

Sulfonamides linked to sulfonate esters via hydrazone functionality: Synthesis, human carbonic anhydrase inhibitory activities, and molecular modeling studies

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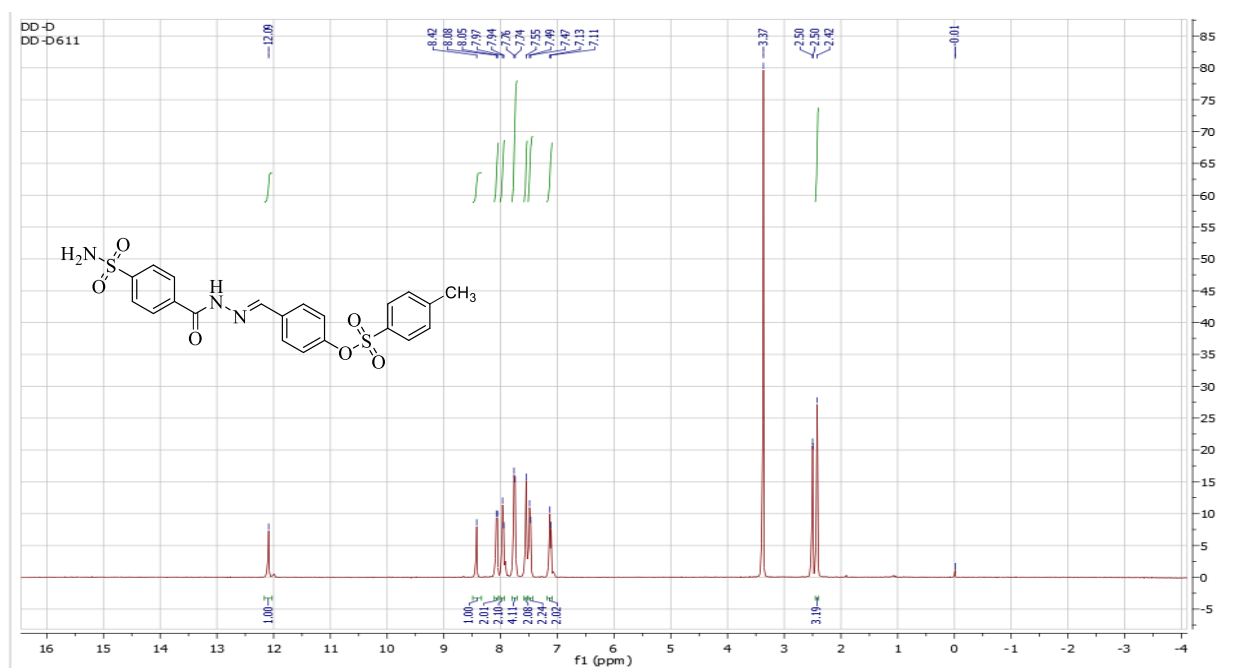
¹H NMR, ¹³C NMR, HRMS, and FT-IR spectra of **SH1-SH14**

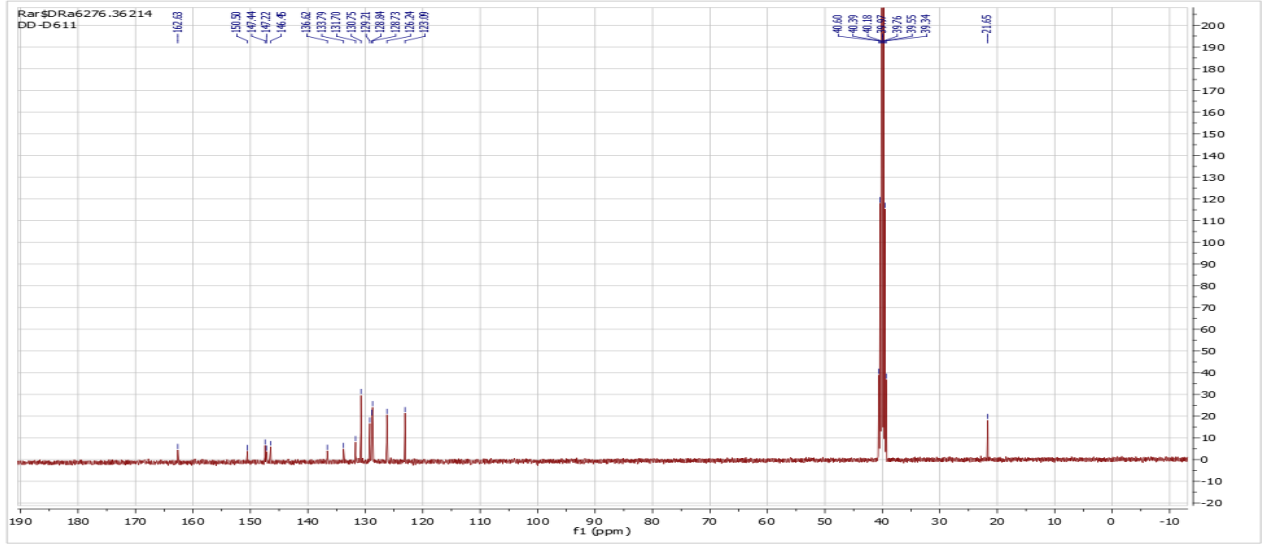
