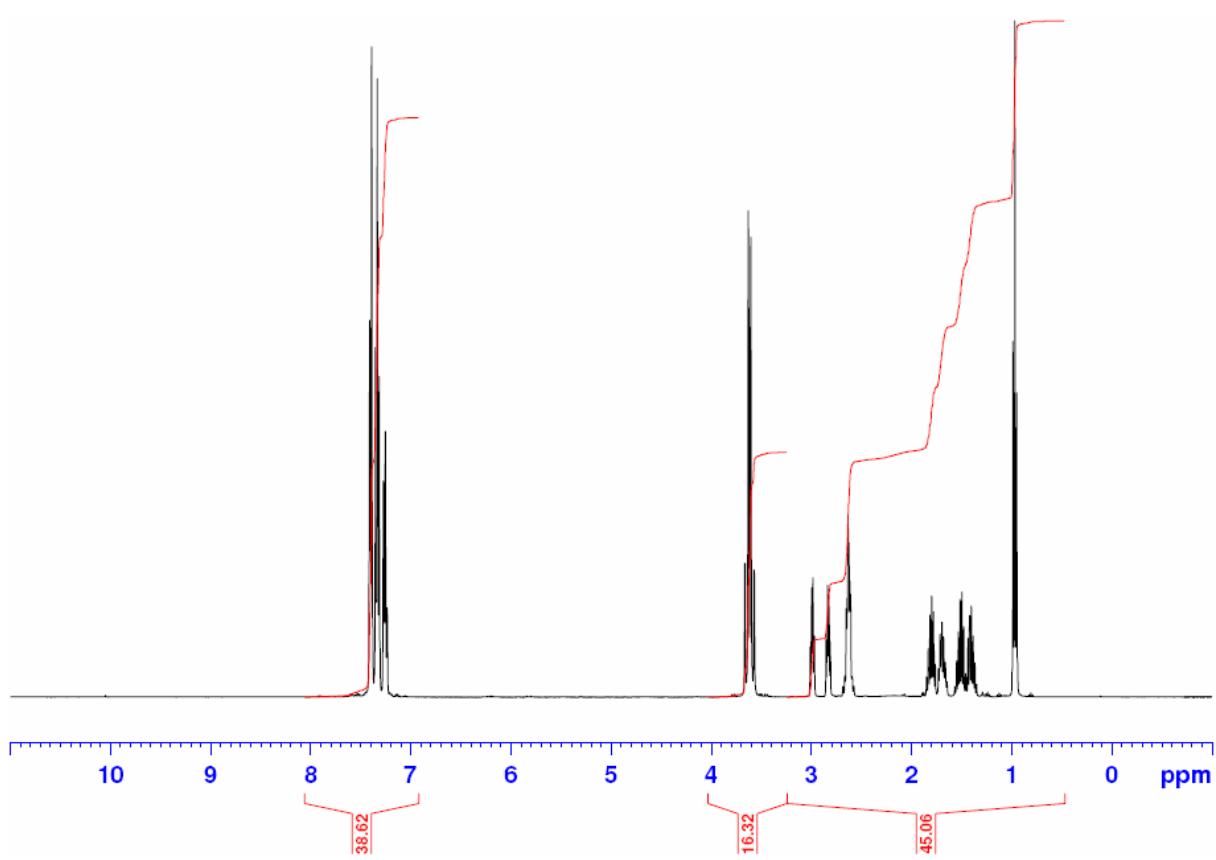
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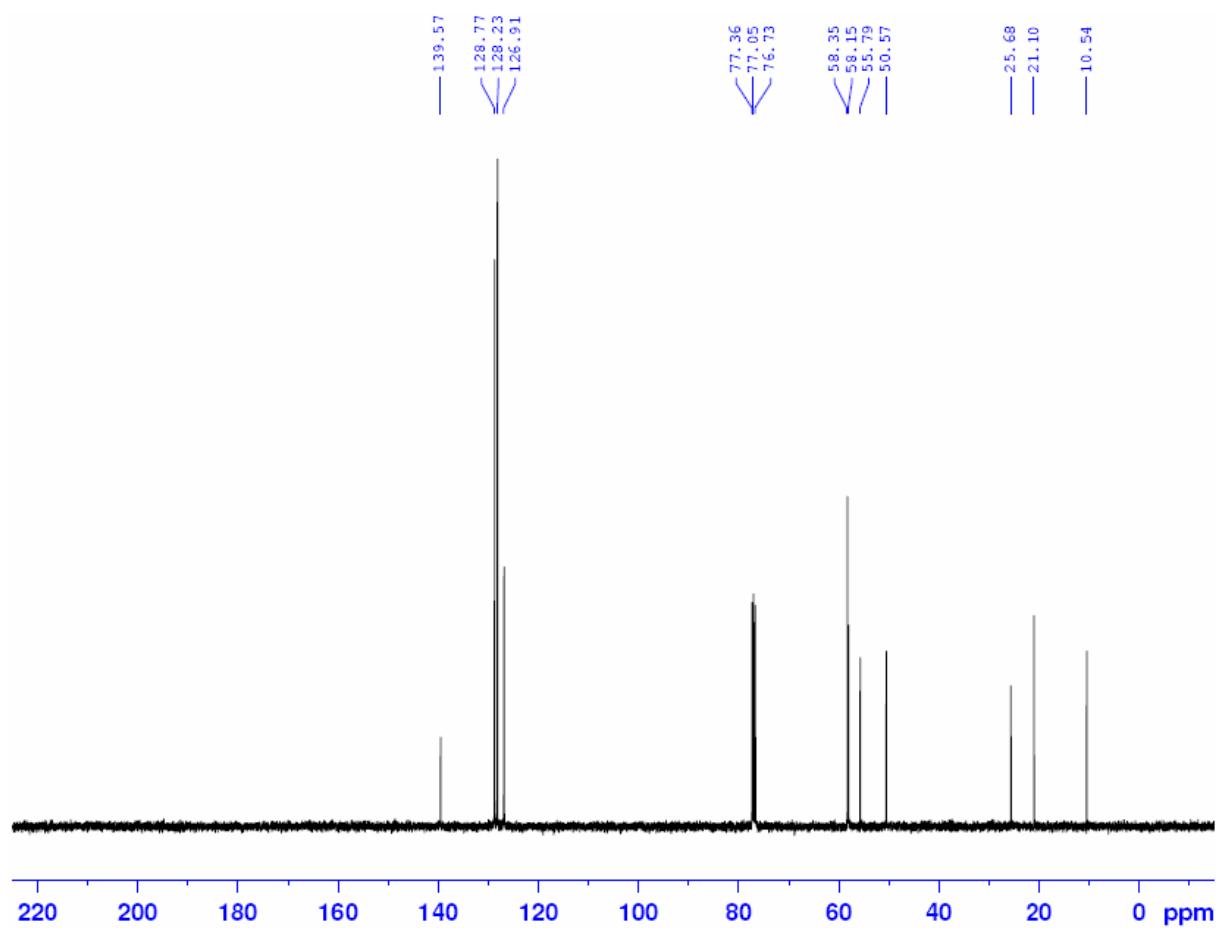
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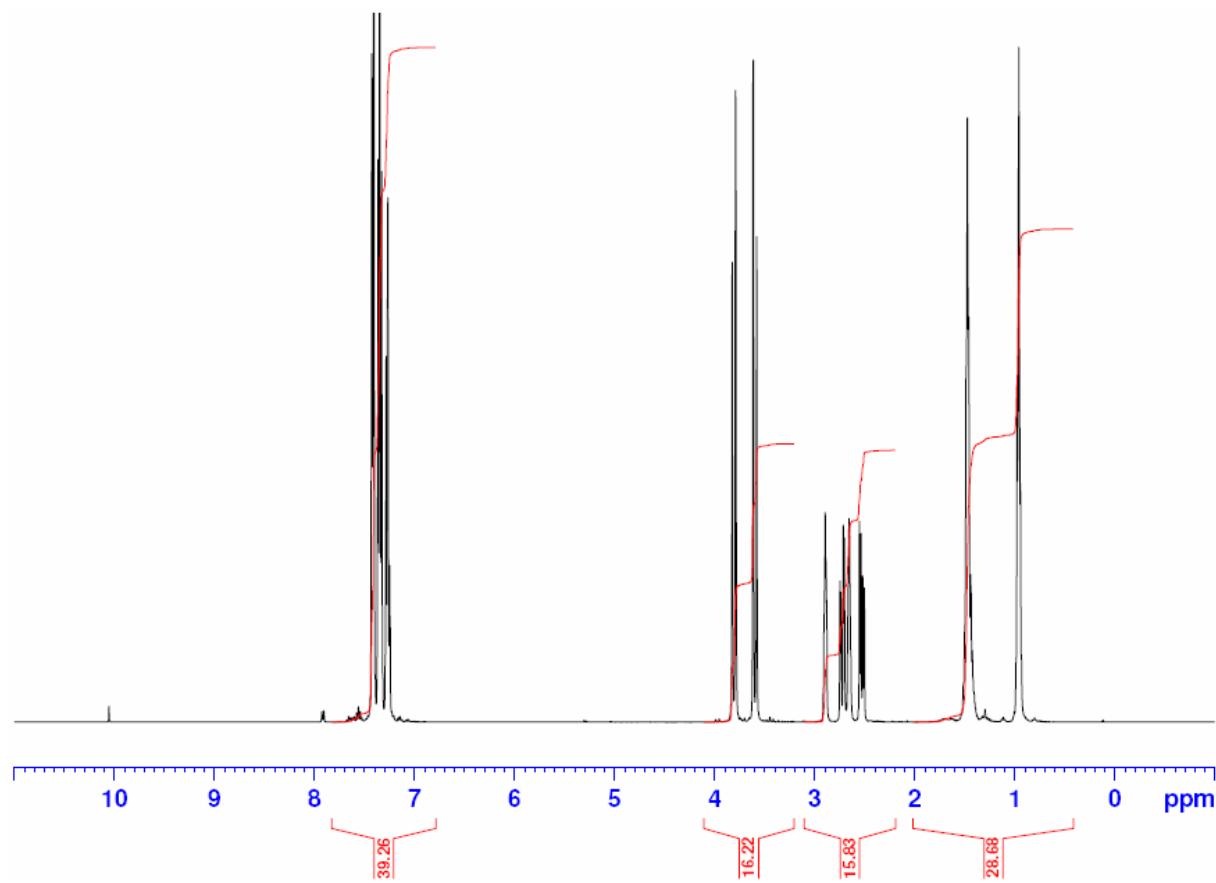
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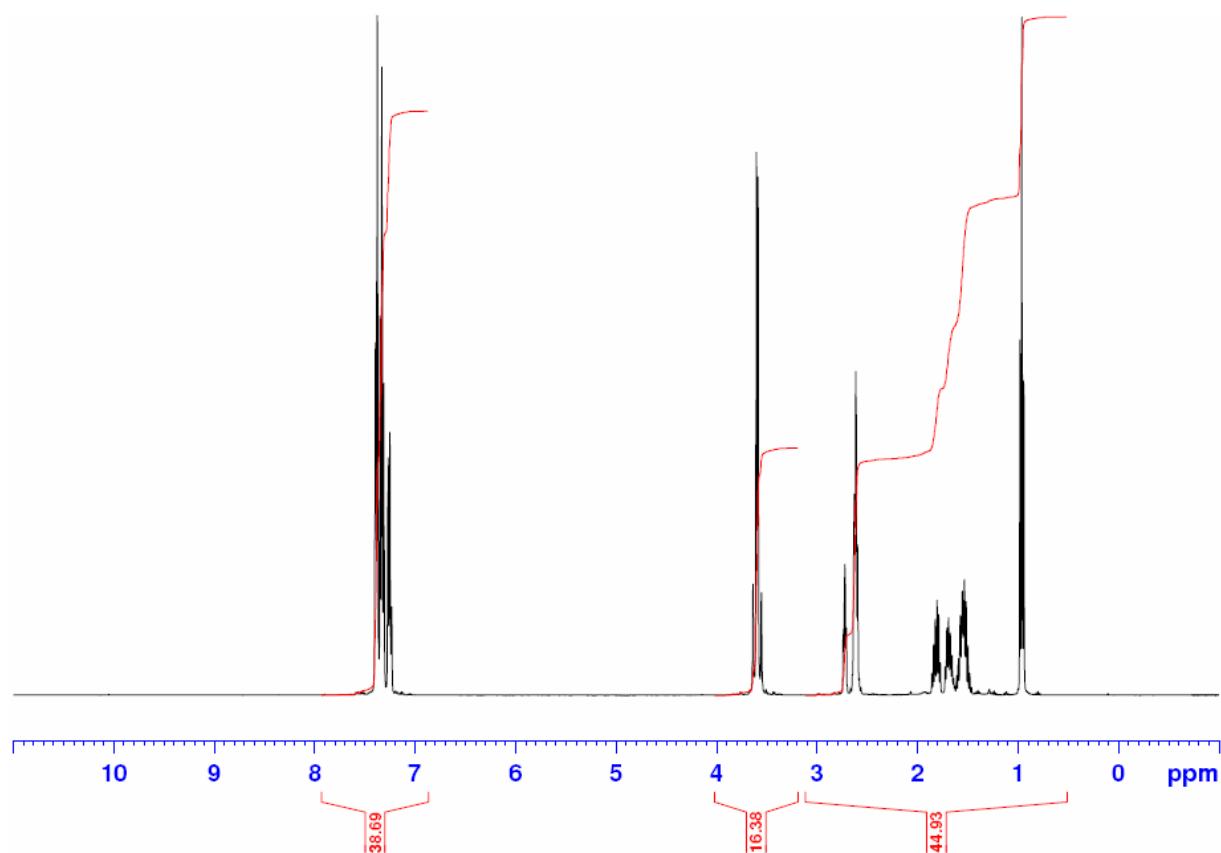
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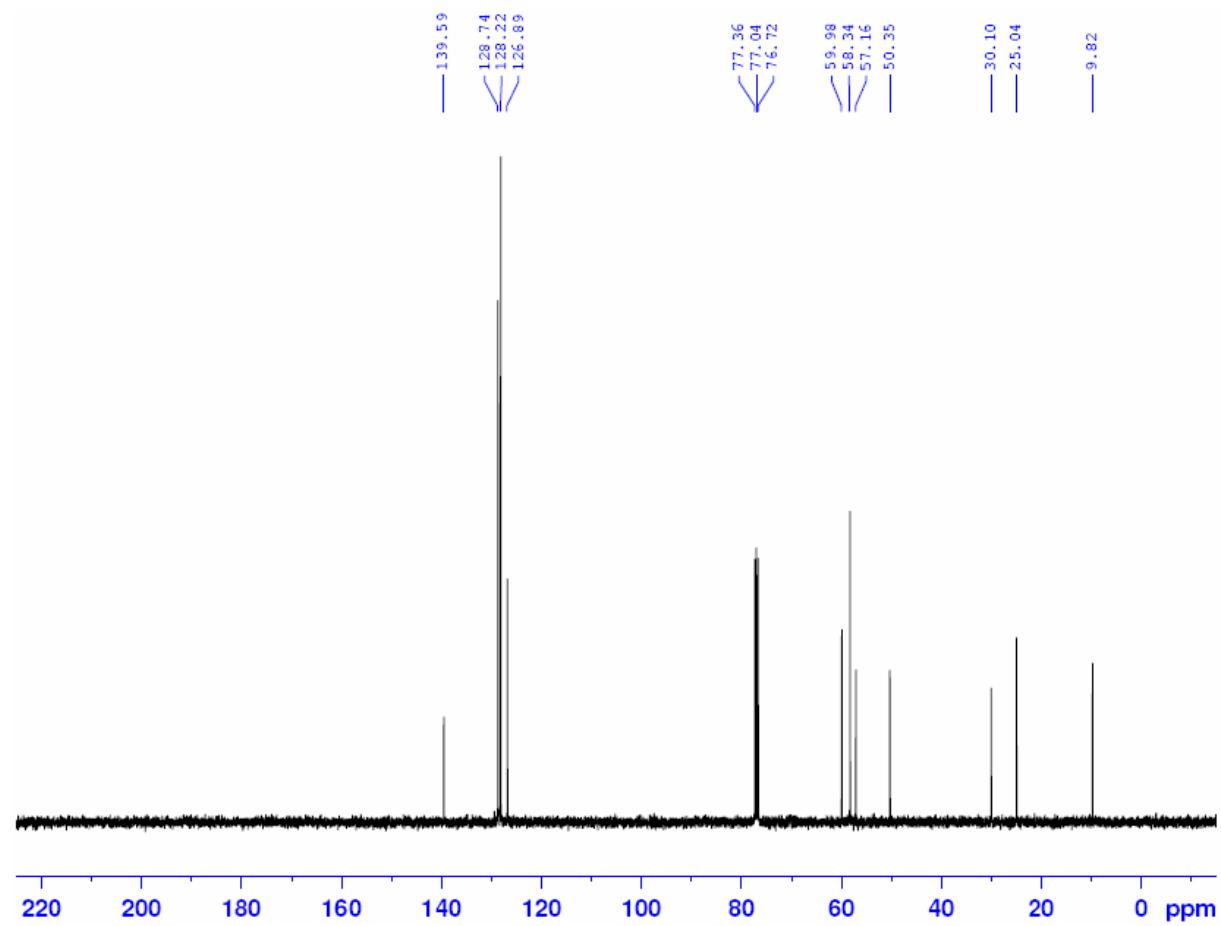
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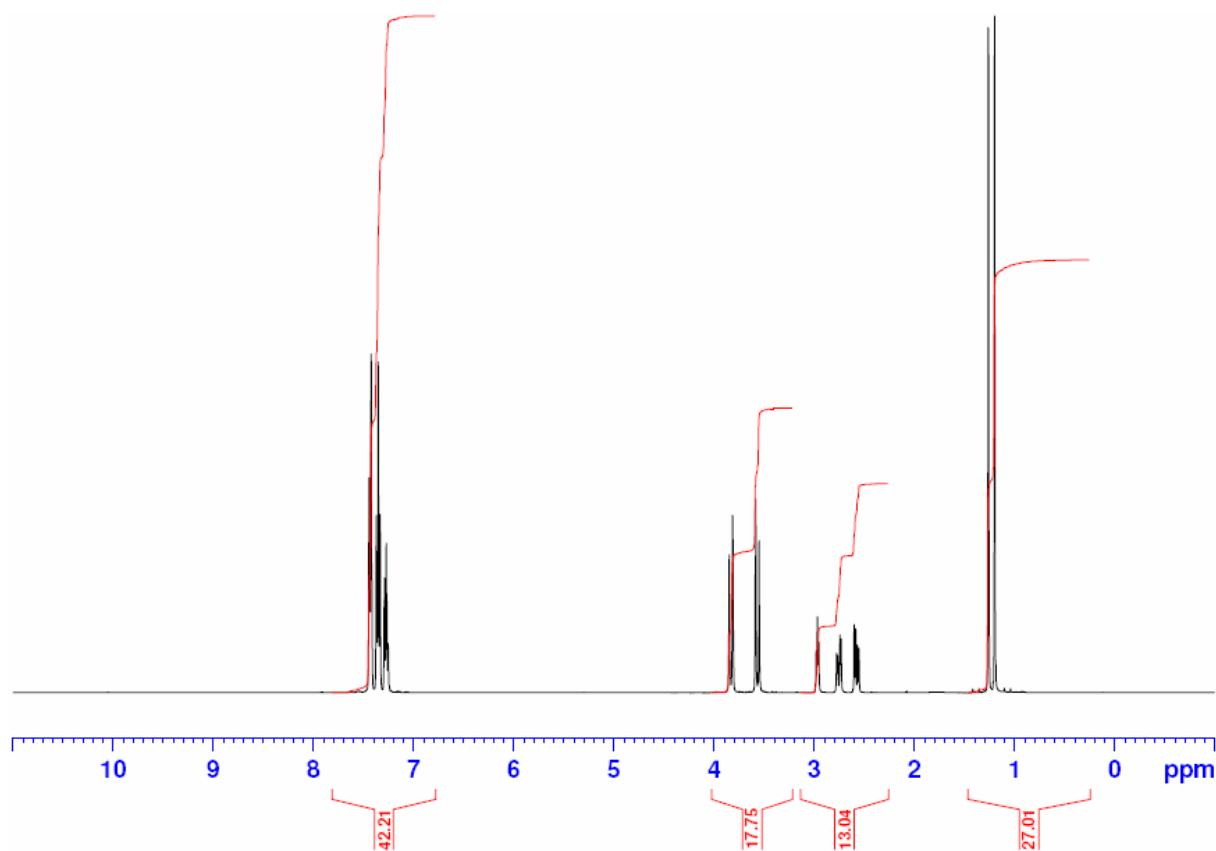
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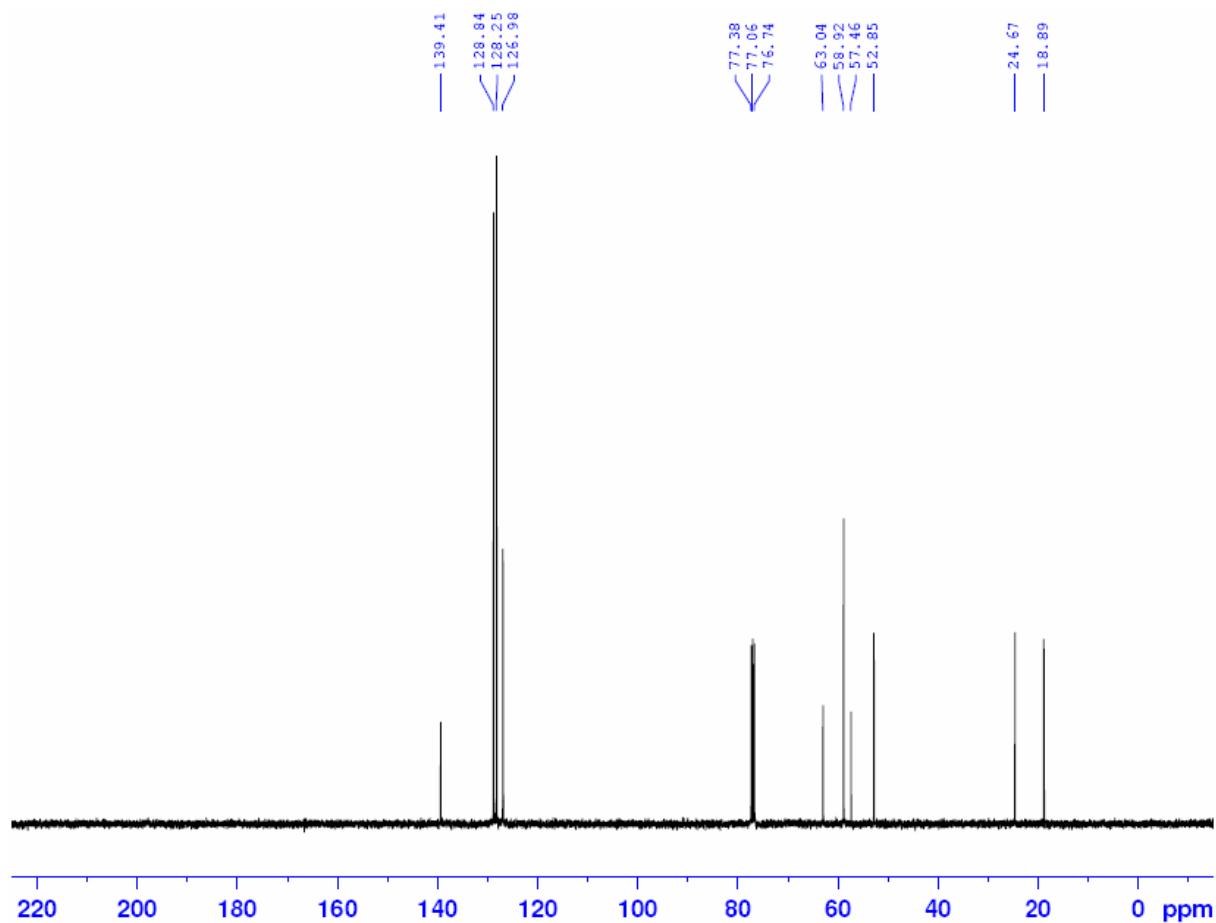
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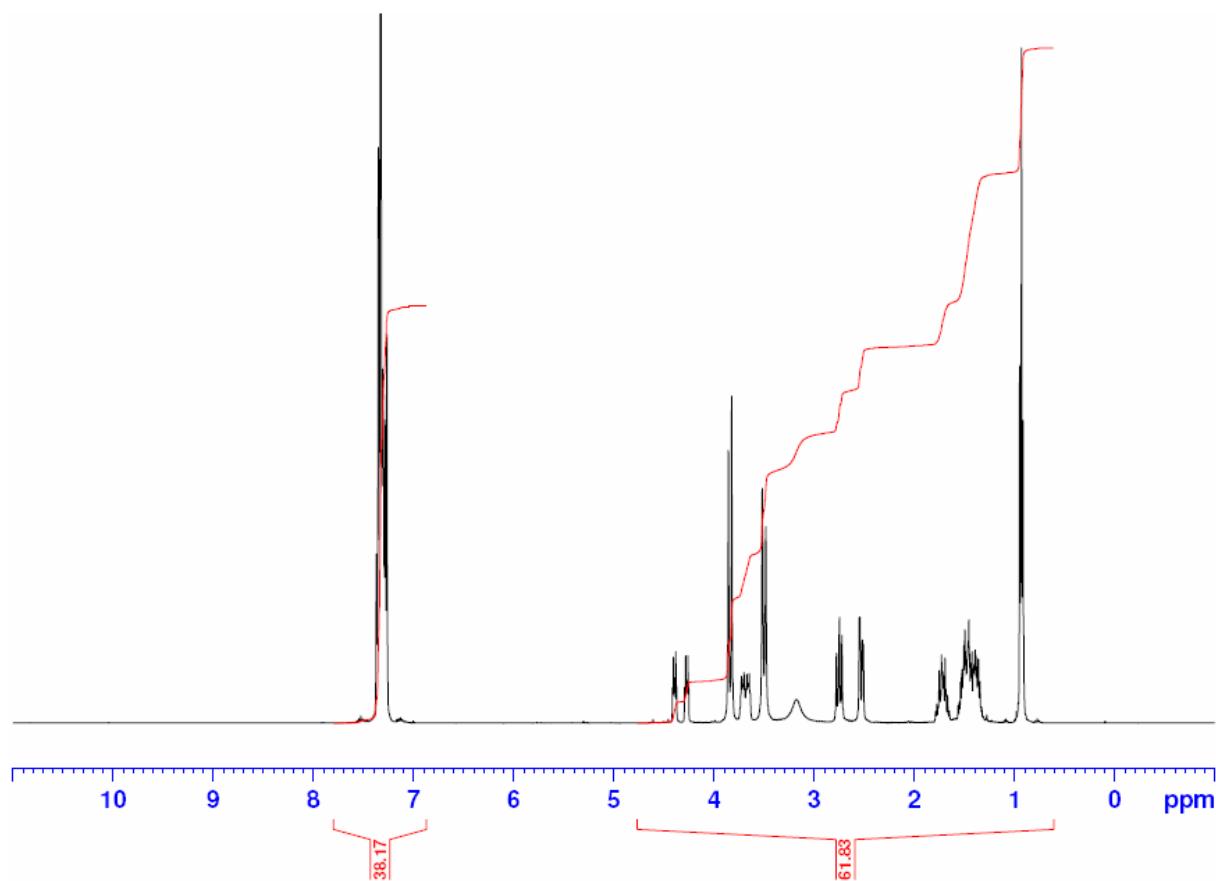
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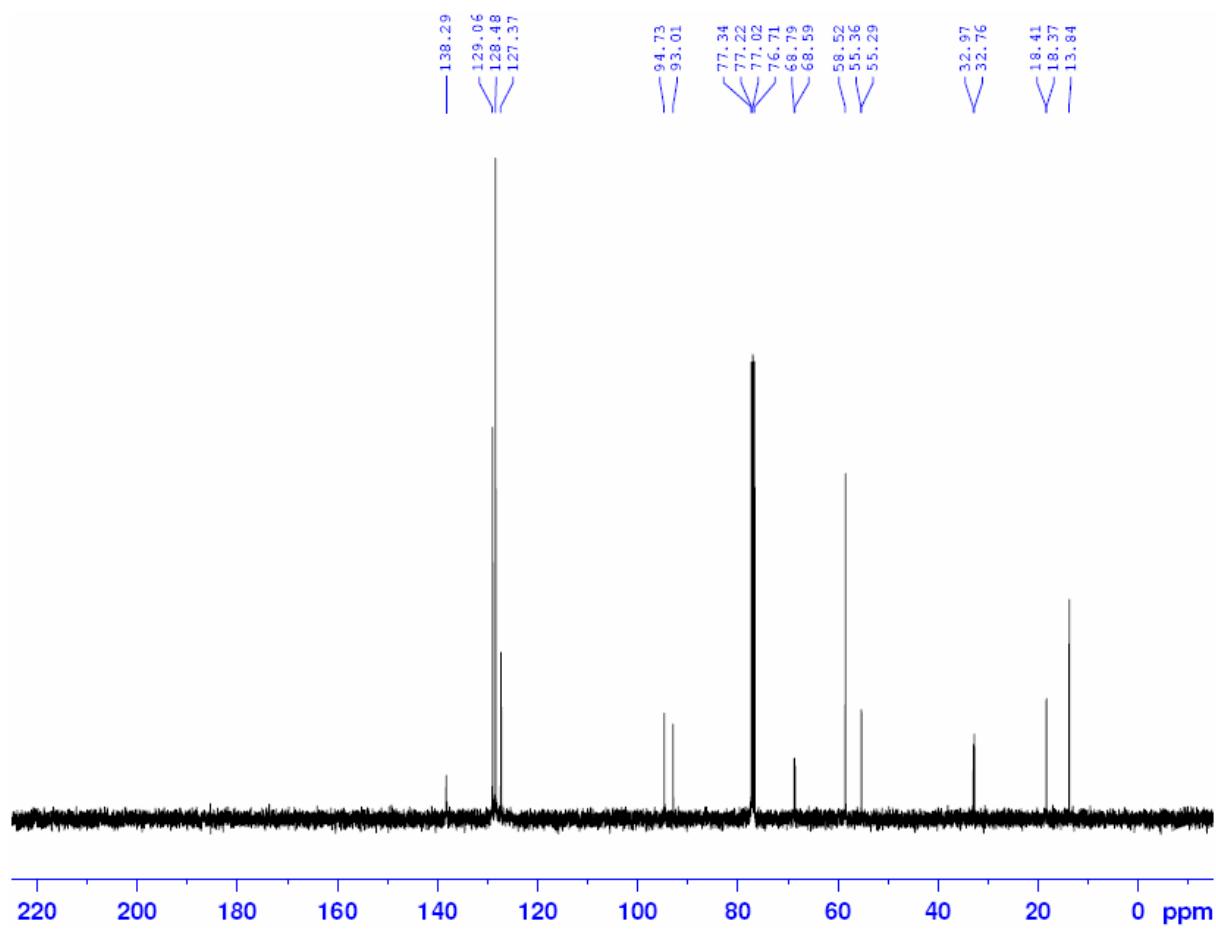
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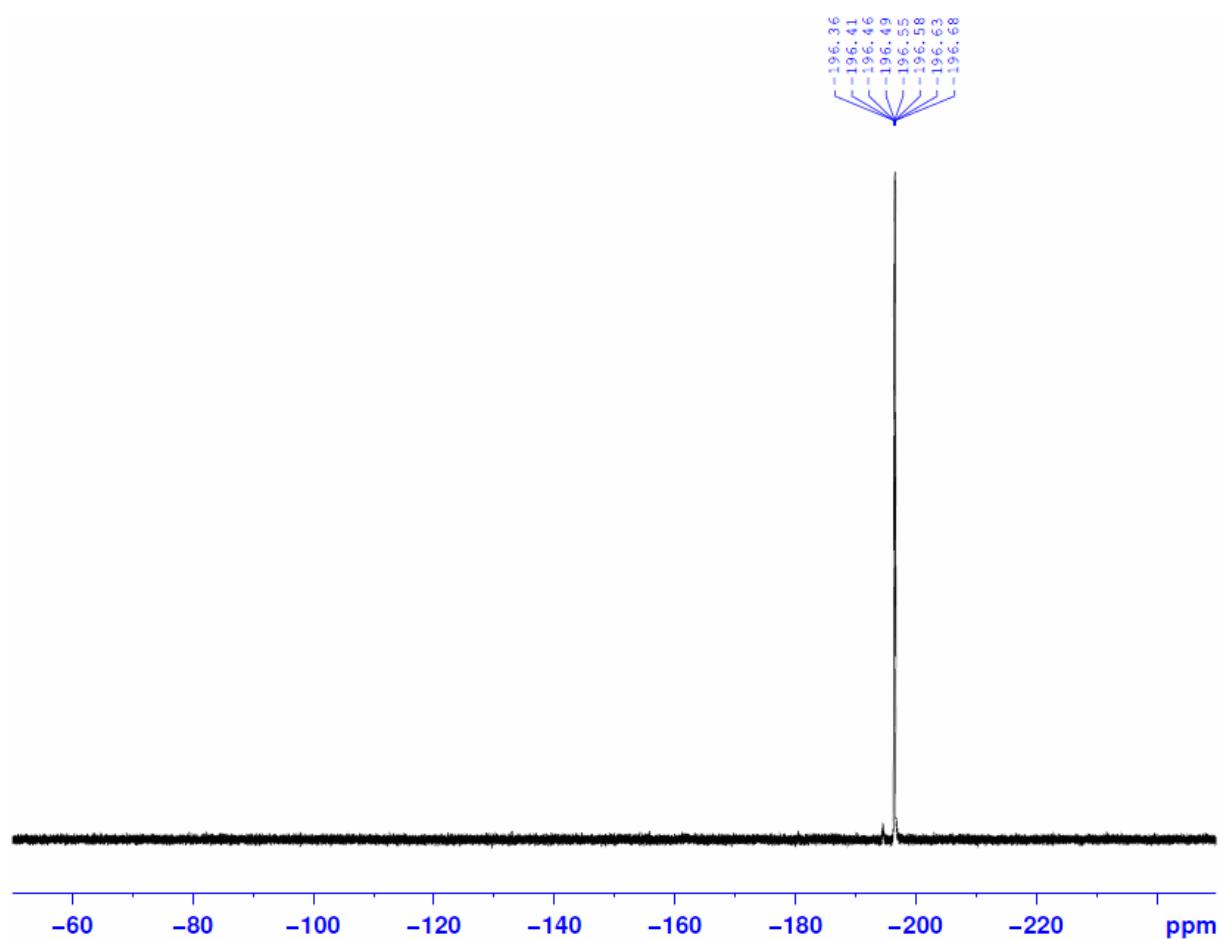
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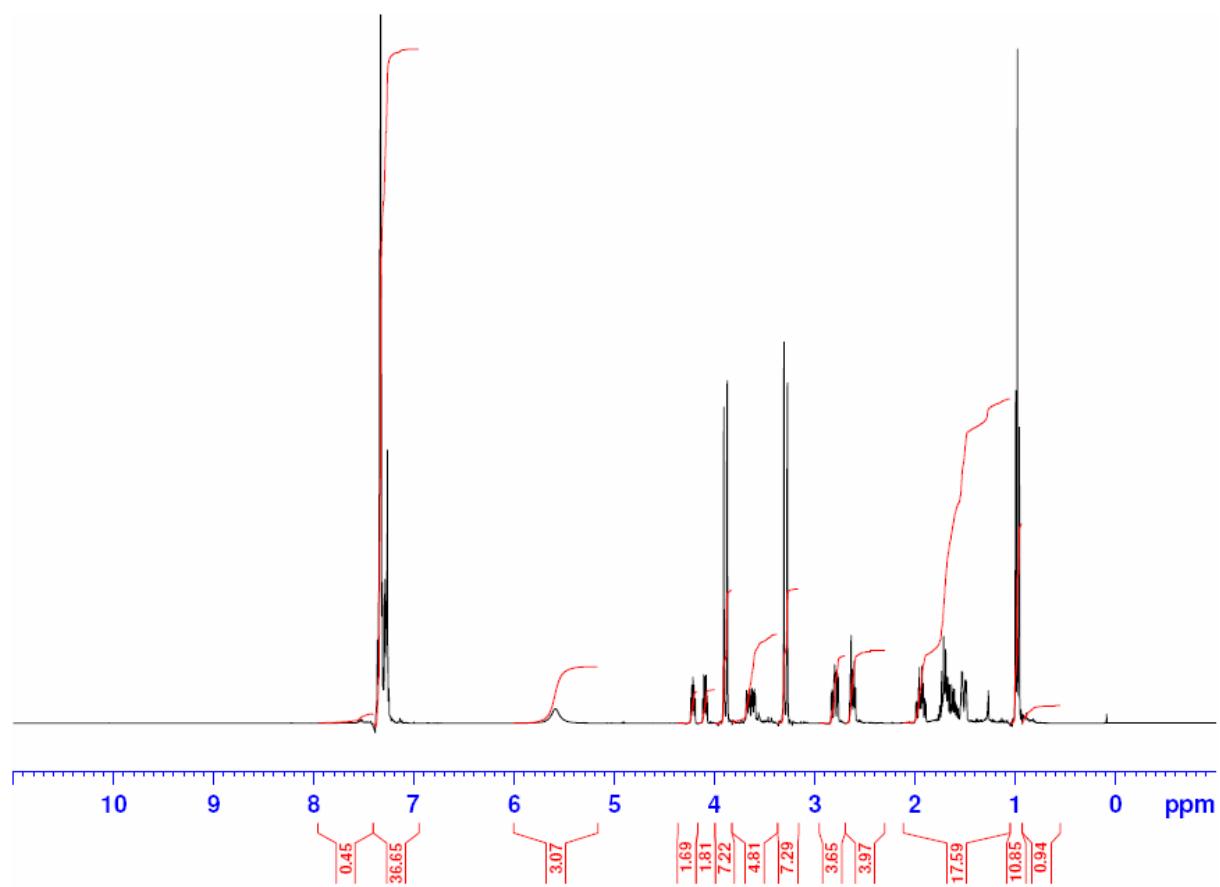
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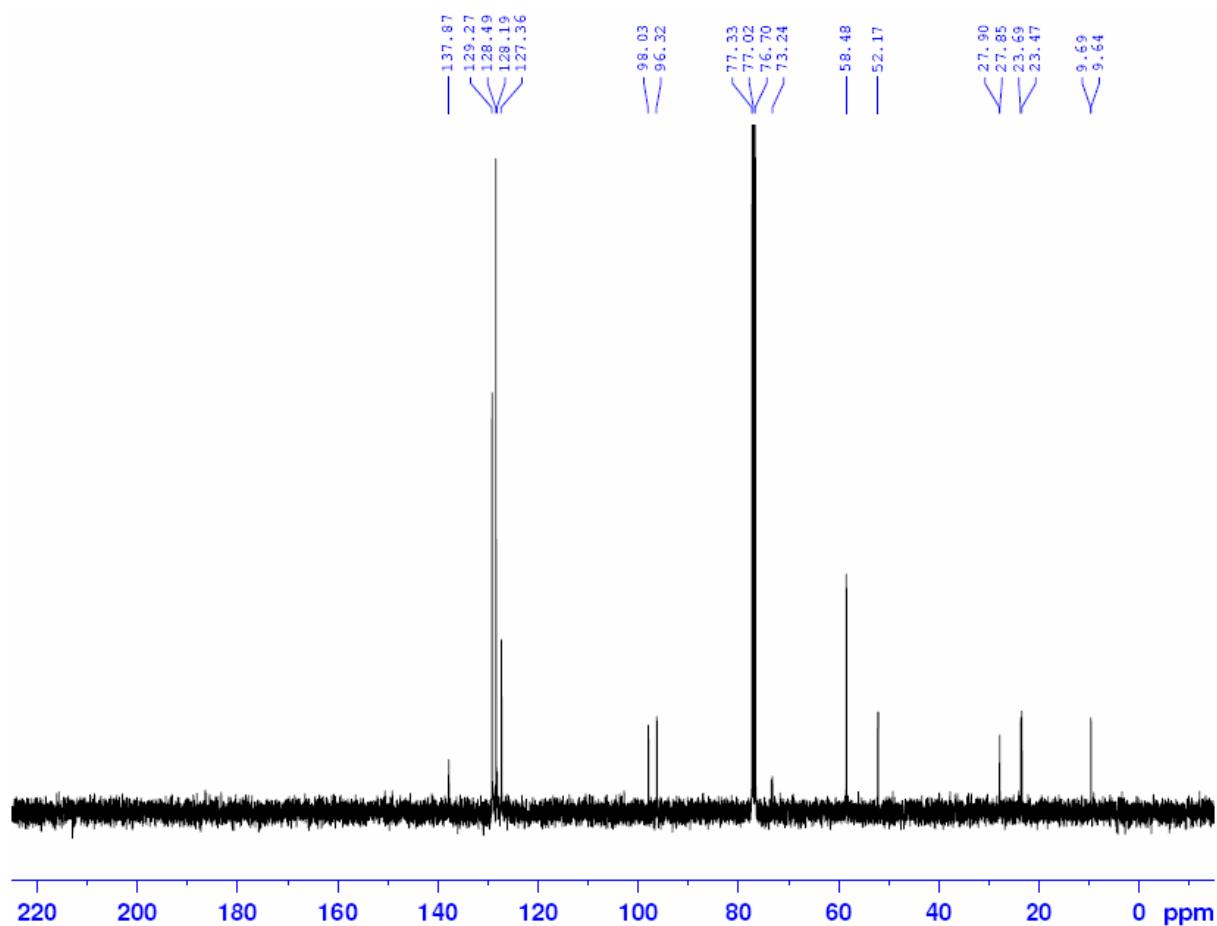
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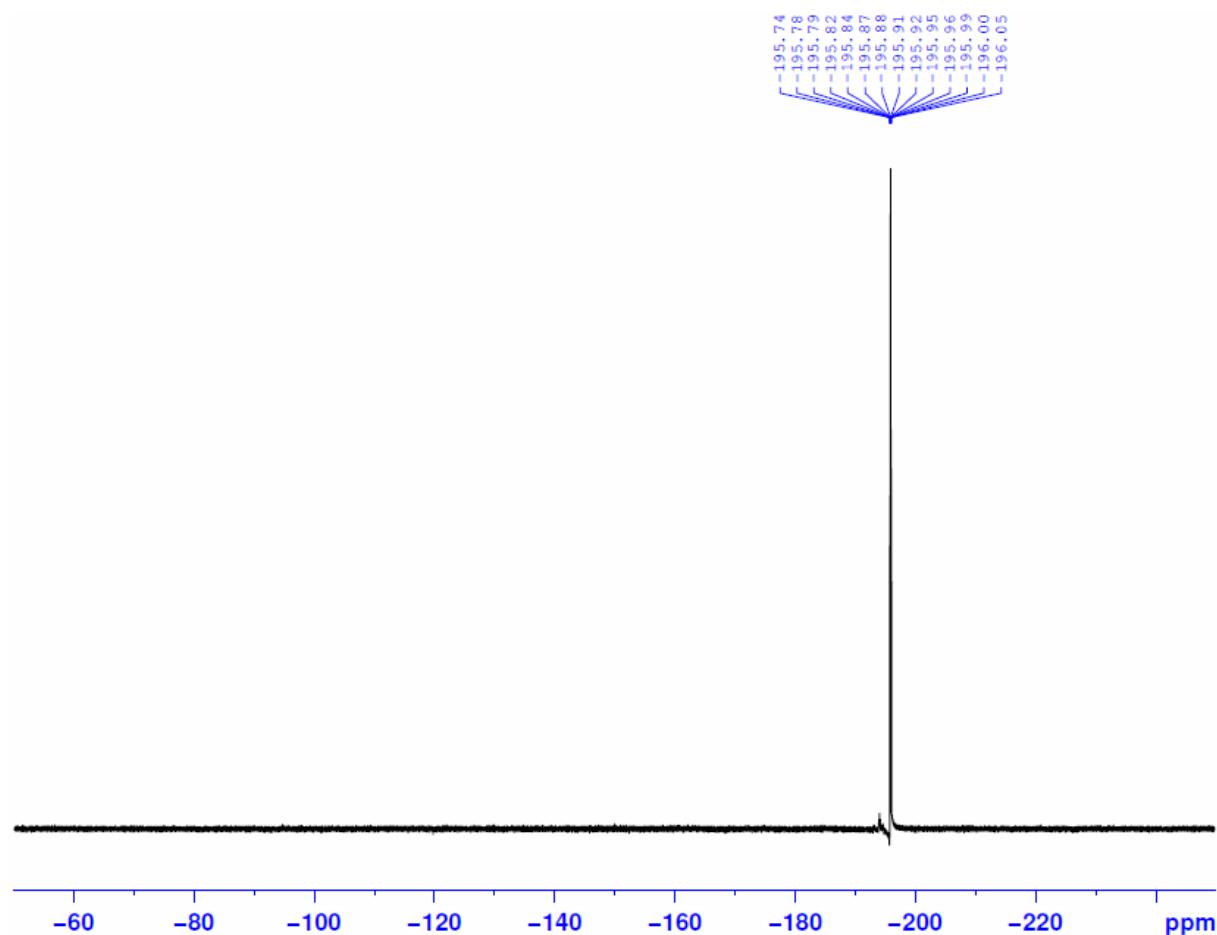
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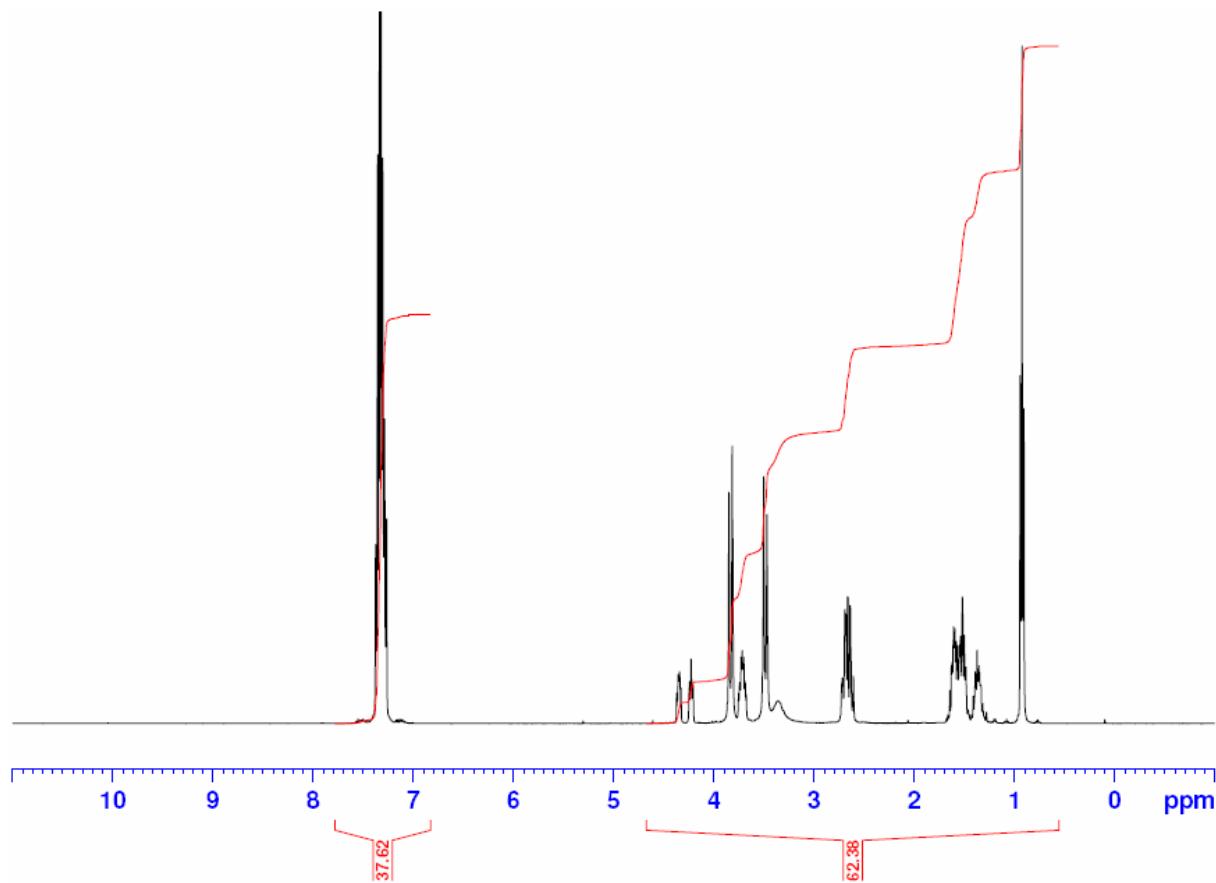
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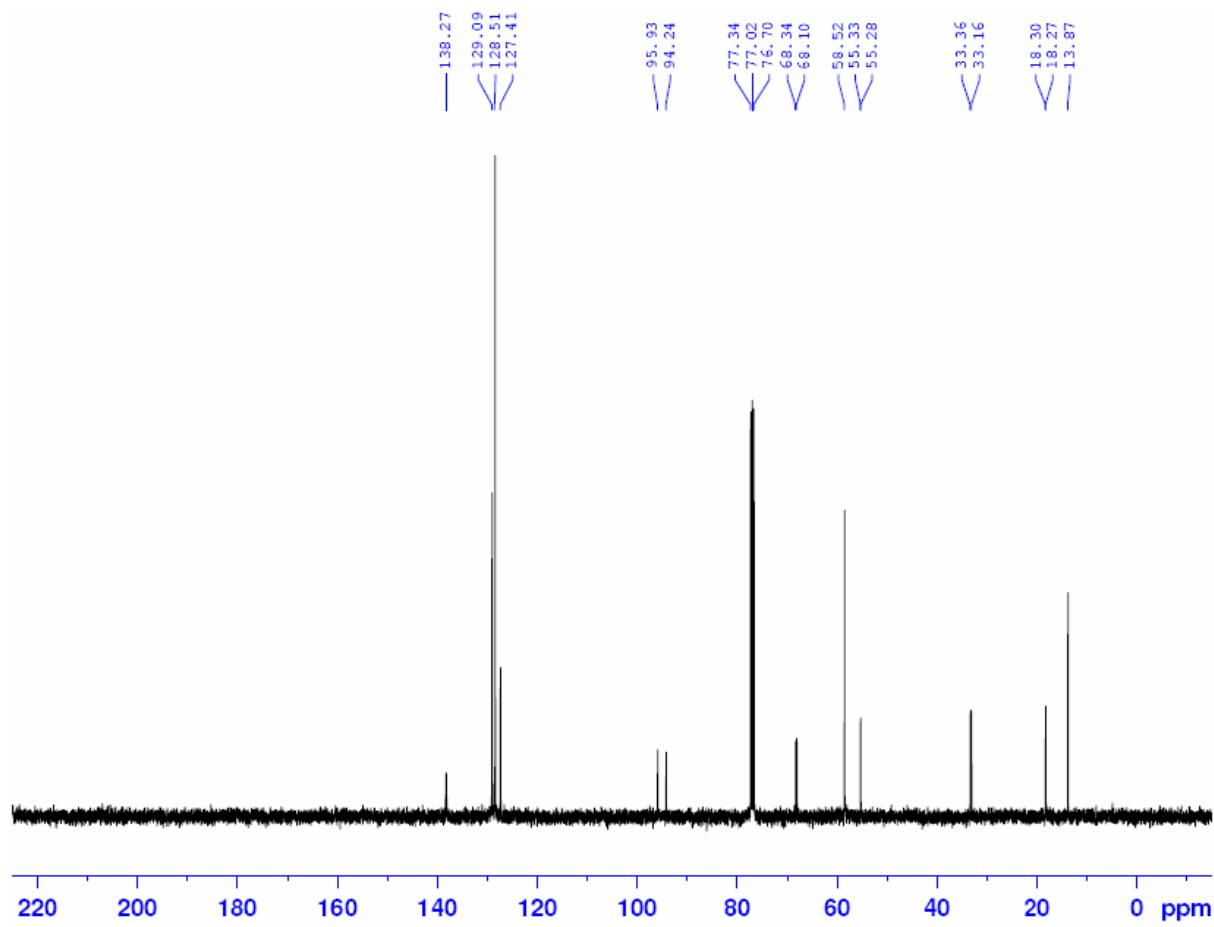
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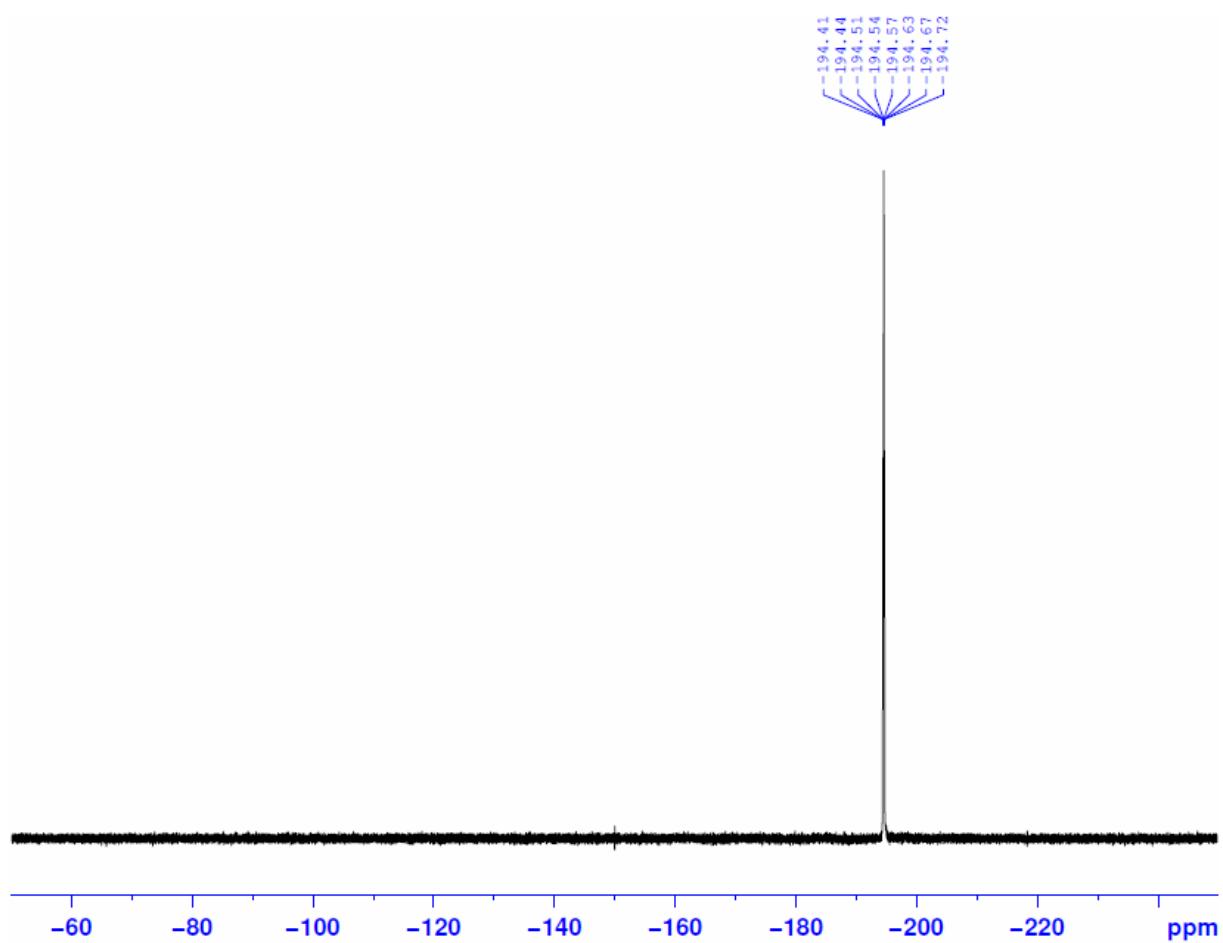