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Binding mode of **SH3** in the active site of hCA I and II

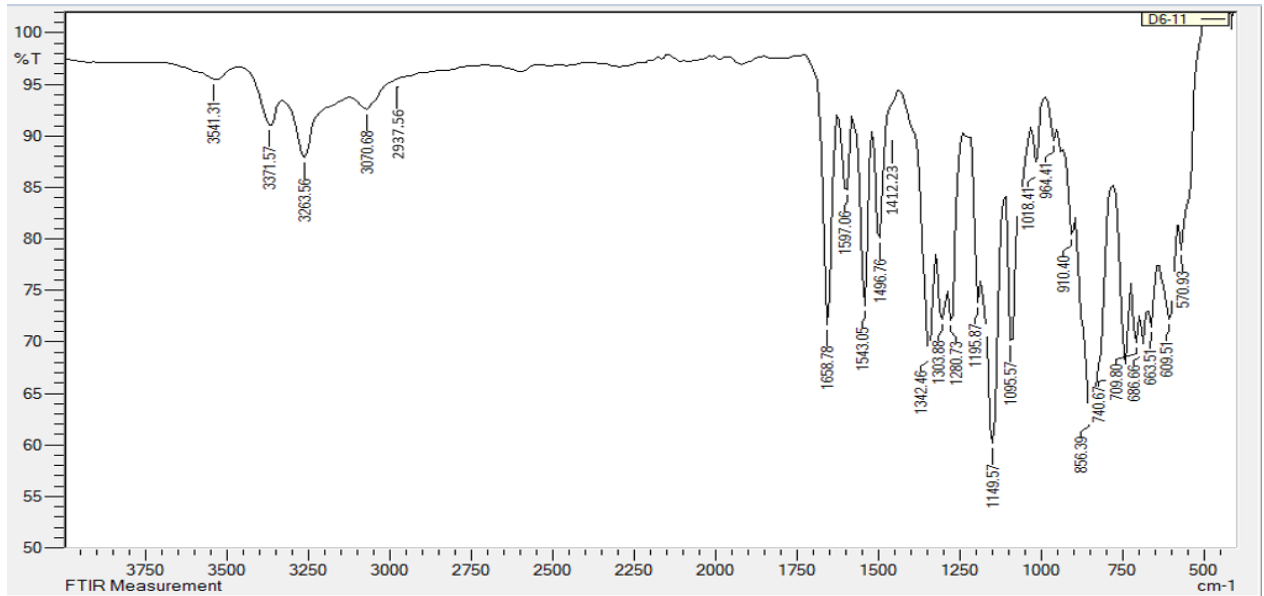
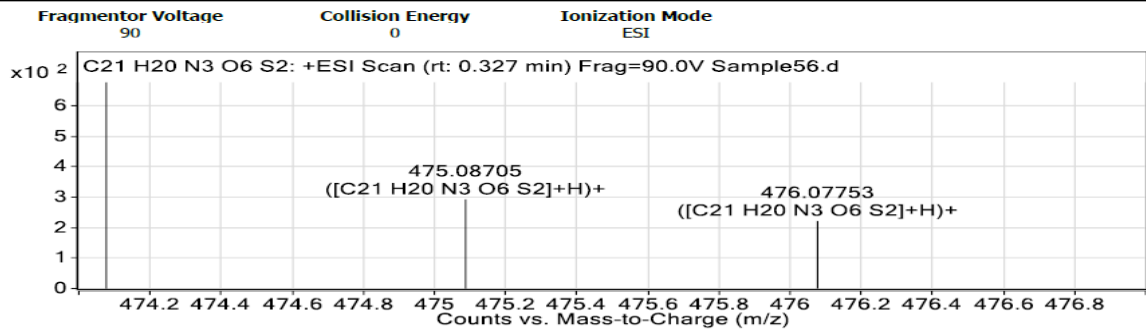
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¹H NMR, ¹³C NMR, HRMS, and FT-IR spectra of **SH1**

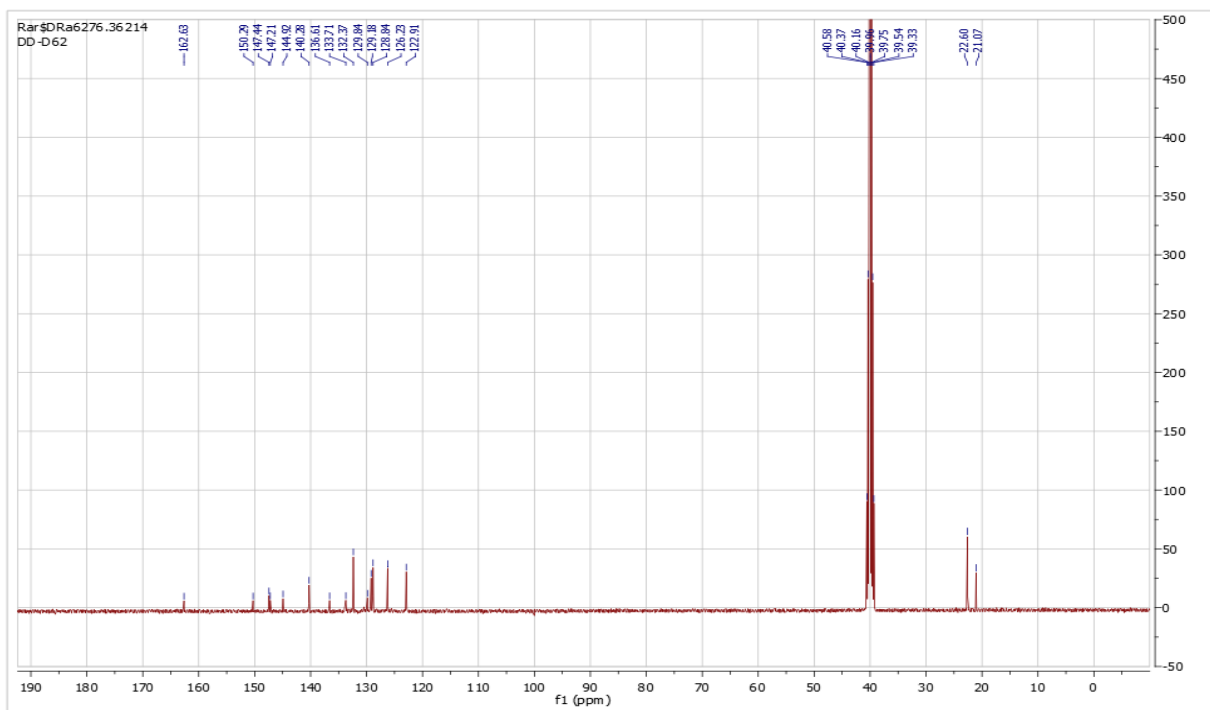
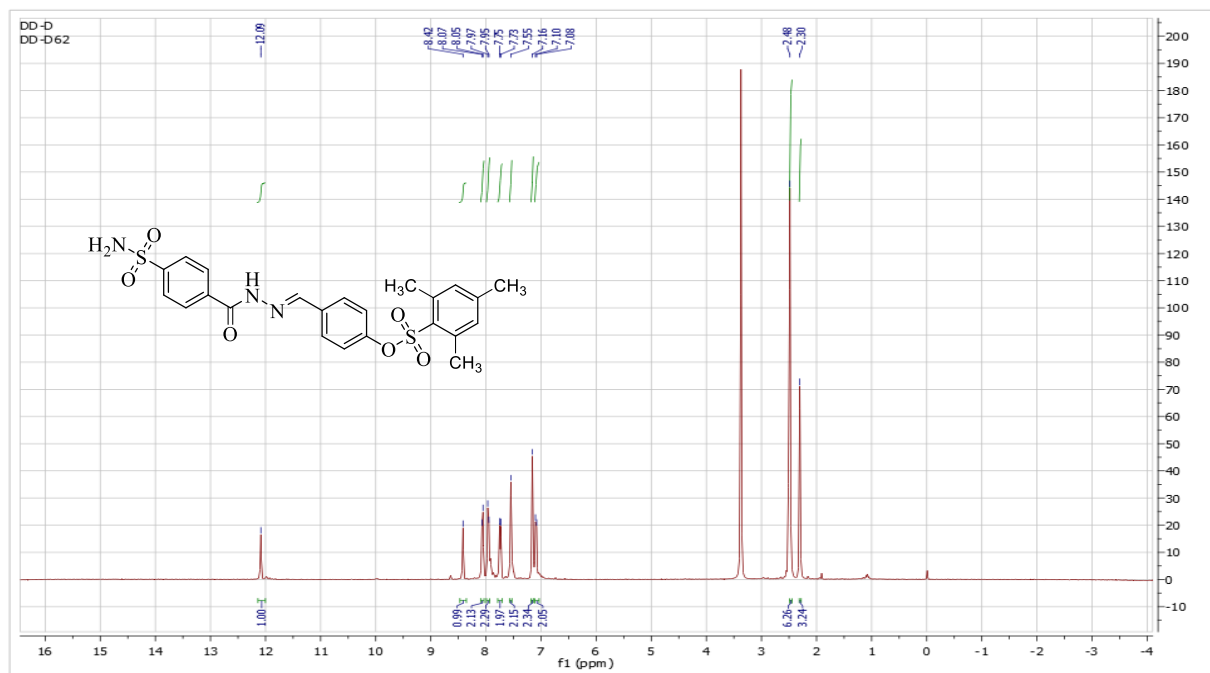