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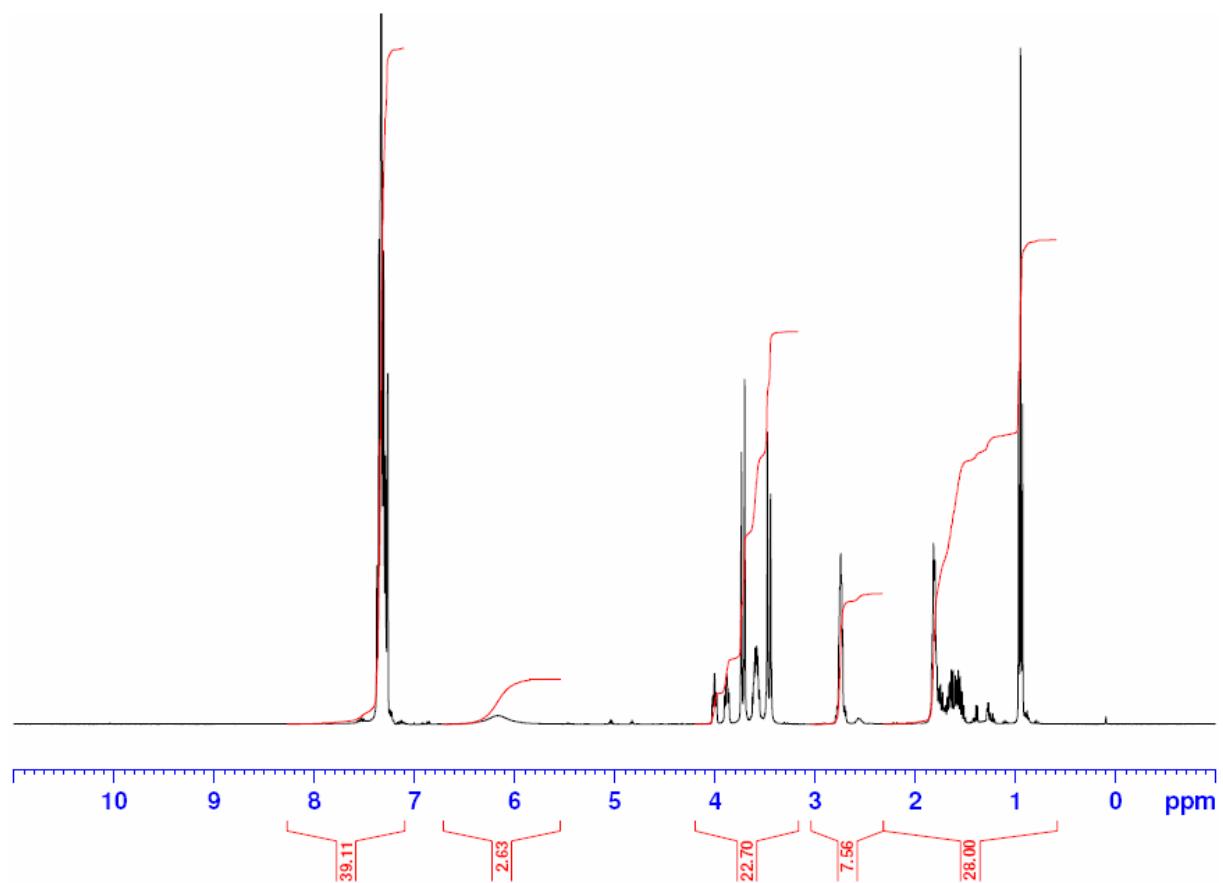
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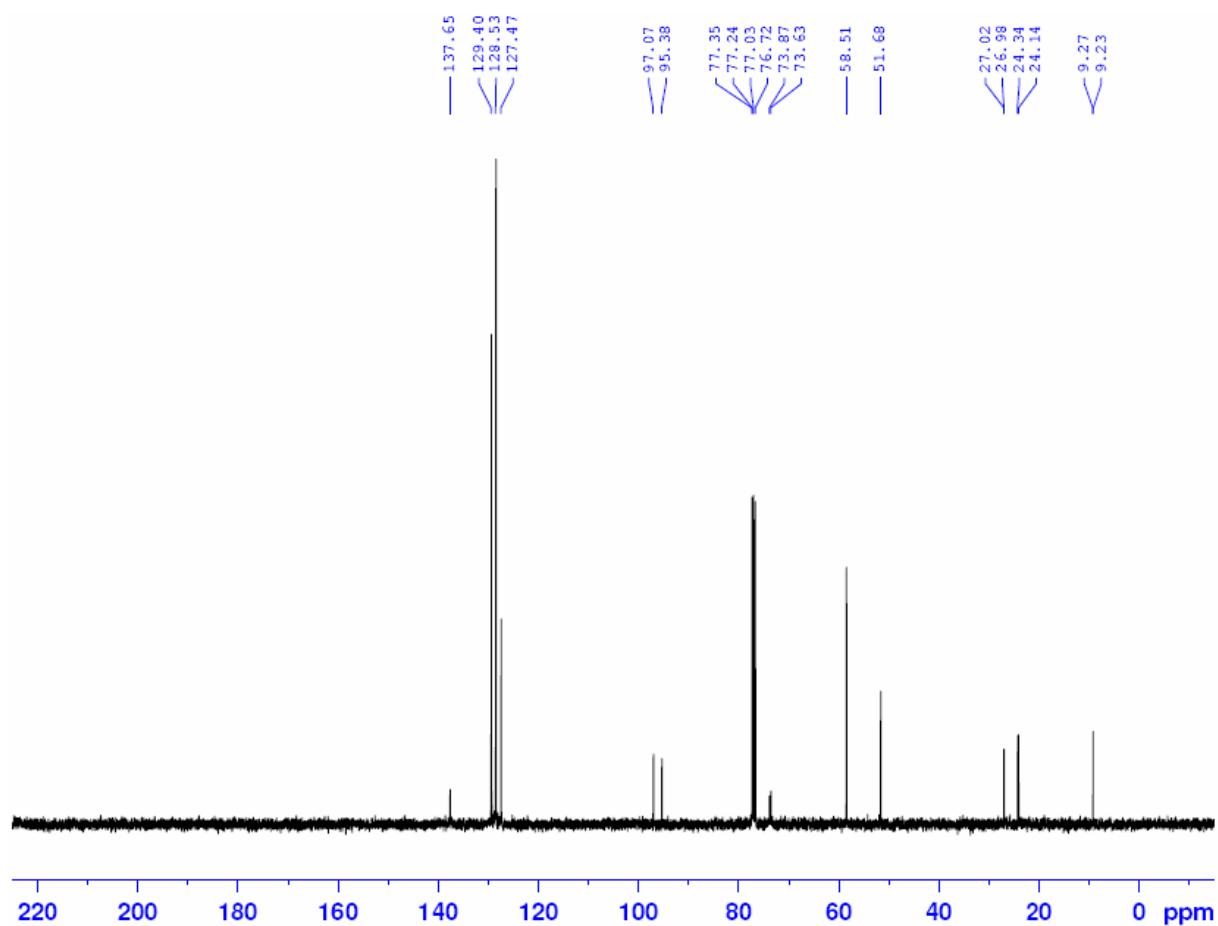
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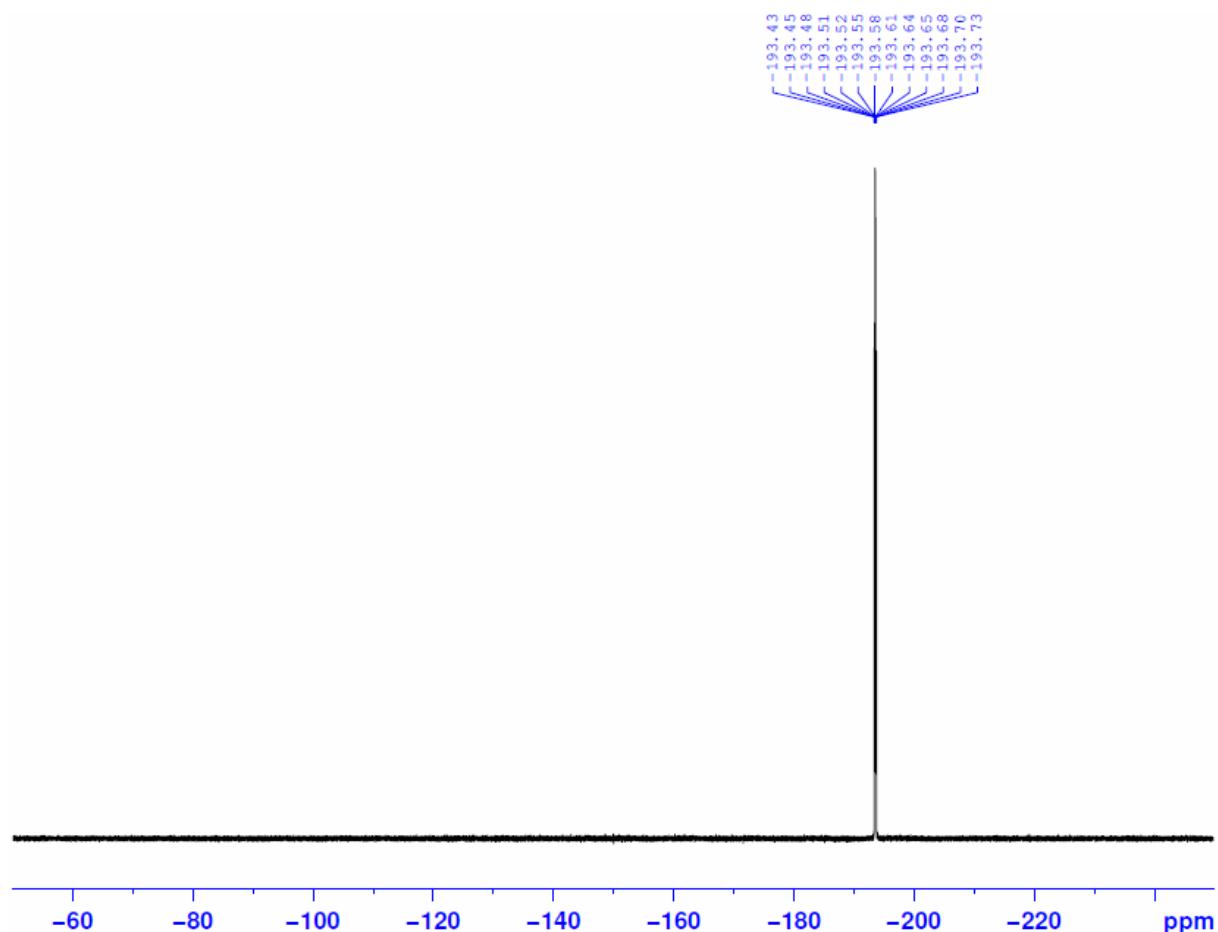
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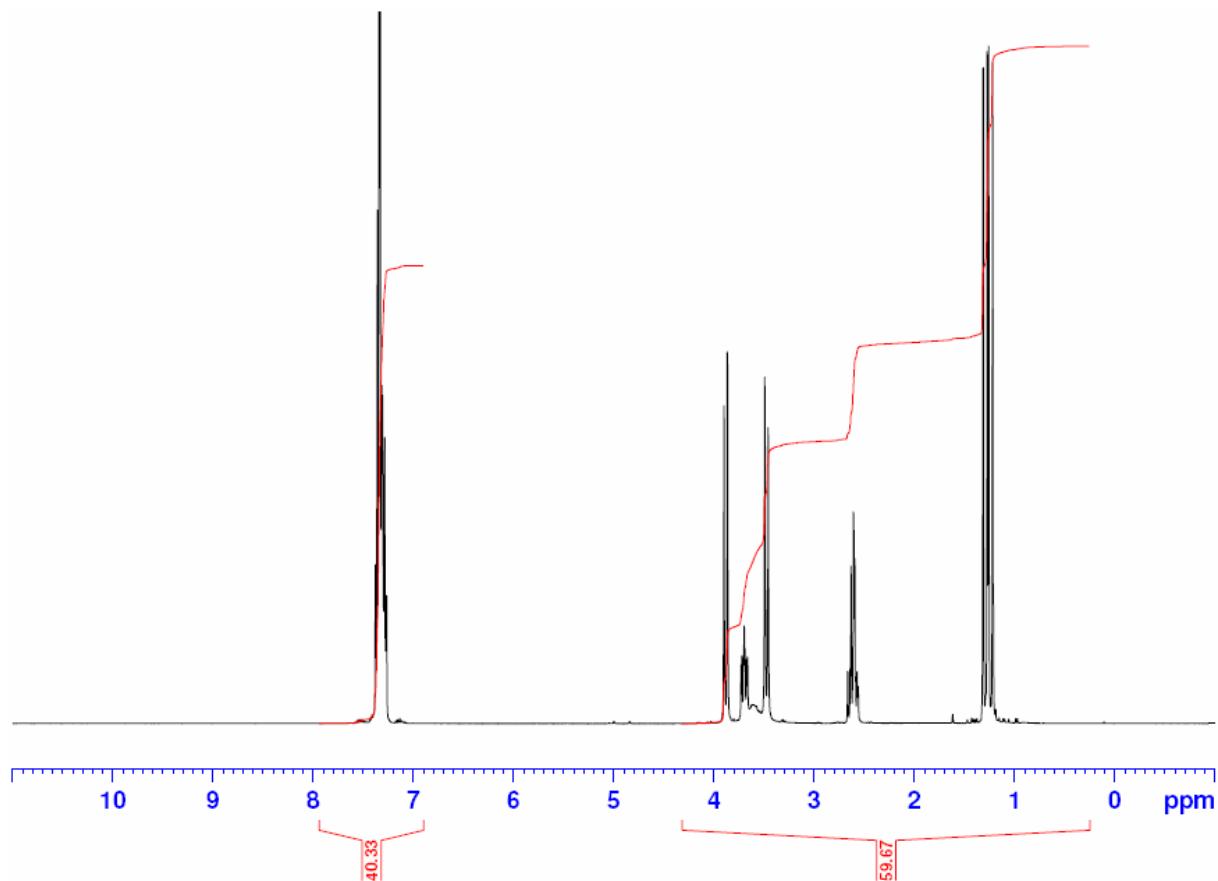
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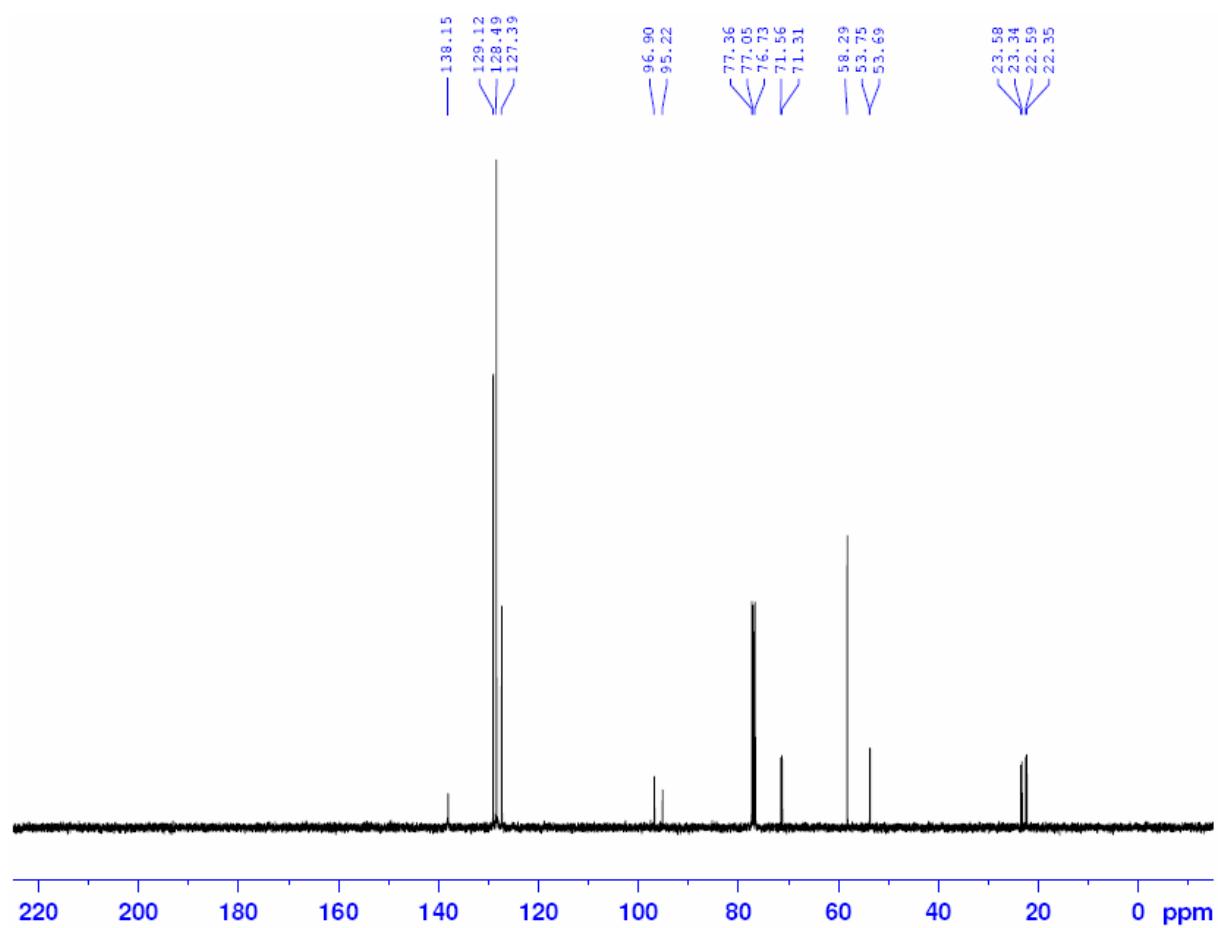
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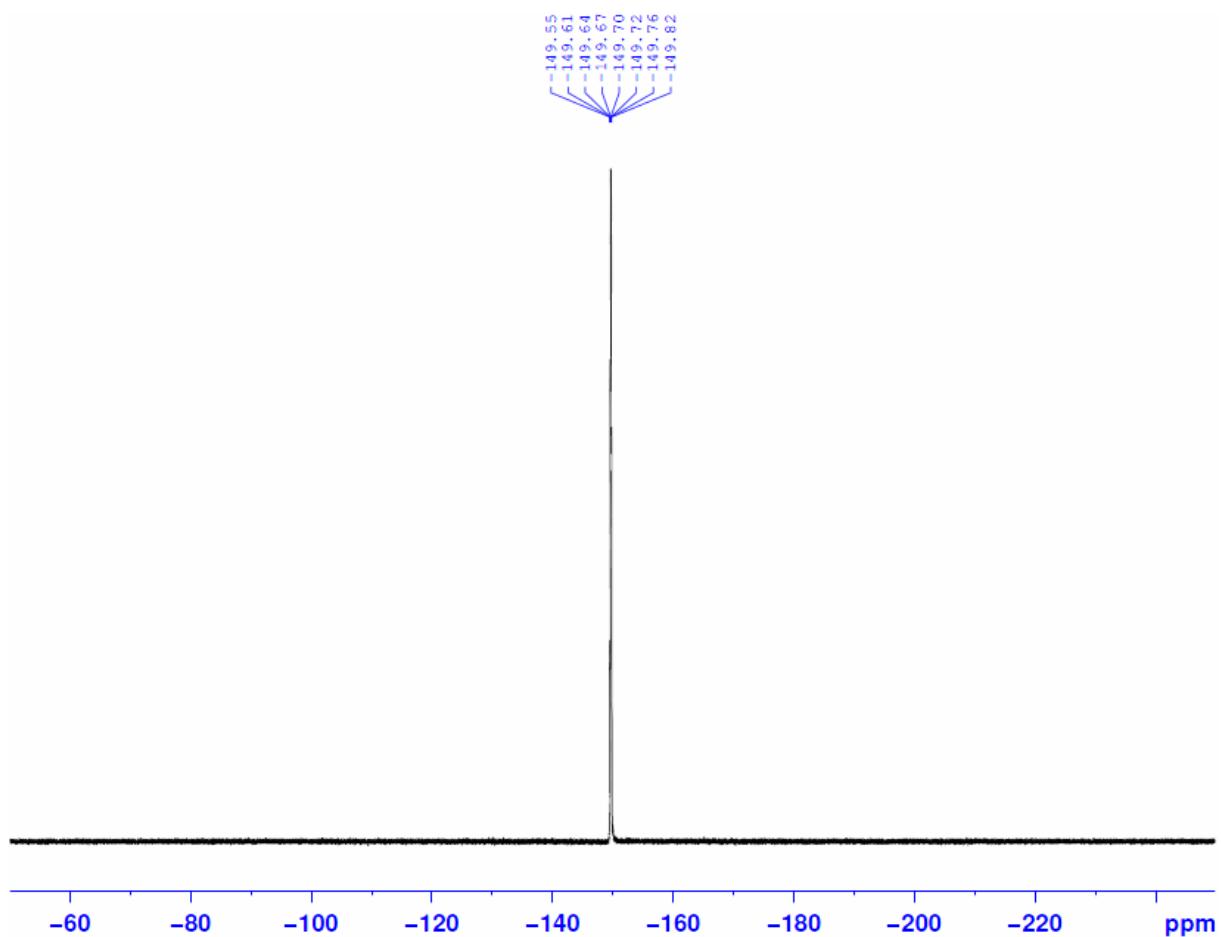
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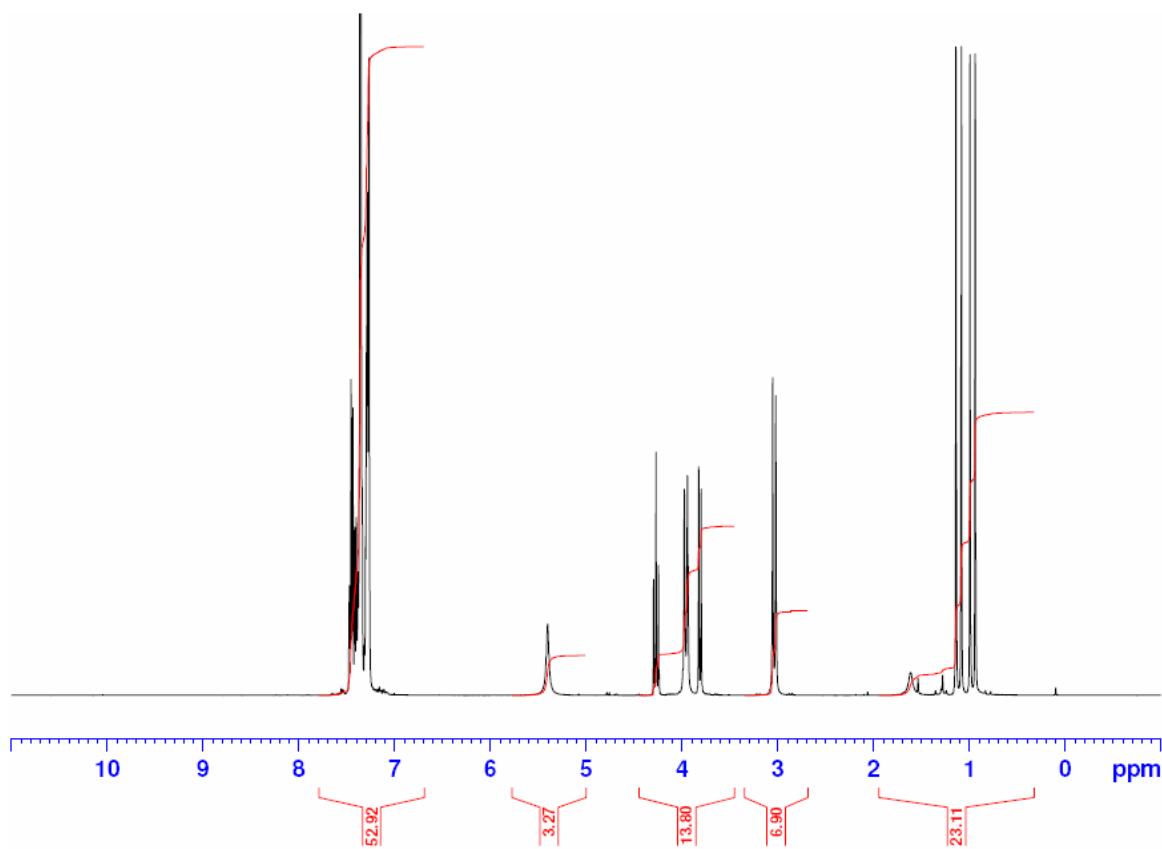
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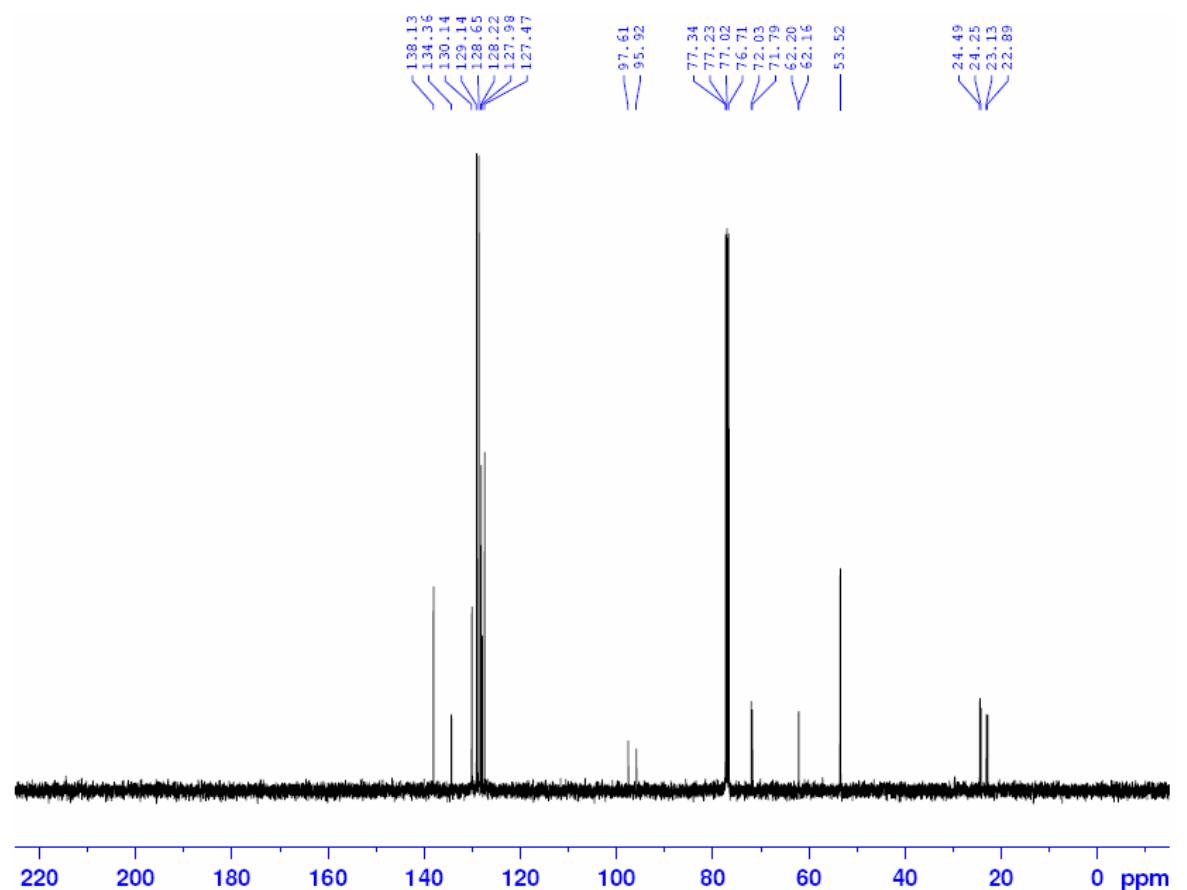
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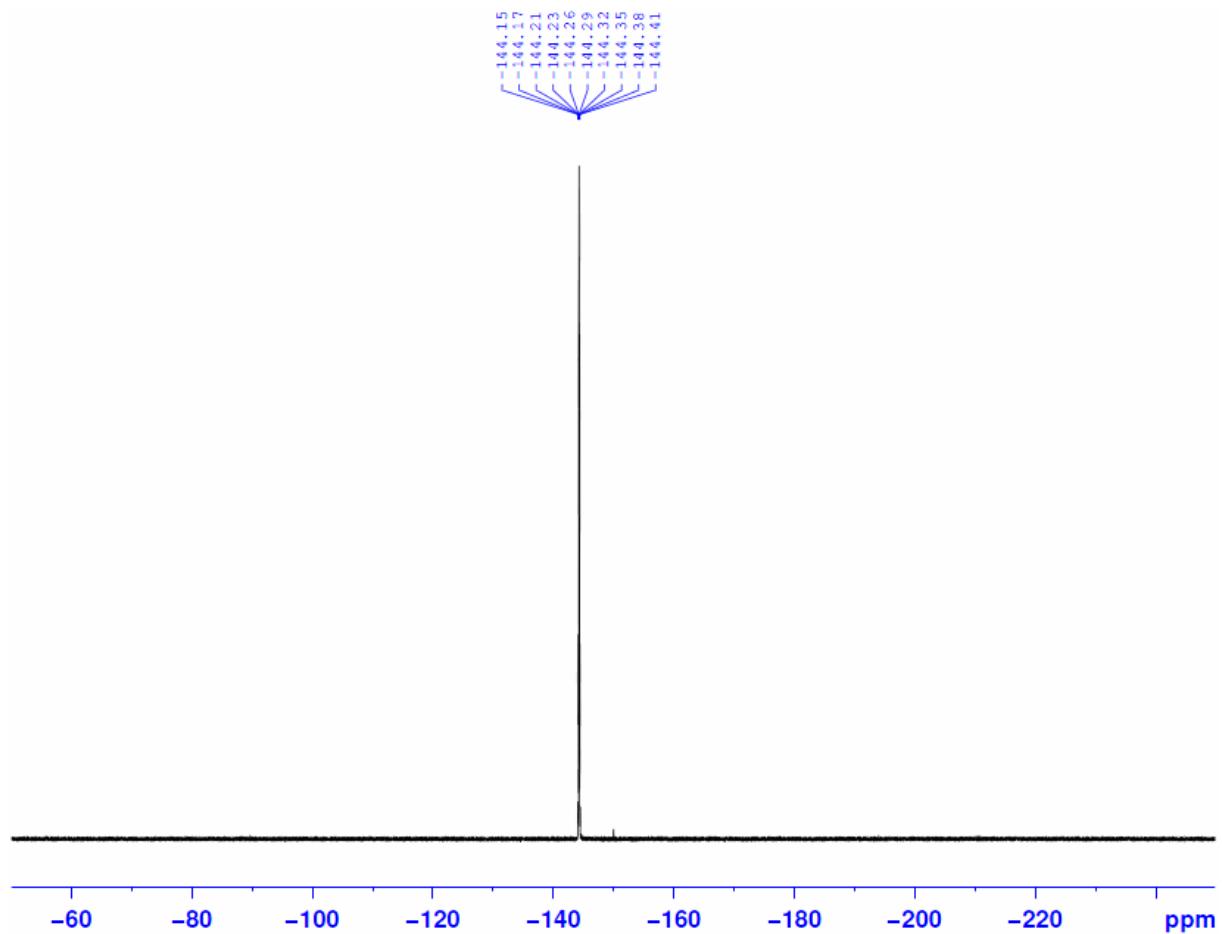
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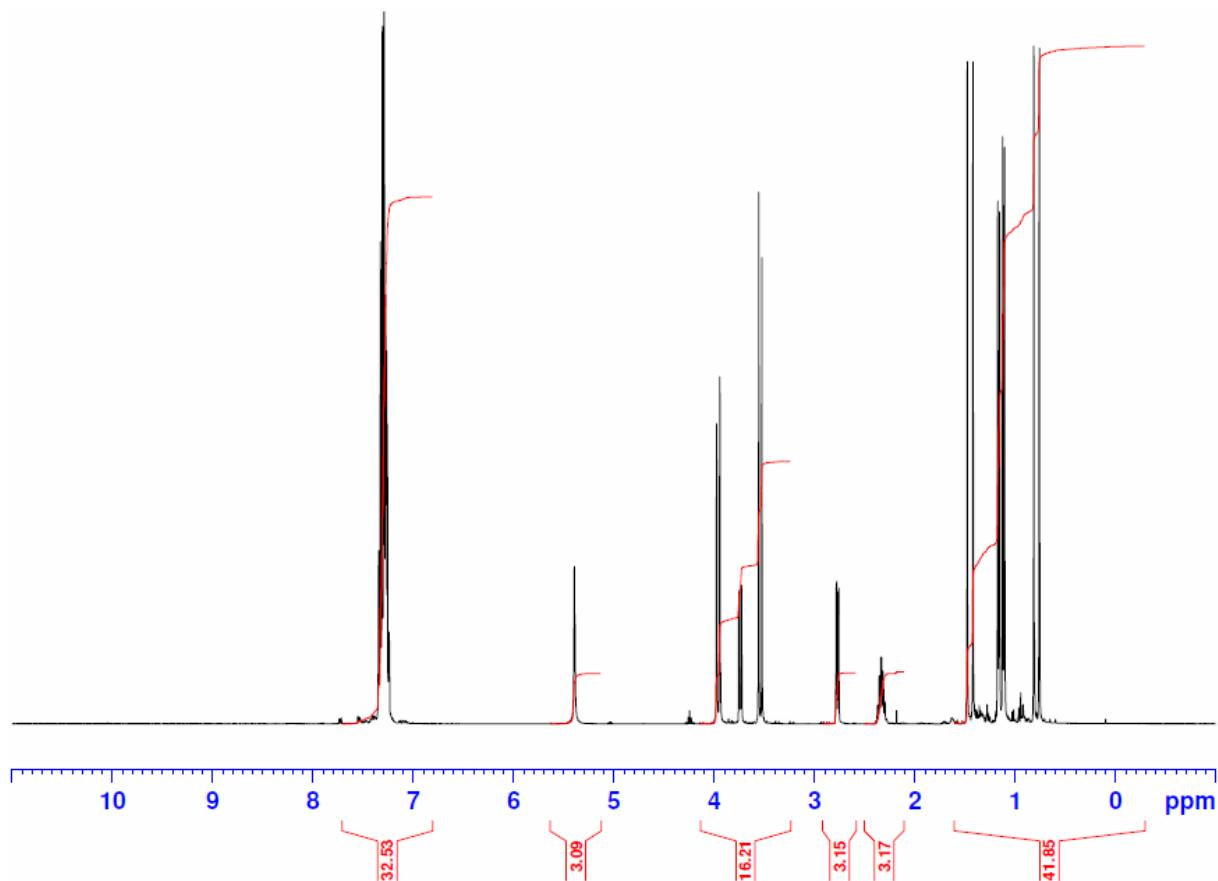
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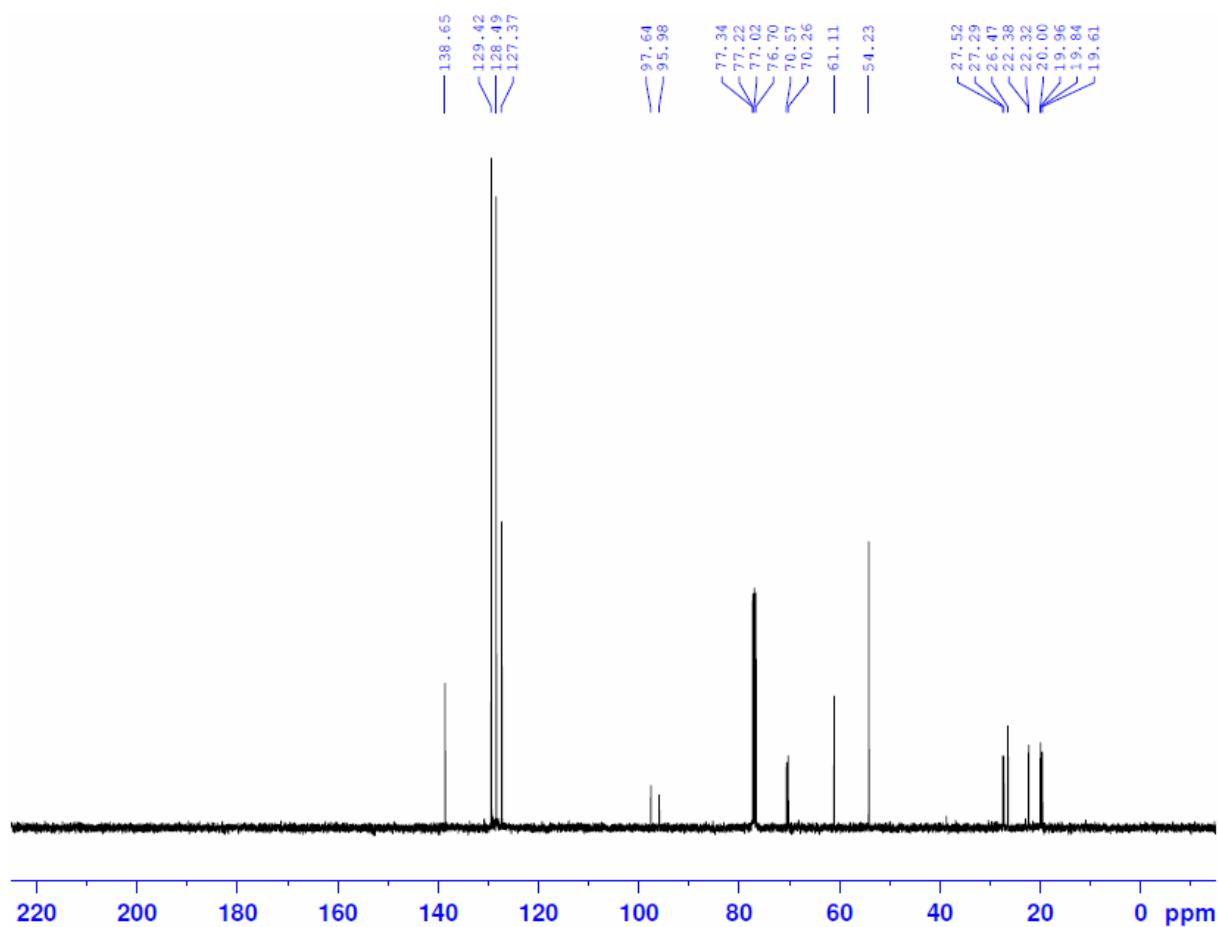
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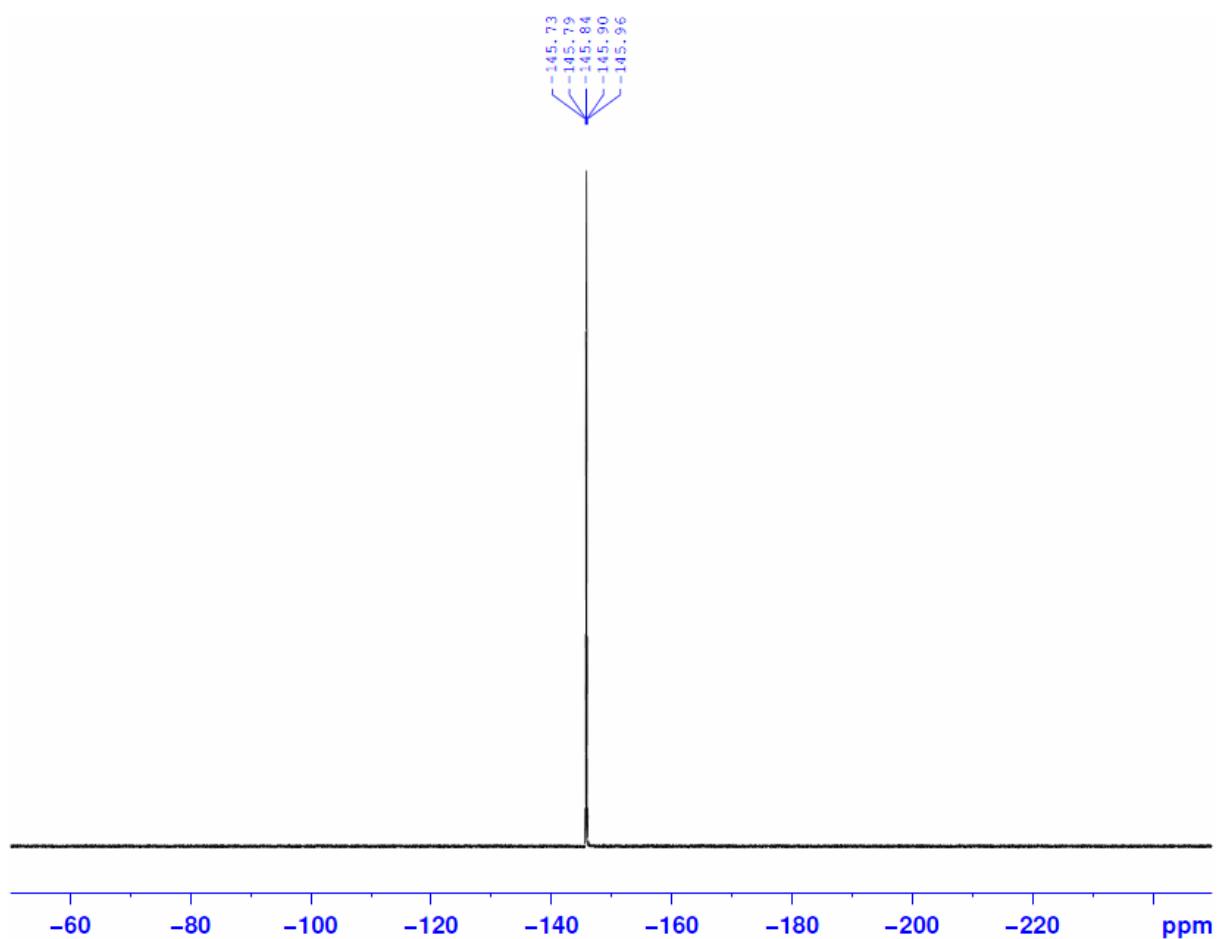
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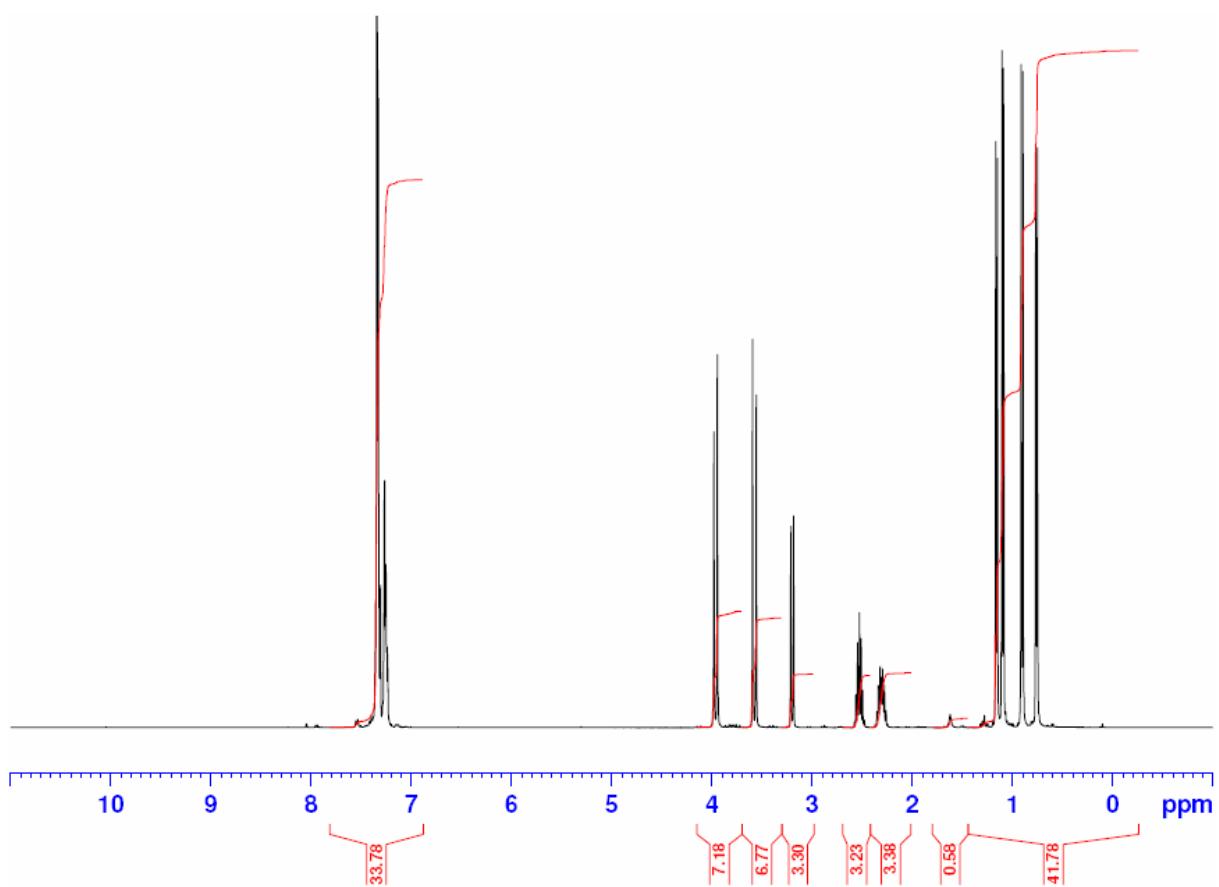
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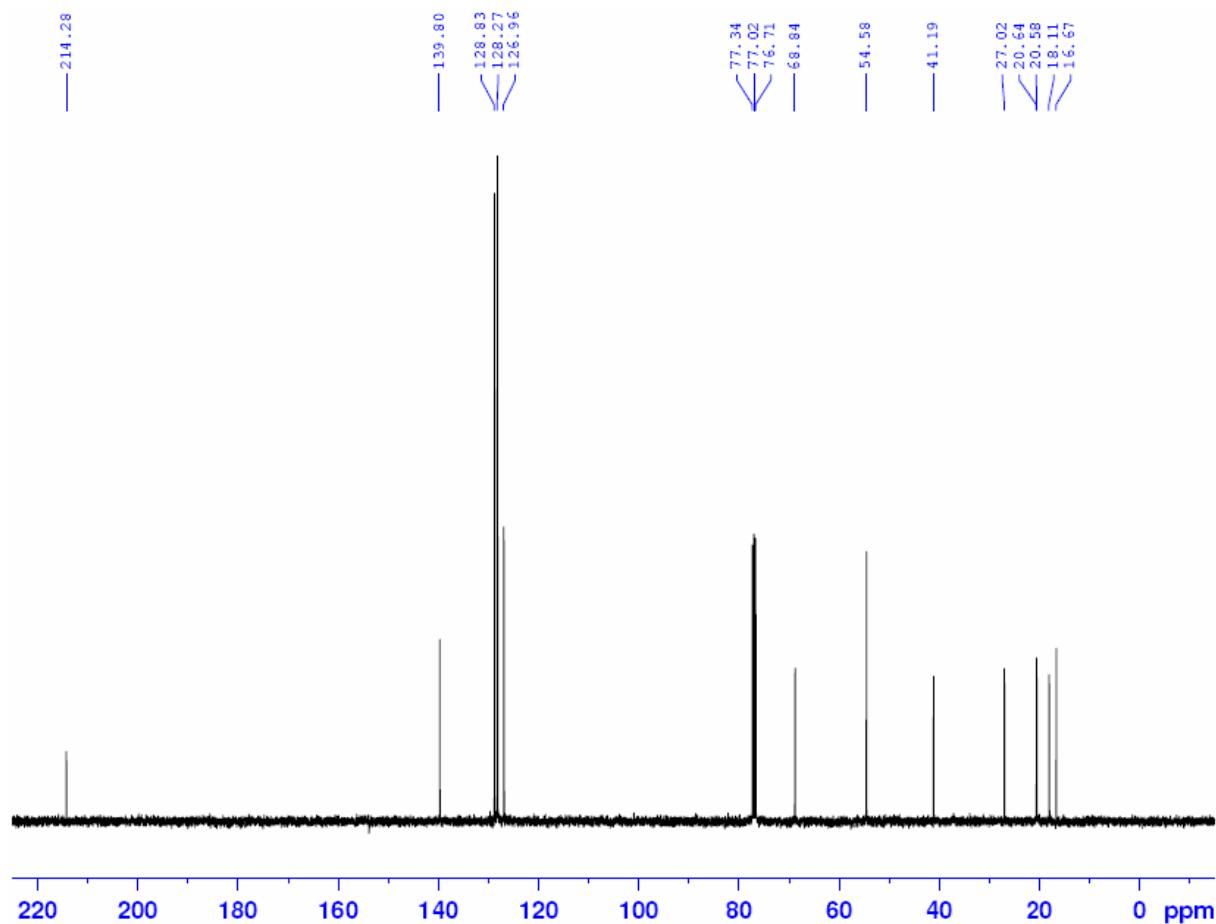
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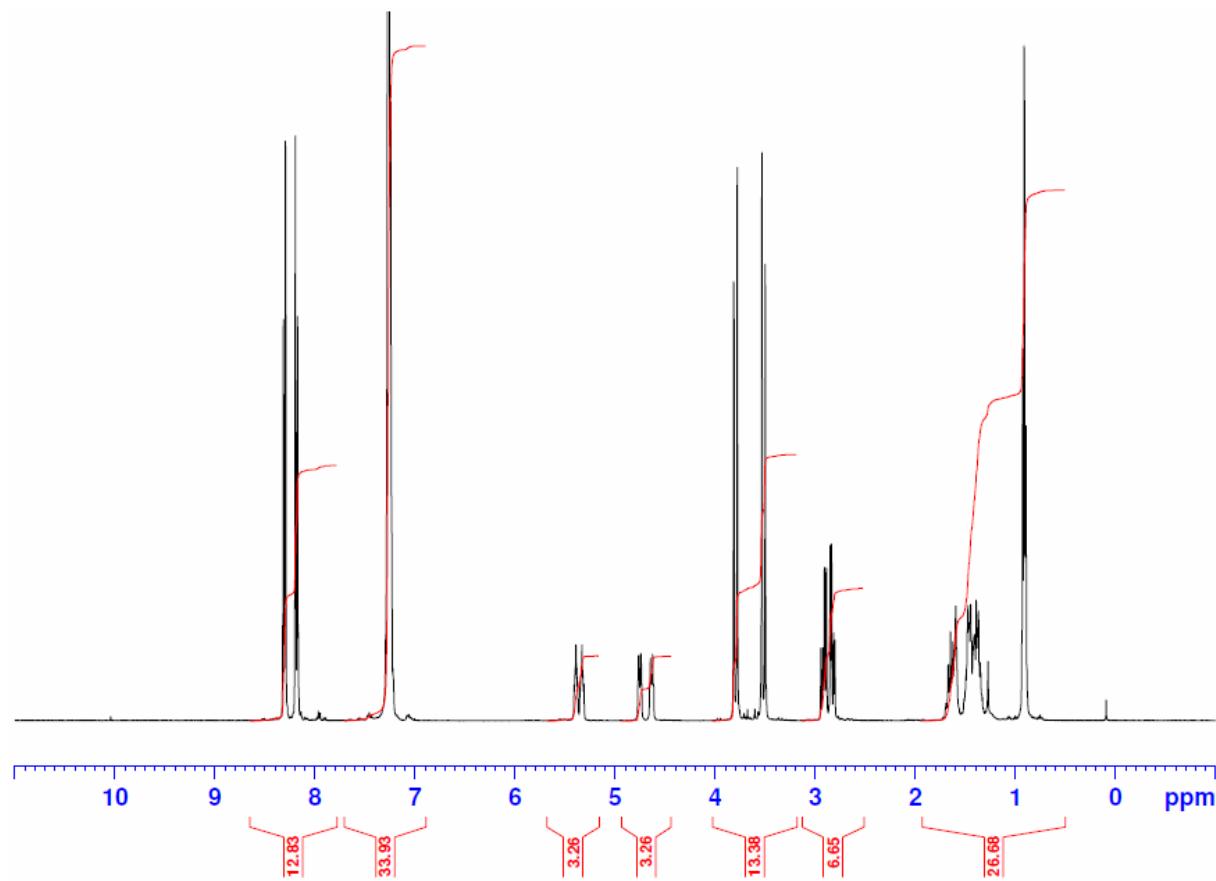
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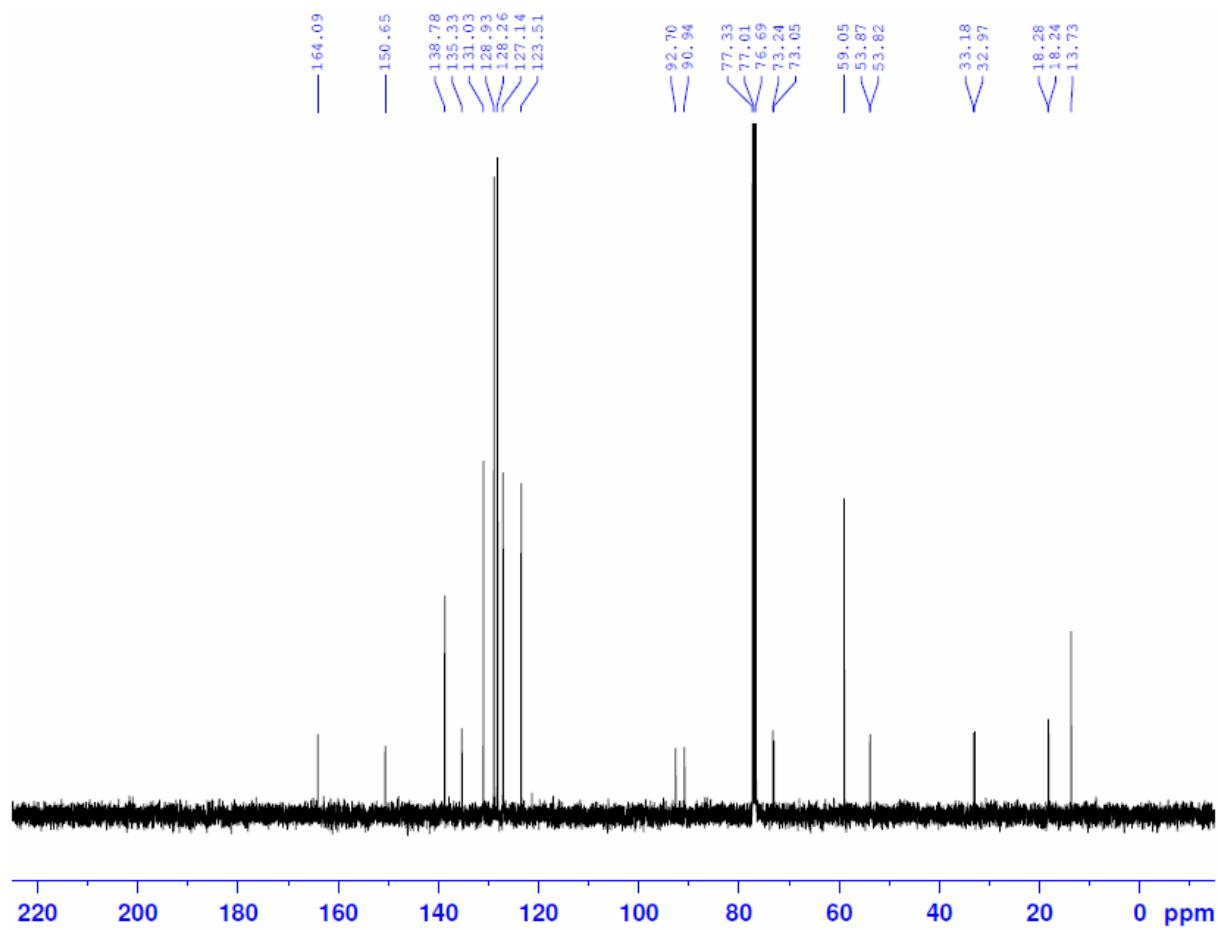
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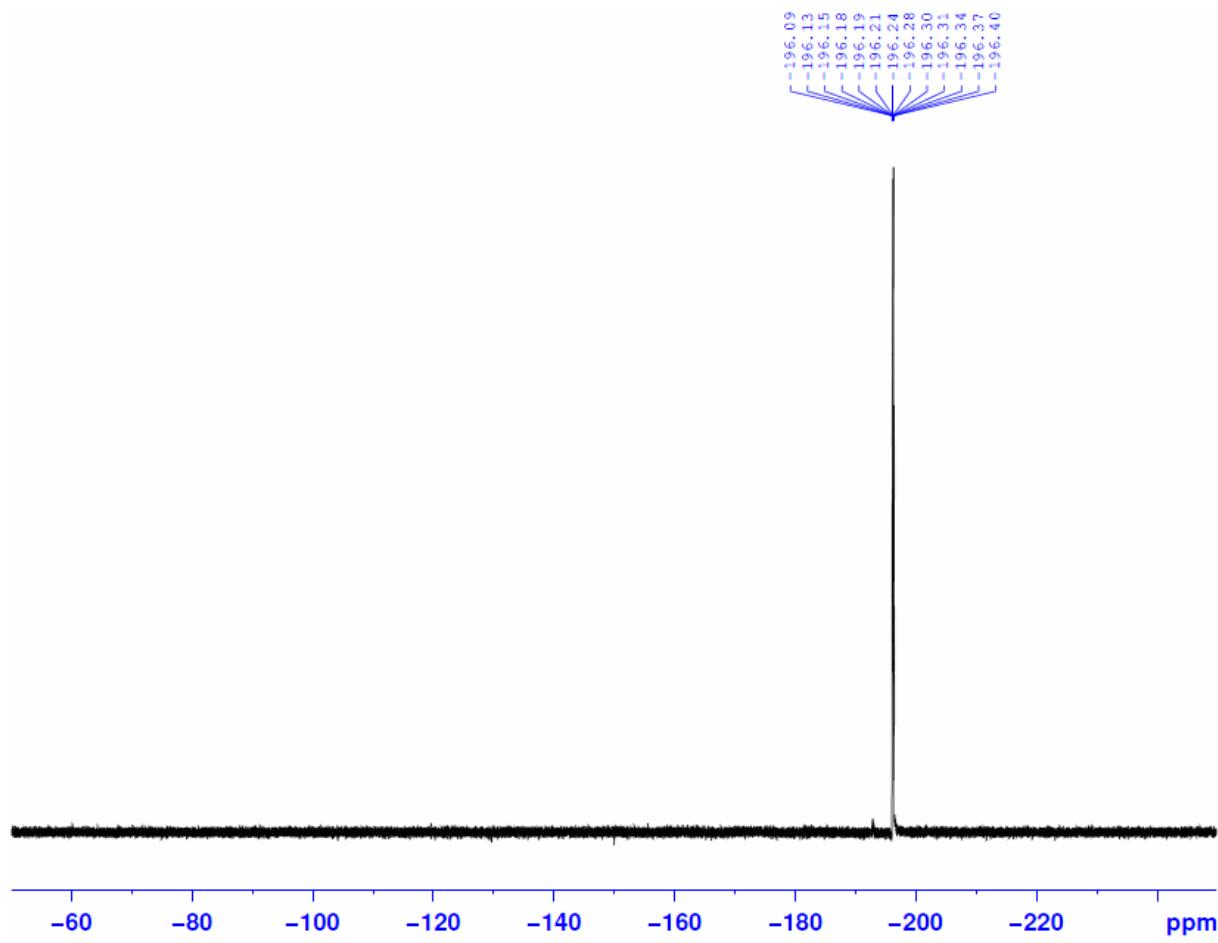
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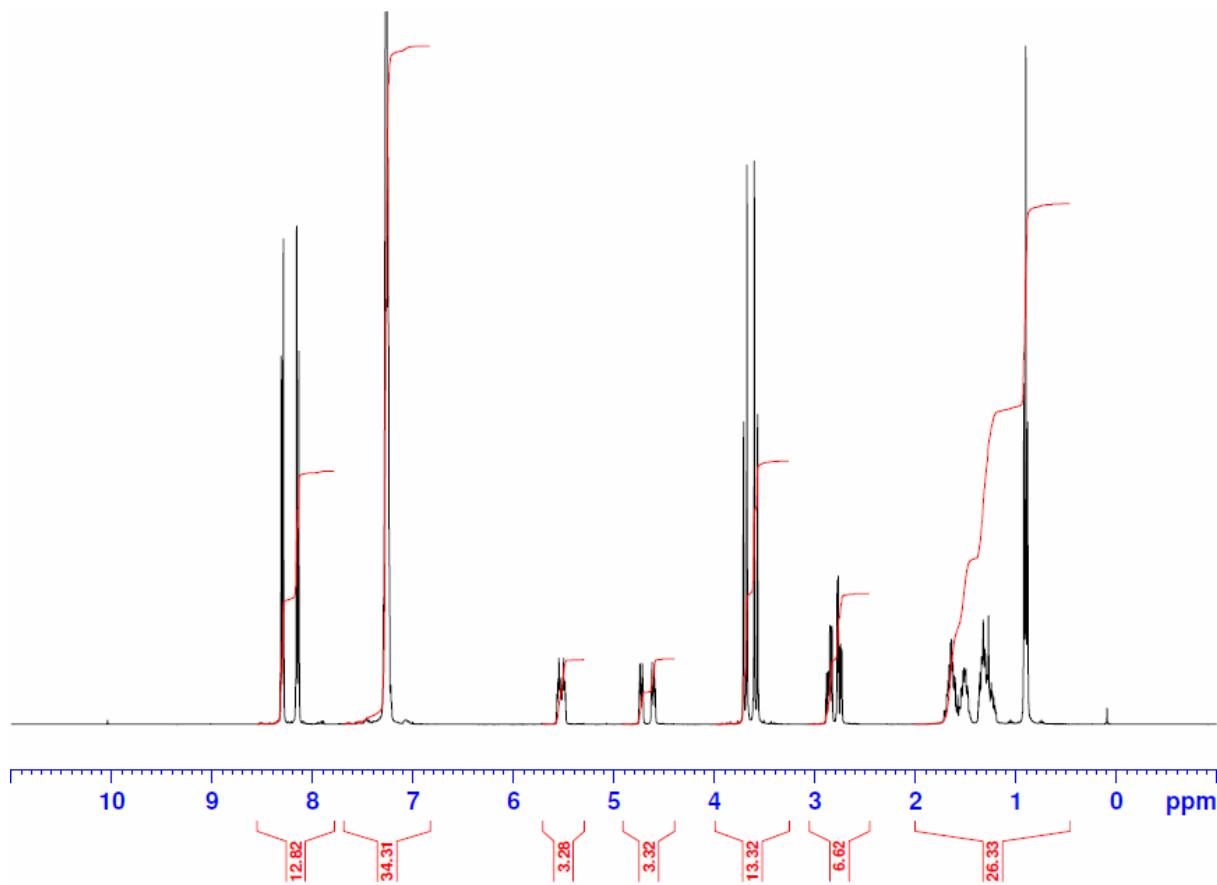
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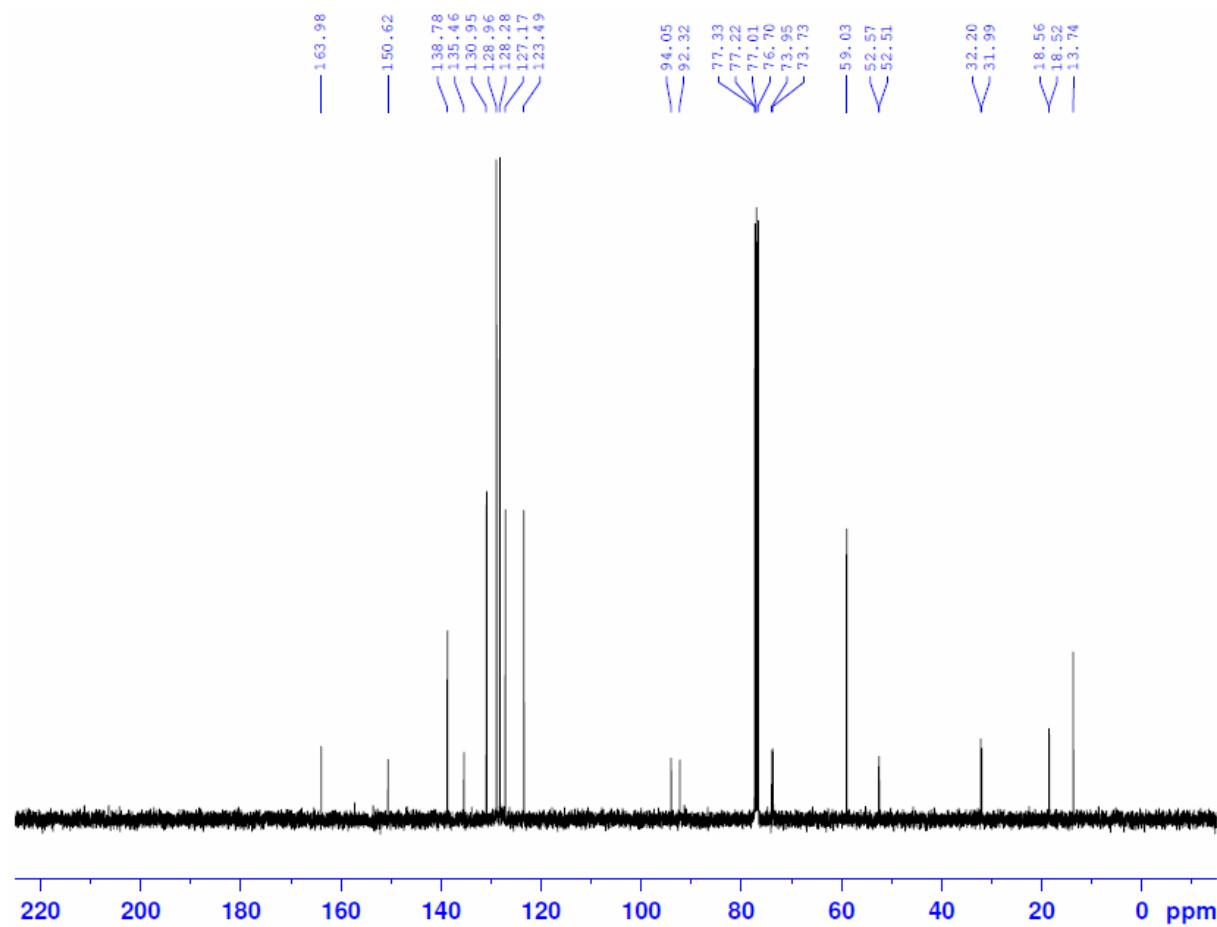
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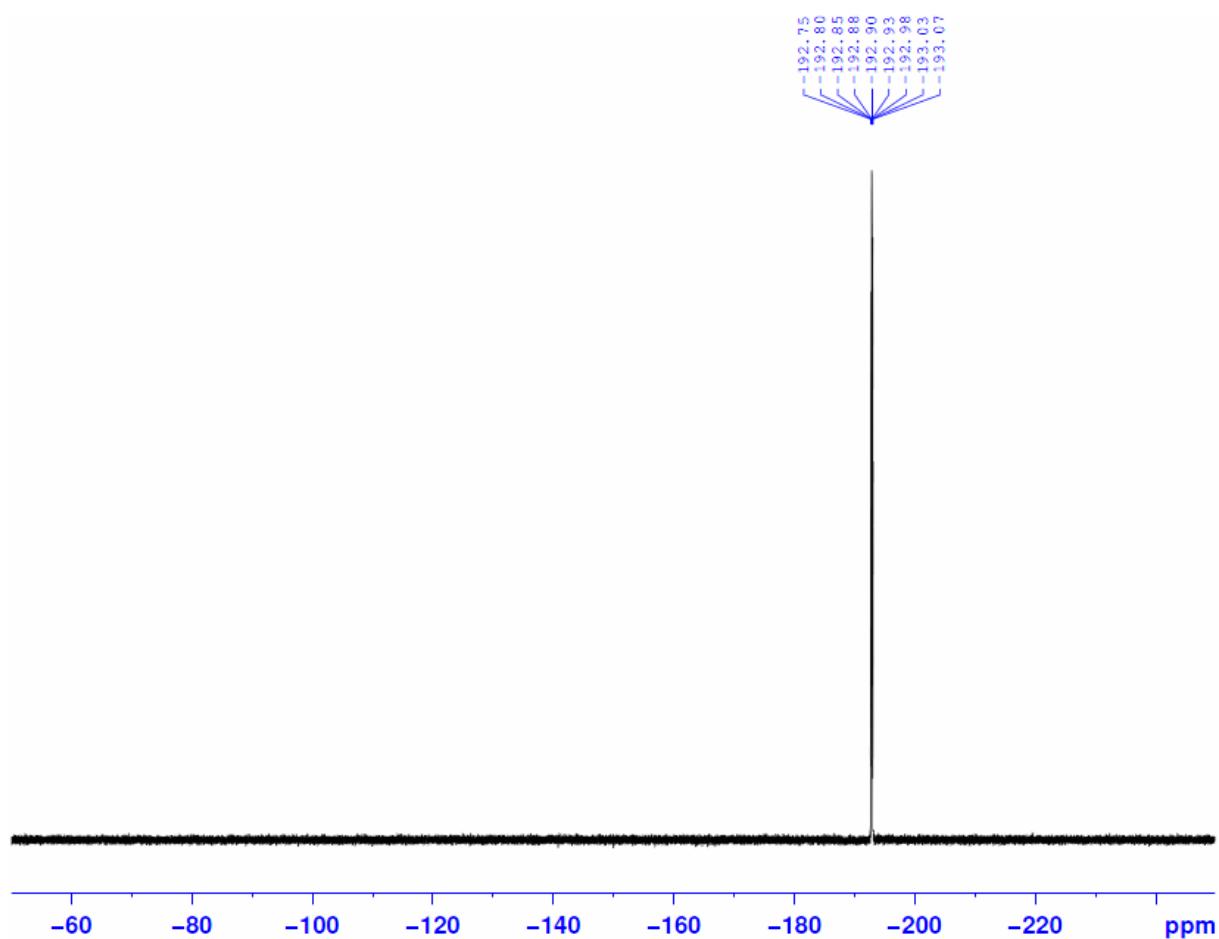
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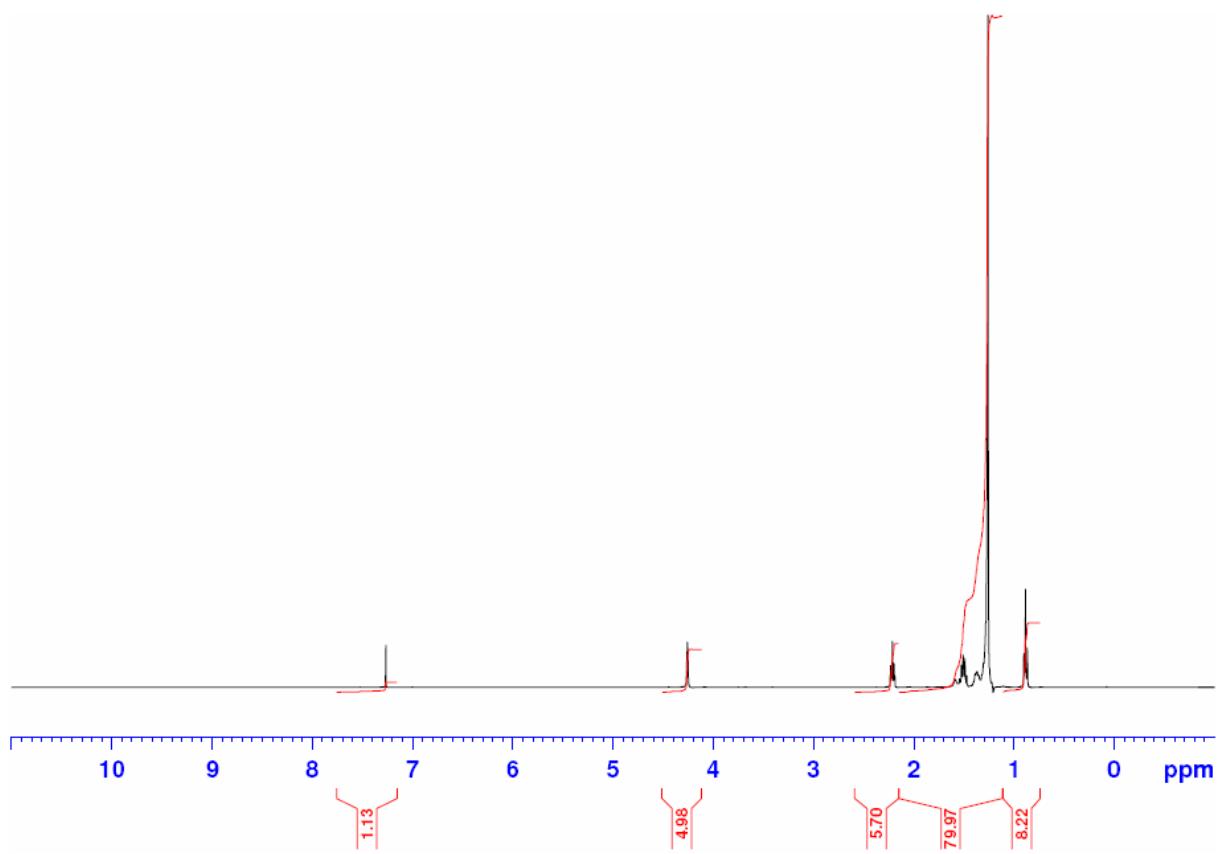
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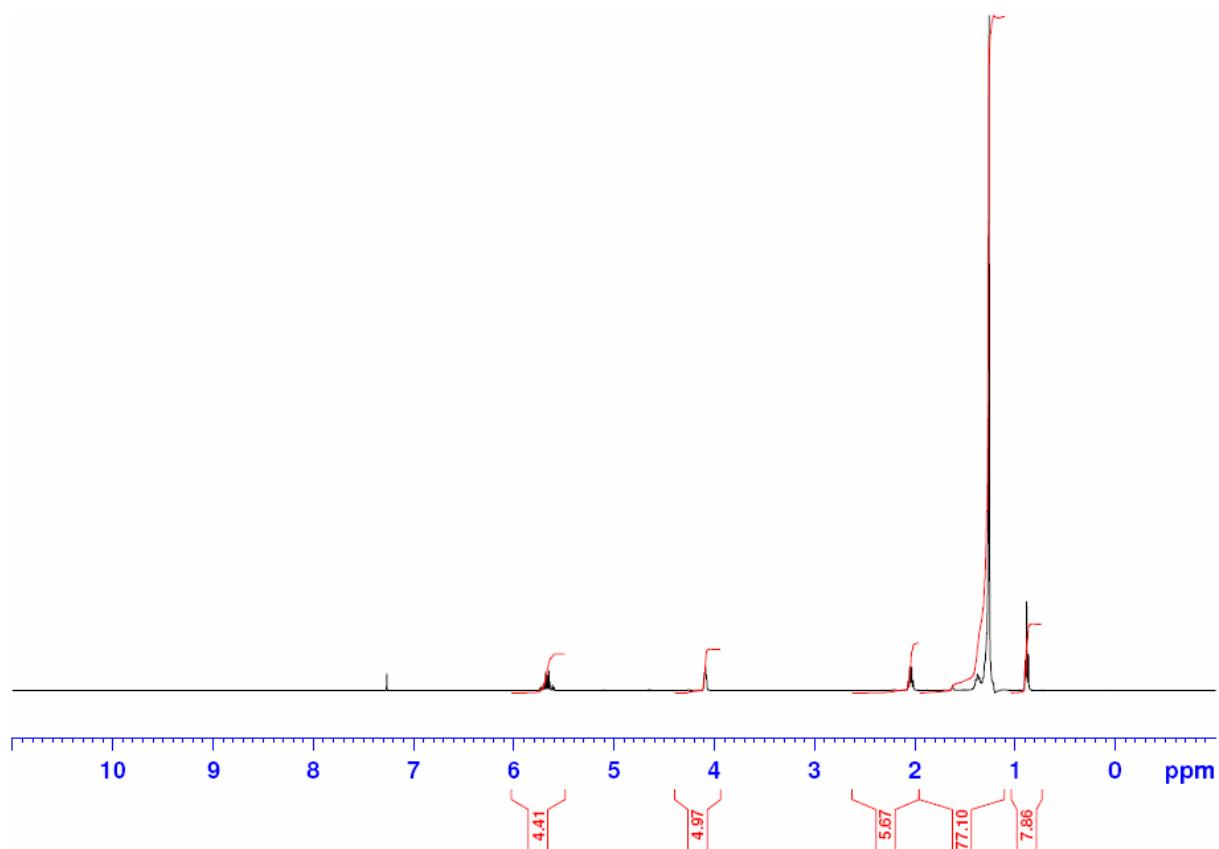
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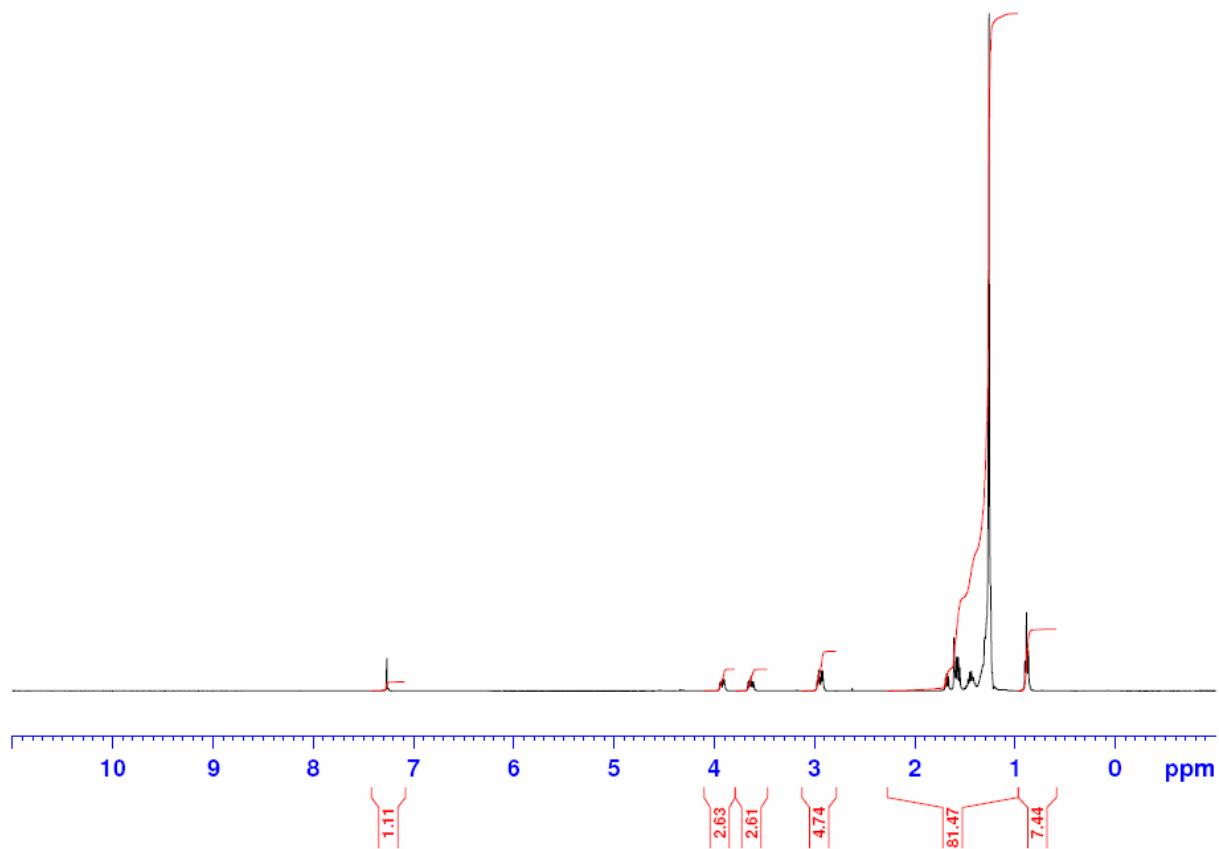
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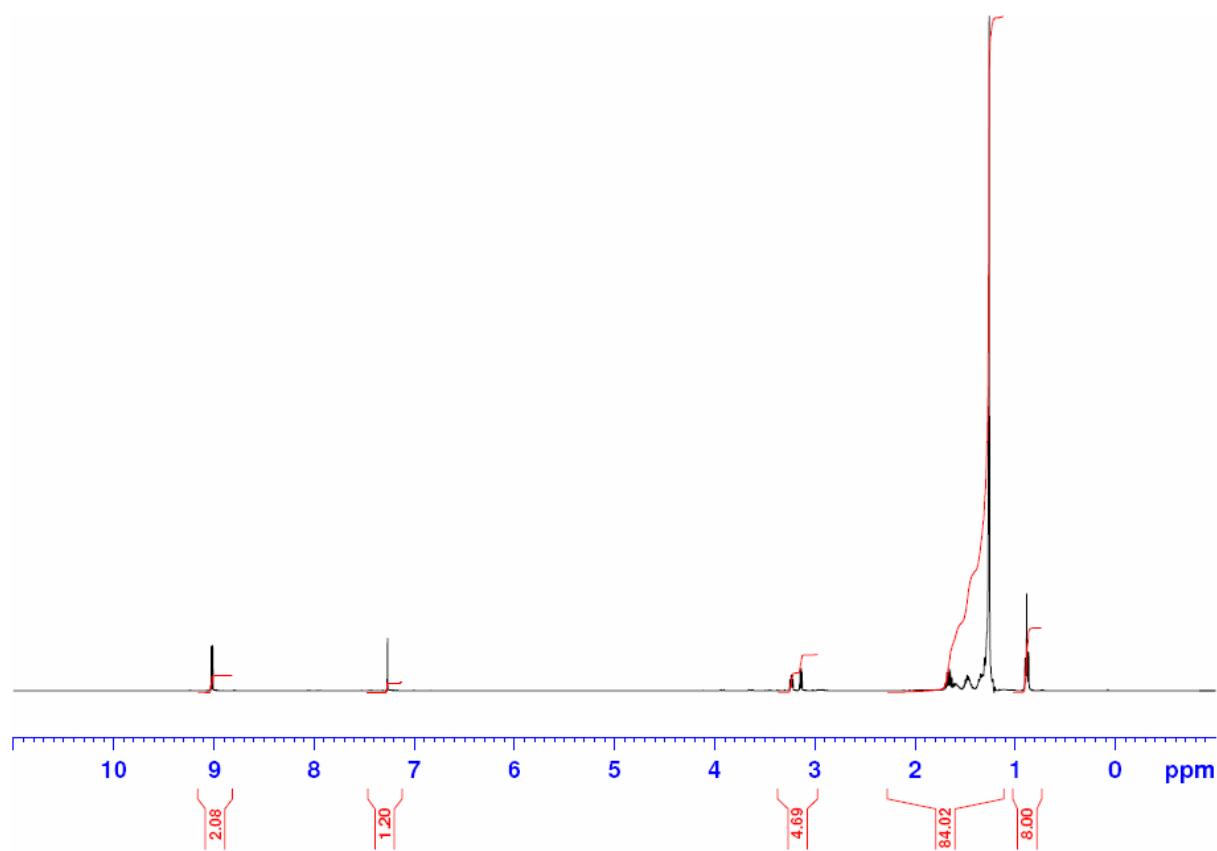
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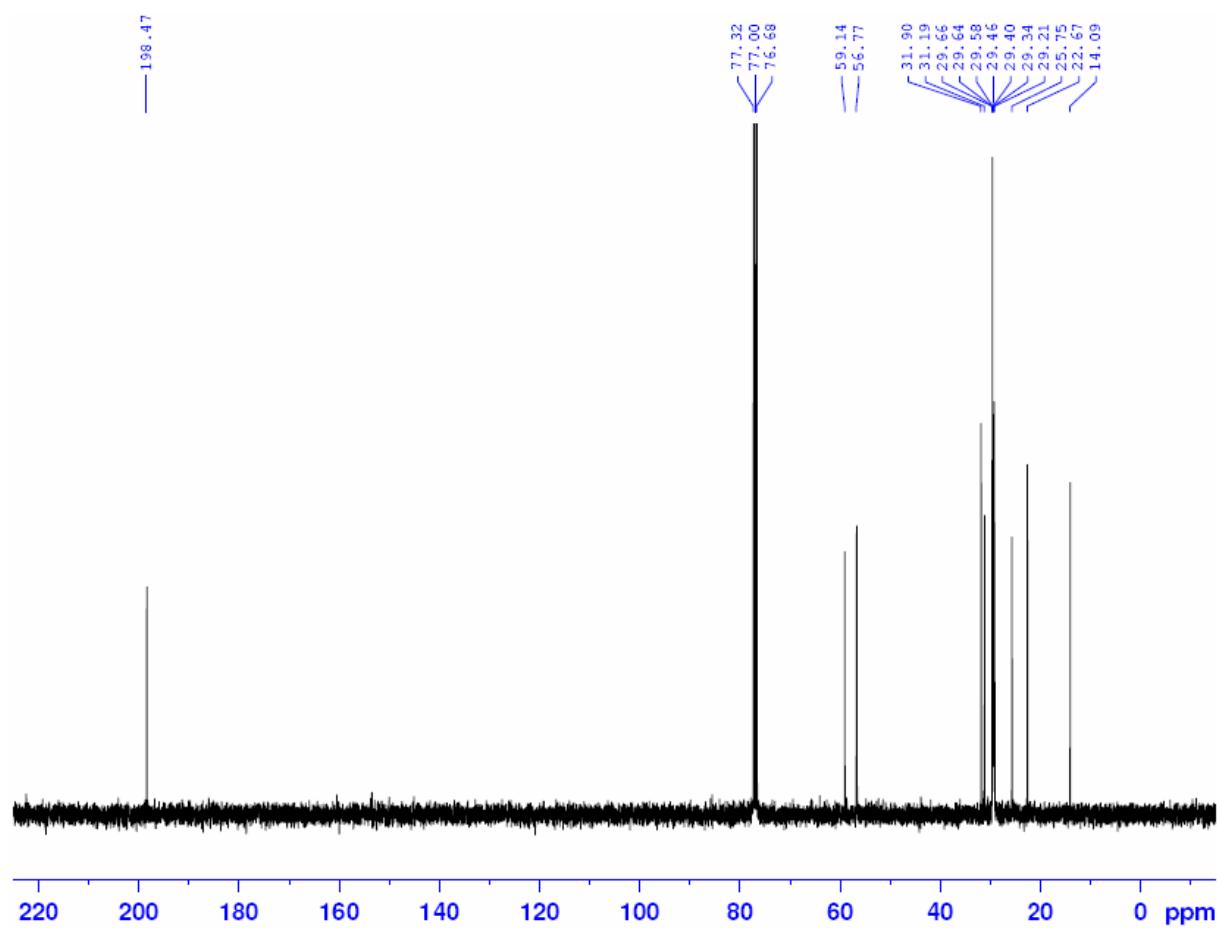
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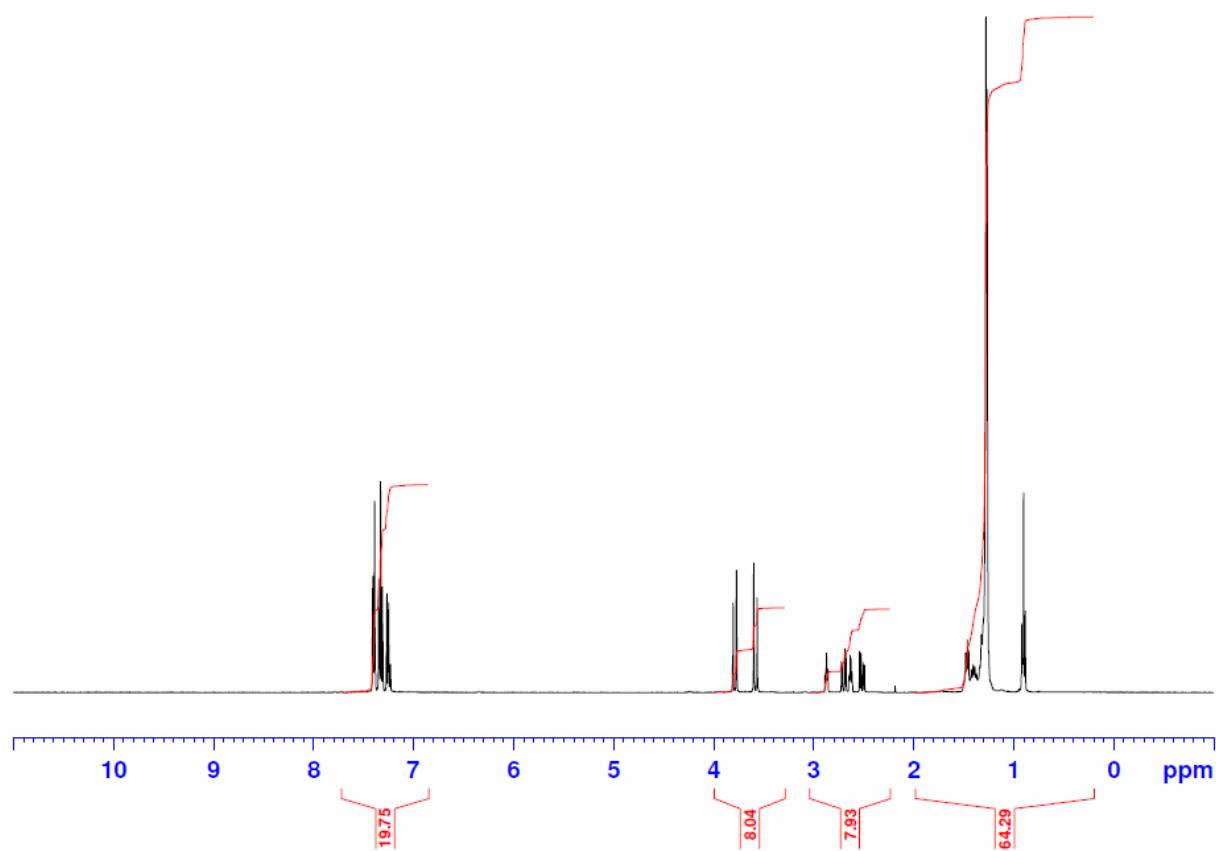
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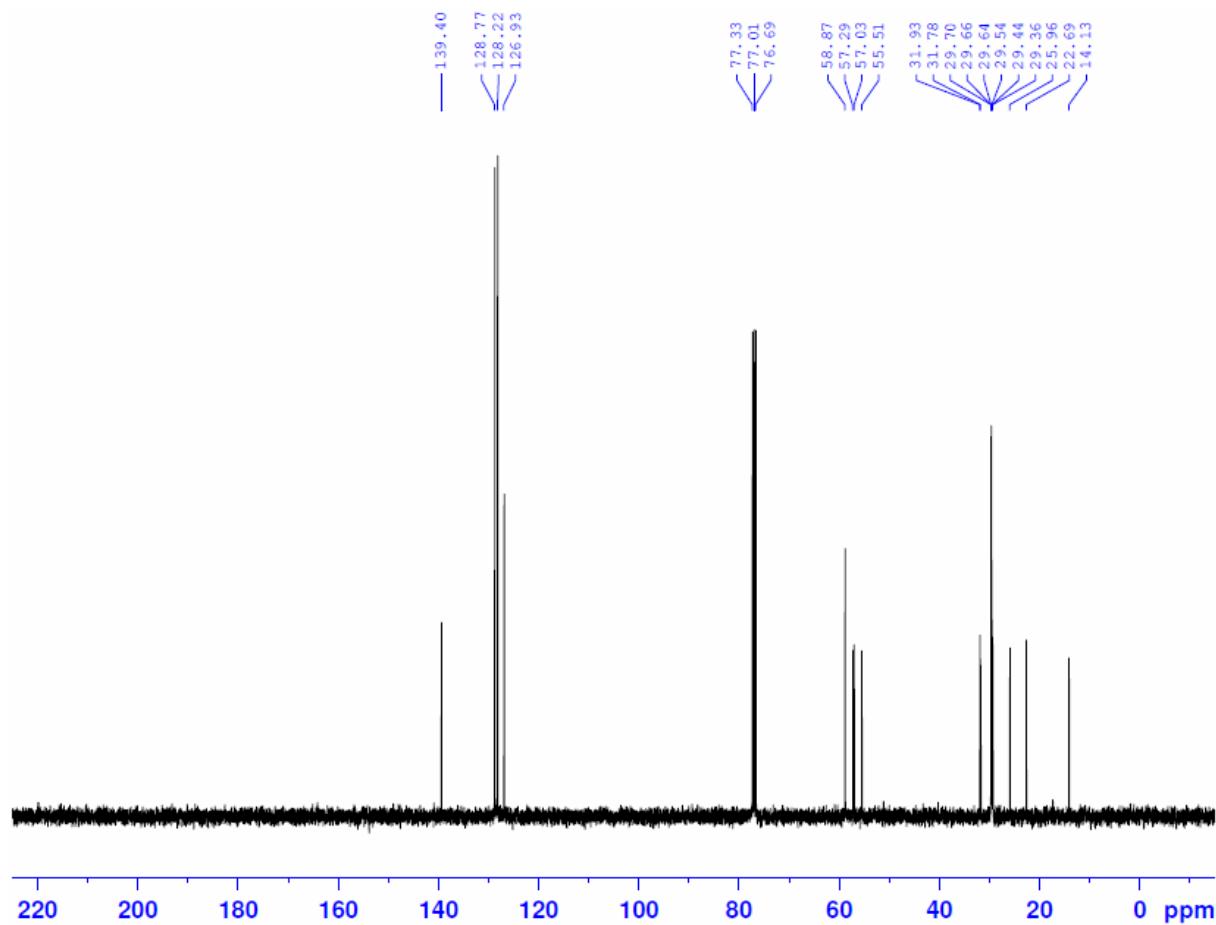
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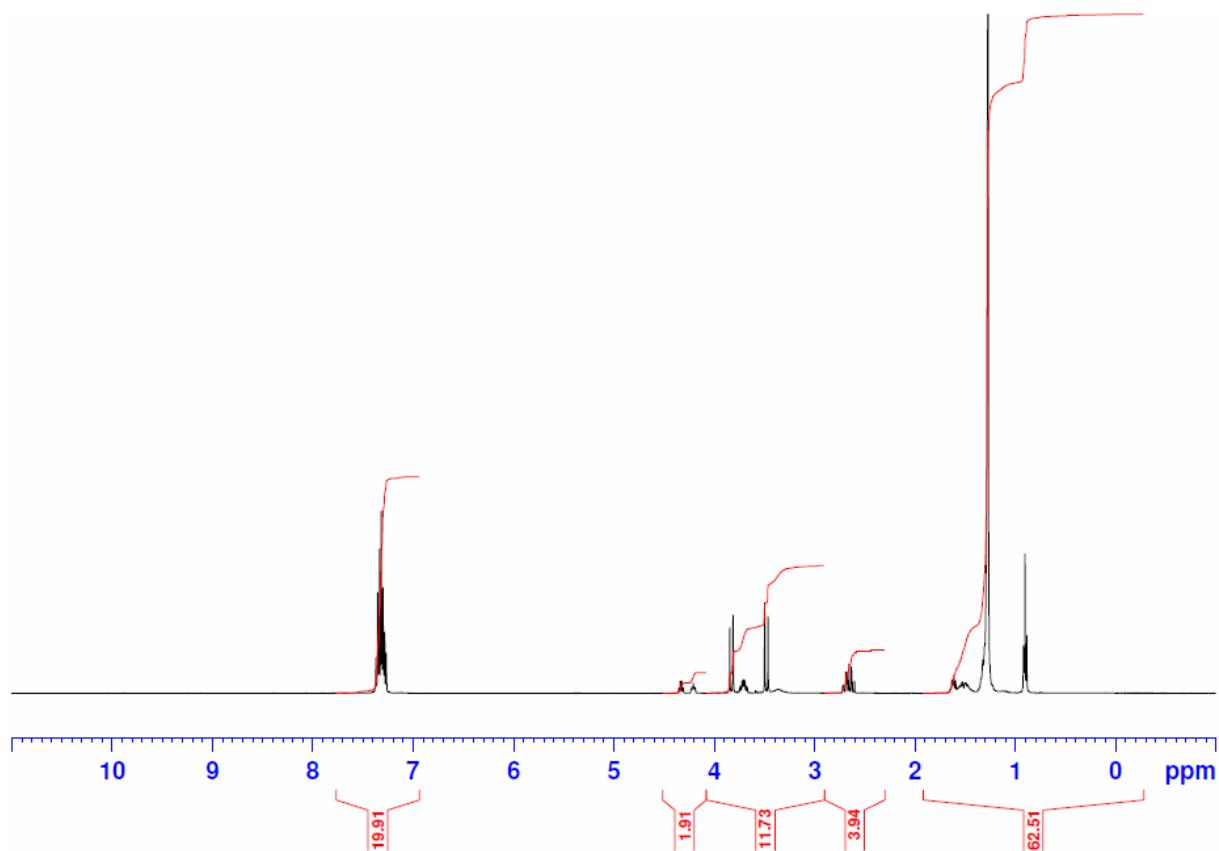
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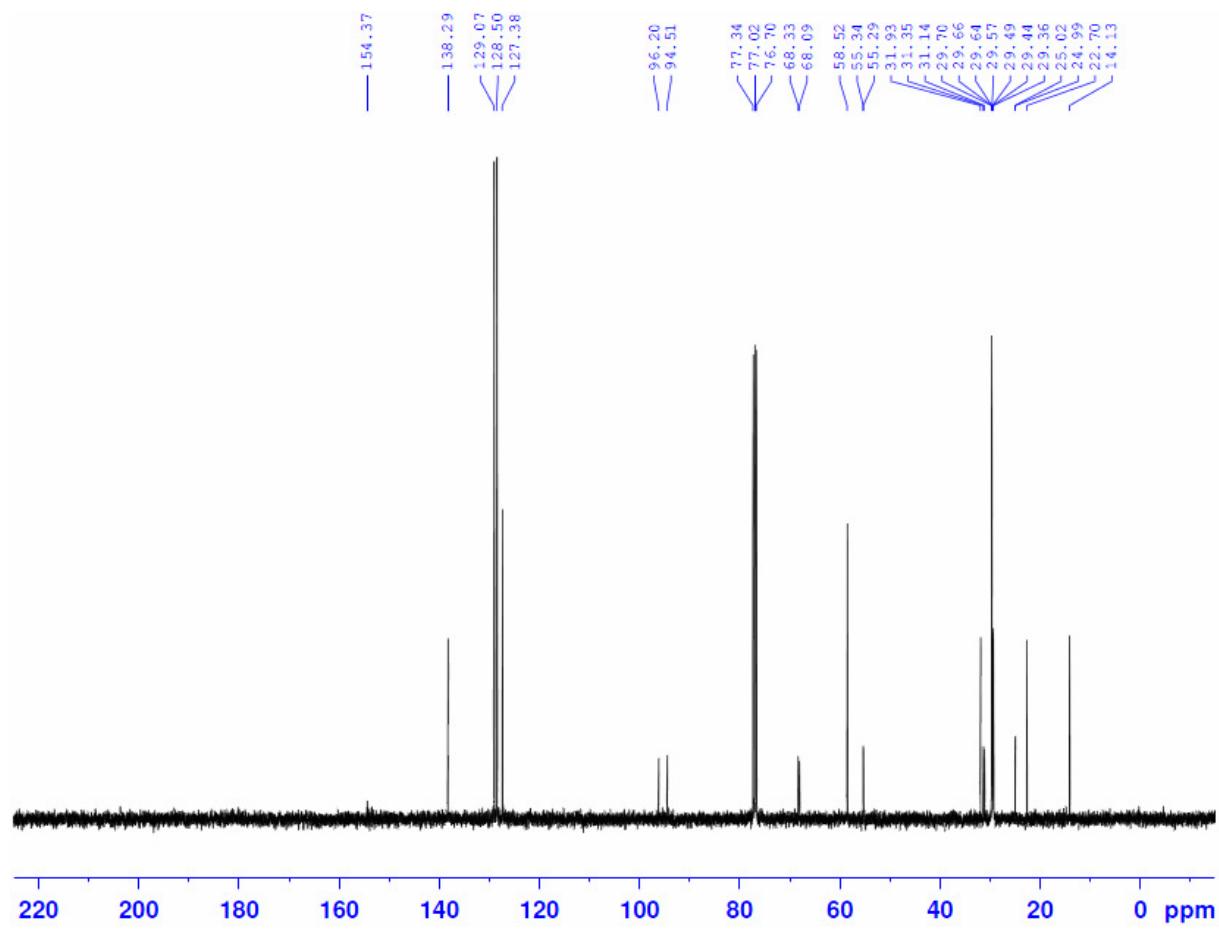
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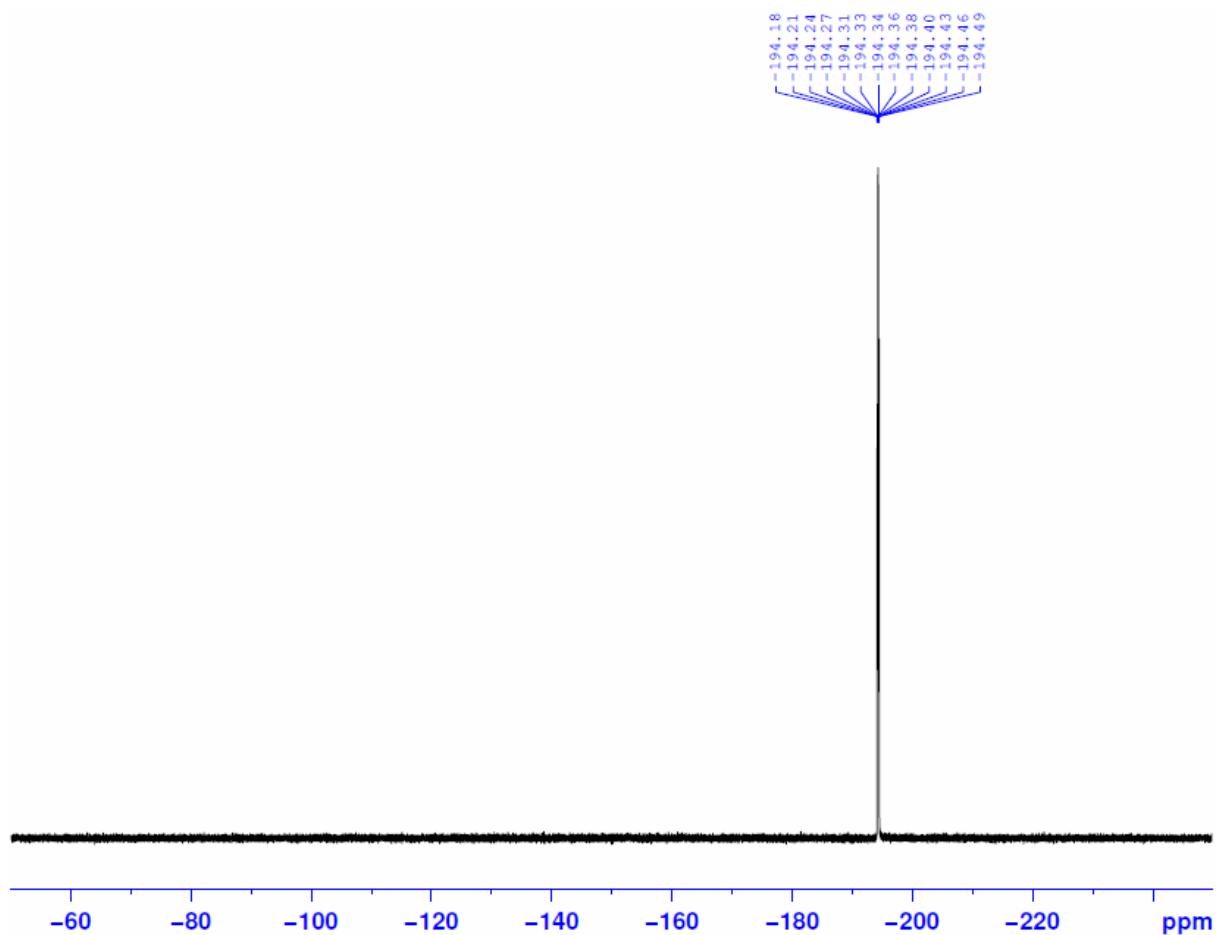
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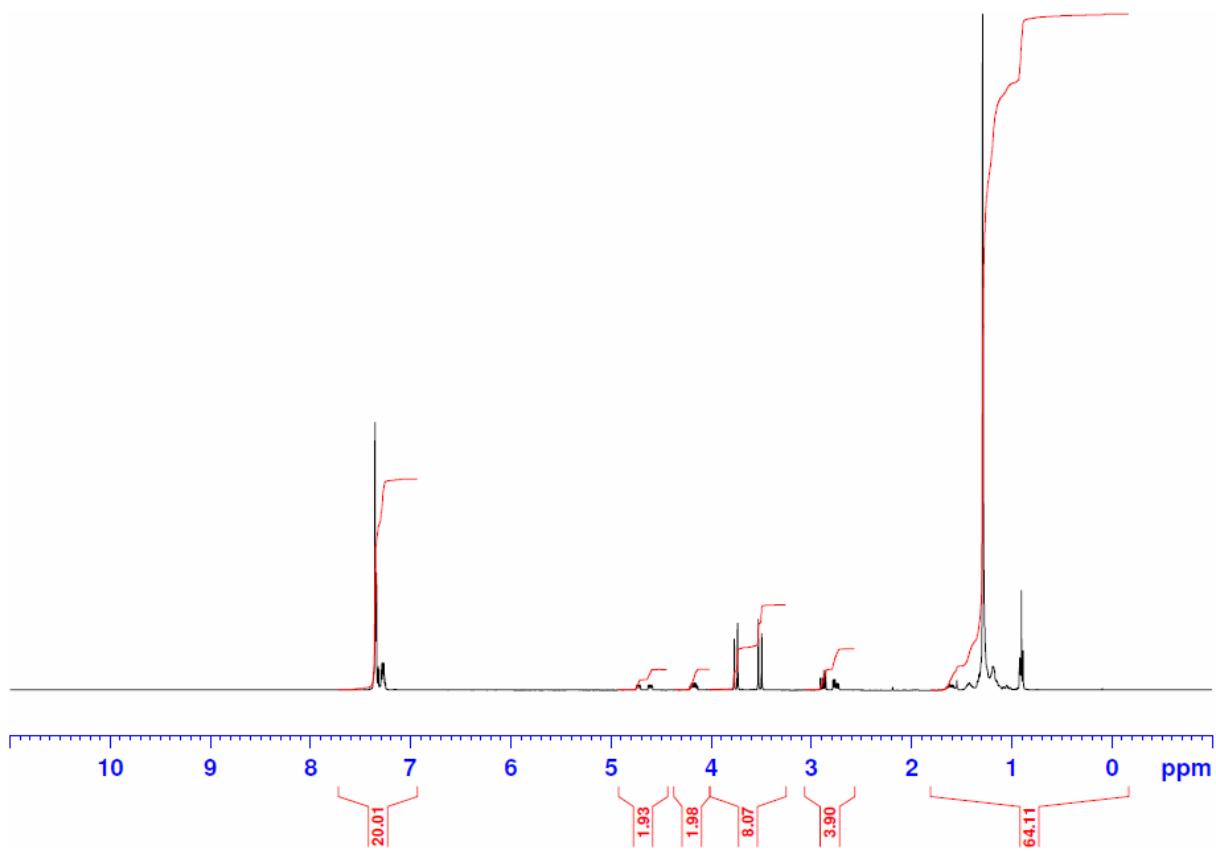
(2*R*,3*S*)-1-(*N,N*-Dibenzylamino)-3-fluoroctadecan-2-ol 38 (100 MHz ^{13}C , CDCl_3)



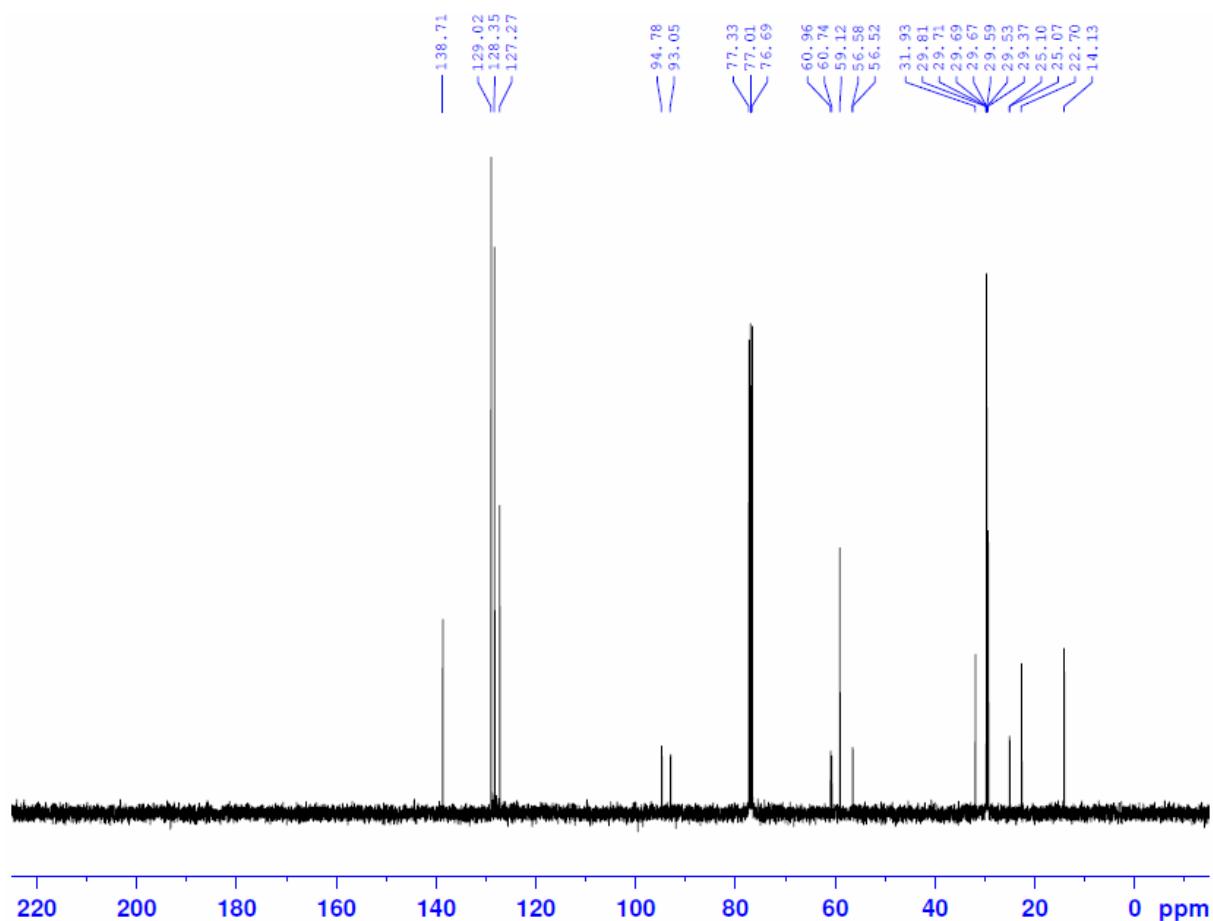
(2*R*,3*S*)-1-(*N,N*-Dibenzylamino)-3-fluorooctadecan-2-ol 38 (377 MHz ^{19}F , CDCl_3)



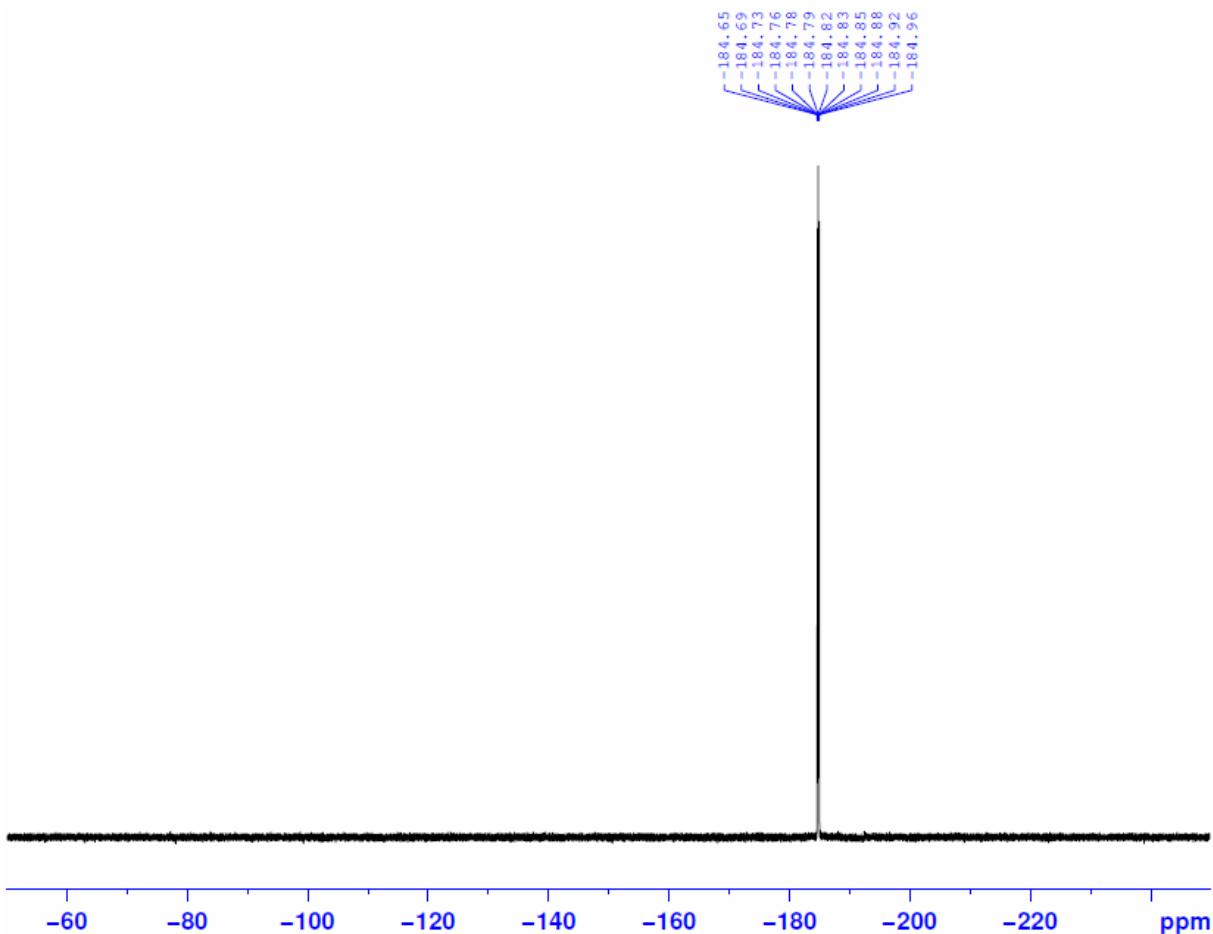
(2*R*,3*S*)-1-(*N,N*-Dibenzylamino)-2-chloro-3-fluorooctadecane 41 (400 MHz ^1H , CDCl_3)



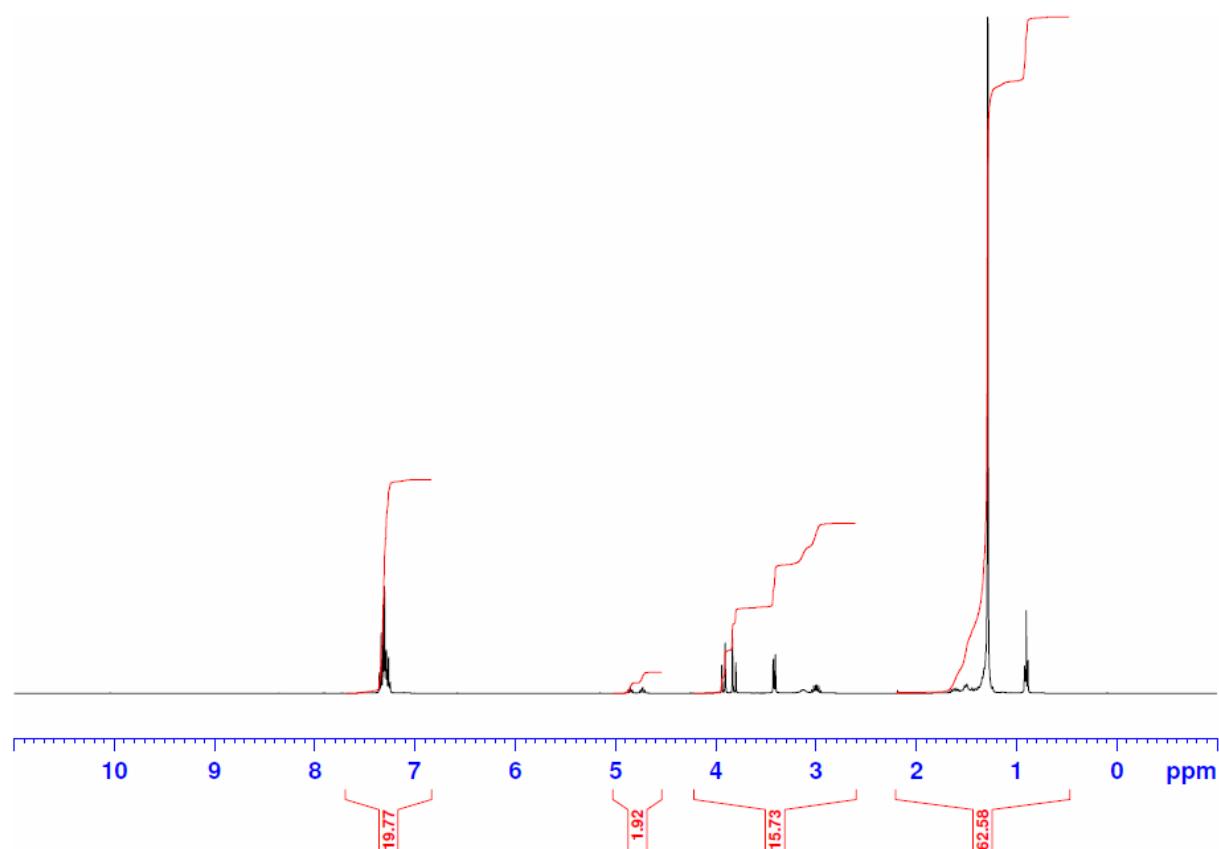
(2*R*,3*S*)-1-(*N,N*-Dibenzylamino)-2-chloro-3-fluorooctadecane 41 (100 MHz ^{13}C , CDCl_3)



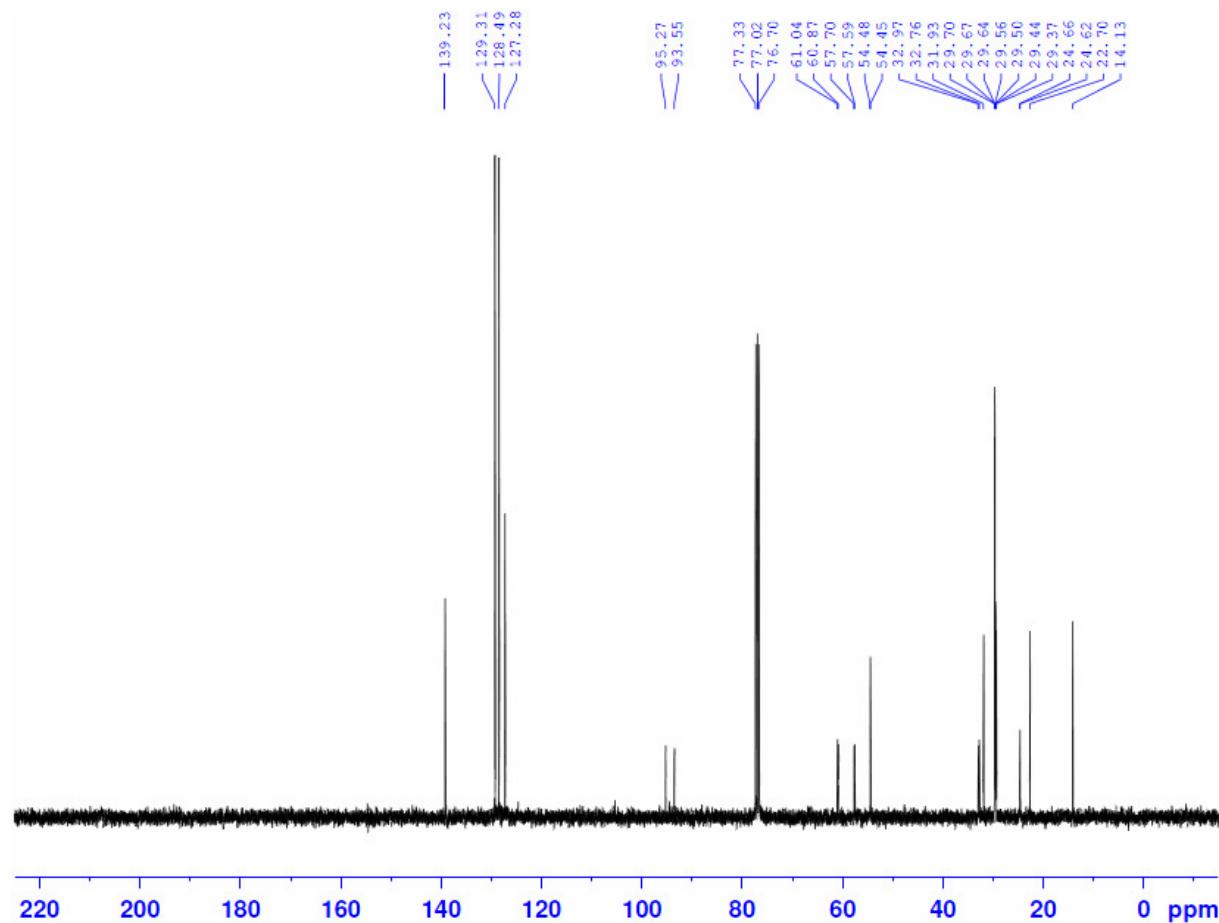
(2*R*,3*S*)-1-(*N,N*-Dibenzylamino)-2-chloro-3-fluorooctadecane 41 (377 MHz ^{19}F , CDCl_3)



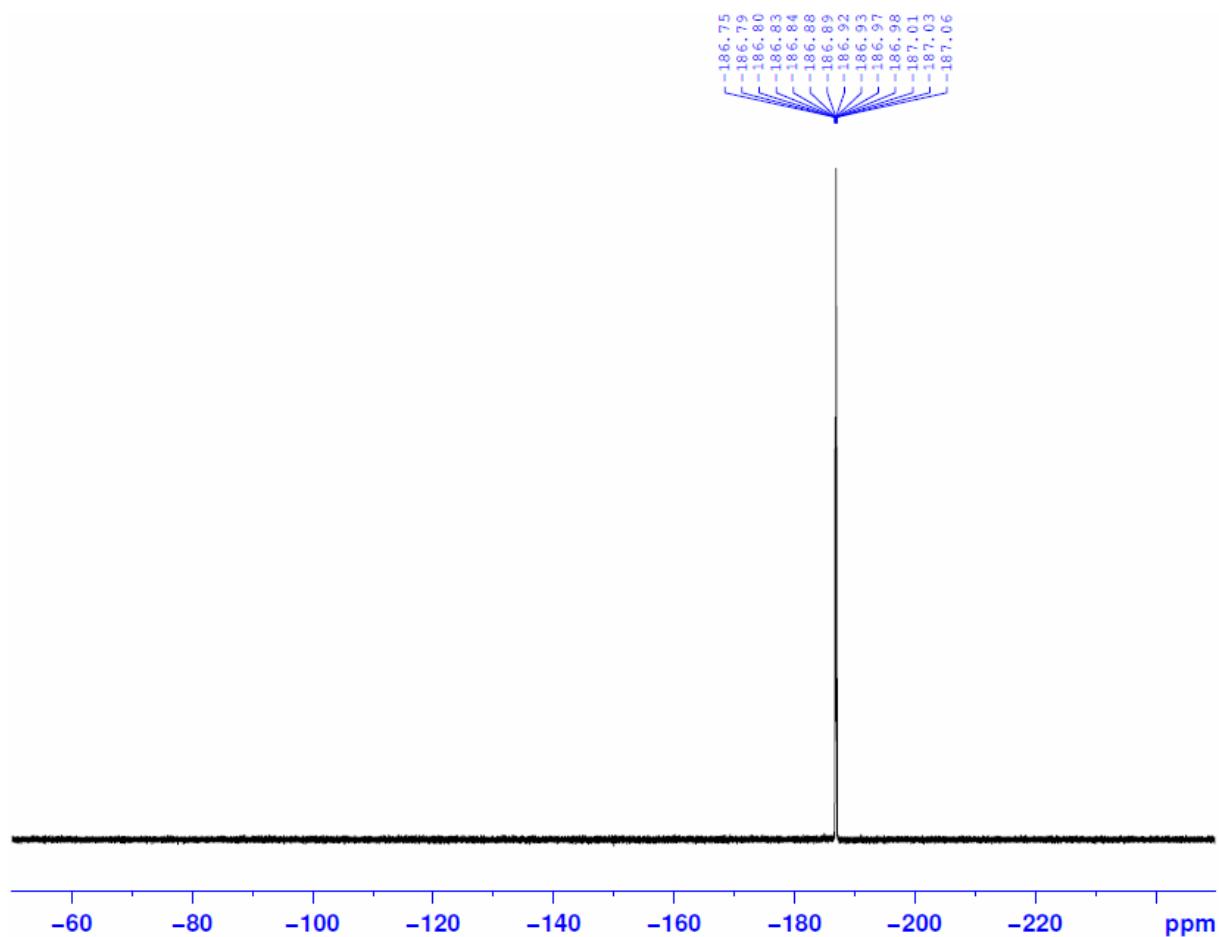
(S,S)-2-(*N,N*-Dibenzylamino)-3-fluorooctadecan-1-ol 42 (400 MHz ^1H , CDCl_3)



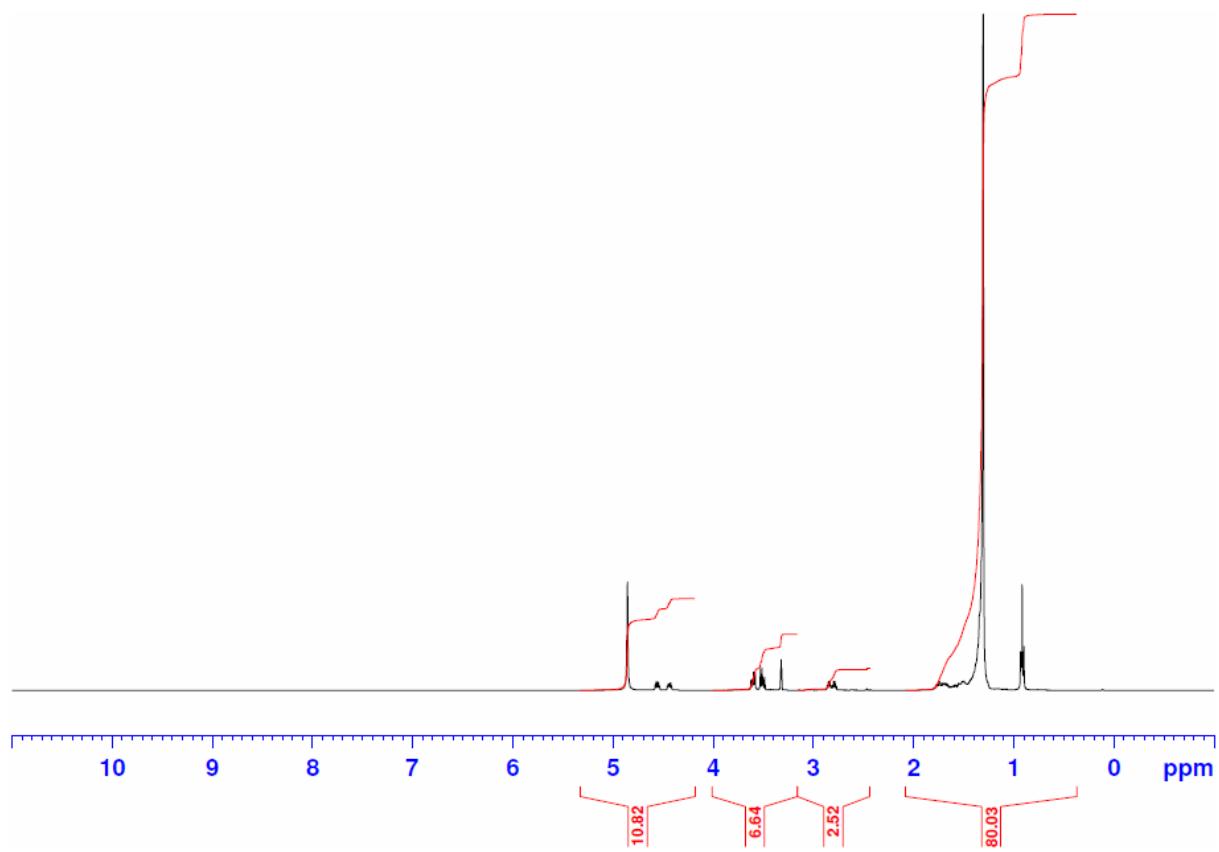
(S,S)-2-(*N,N*-Dibenzylamino)-3-fluorooctadecan-1-ol 42 (100 MHz ^{13}C , CDCl_3)



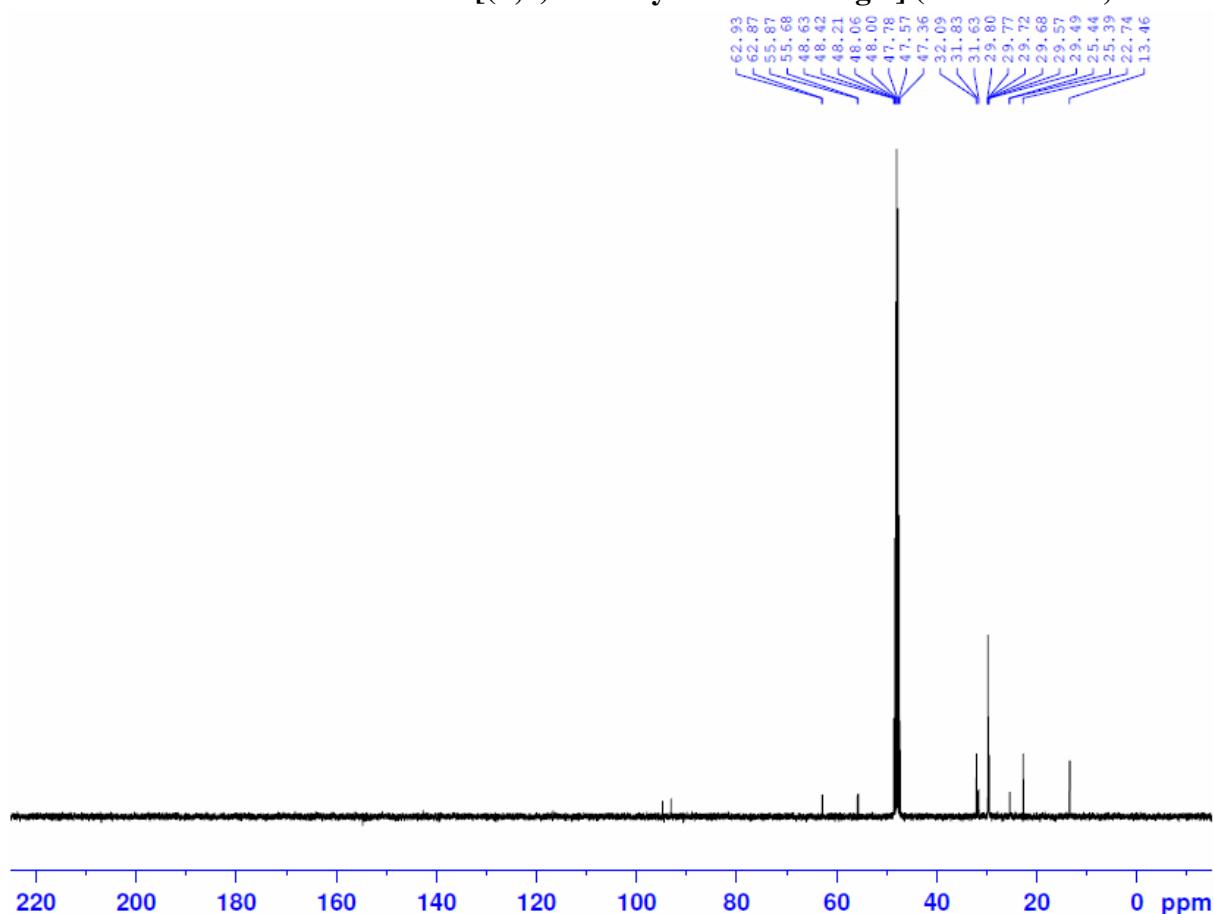
(S,S)-2-(*N,N*-Dibenzylamino)-3-fluorooctadecan-1-ol 42 (377 MHz ^{19}F , CDCl_3)



(S,S)-2-Amino-3-fluorooctadecan-1-ol 43 [(S,S)-3-deoxy-3-fluorosafingol] (400 MHz ^1H , $\text{MeOH}-d_4$)



(S,S)-2-Amino-3-fluorooctadecan-1-ol 43 [(S,S)-3-deoxy-3-fluorosafingol] (100 MHz ^{13}C , MeOH- d_4)



(S,S)-2-Amino-3-fluorooctadecan-1-ol 43 [(S,S)-3-deoxy-3-fluorosafingol] (377 MHz ^{19}F , MeOH- d_4)