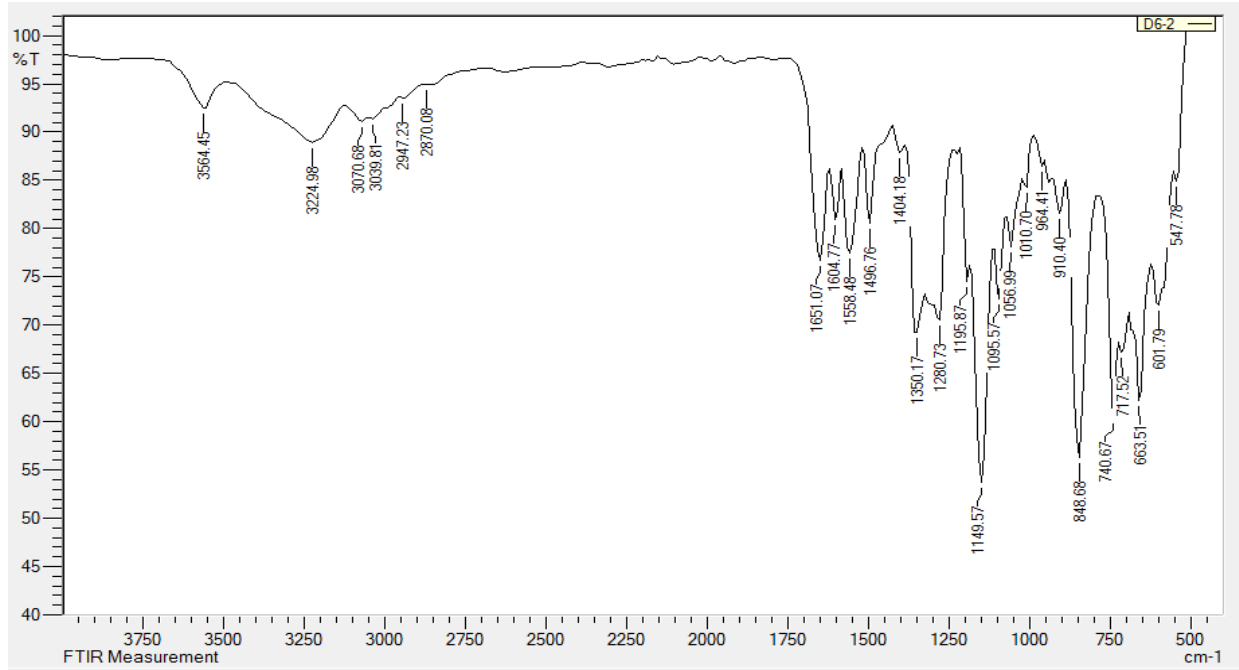
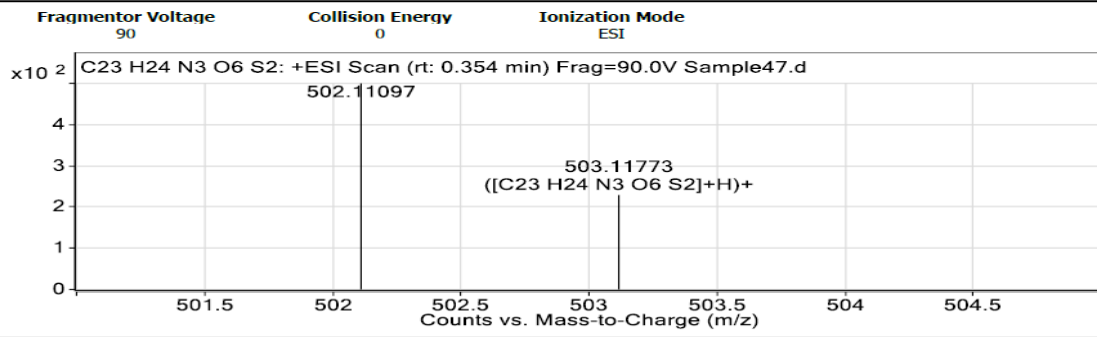
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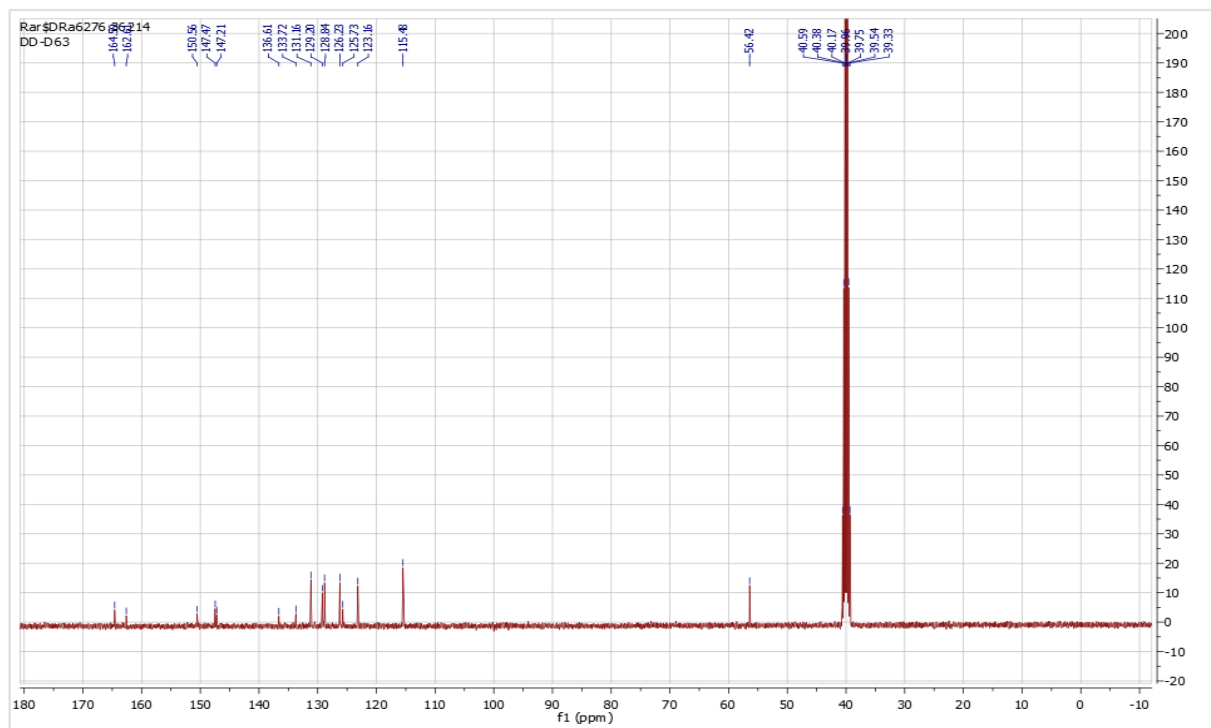
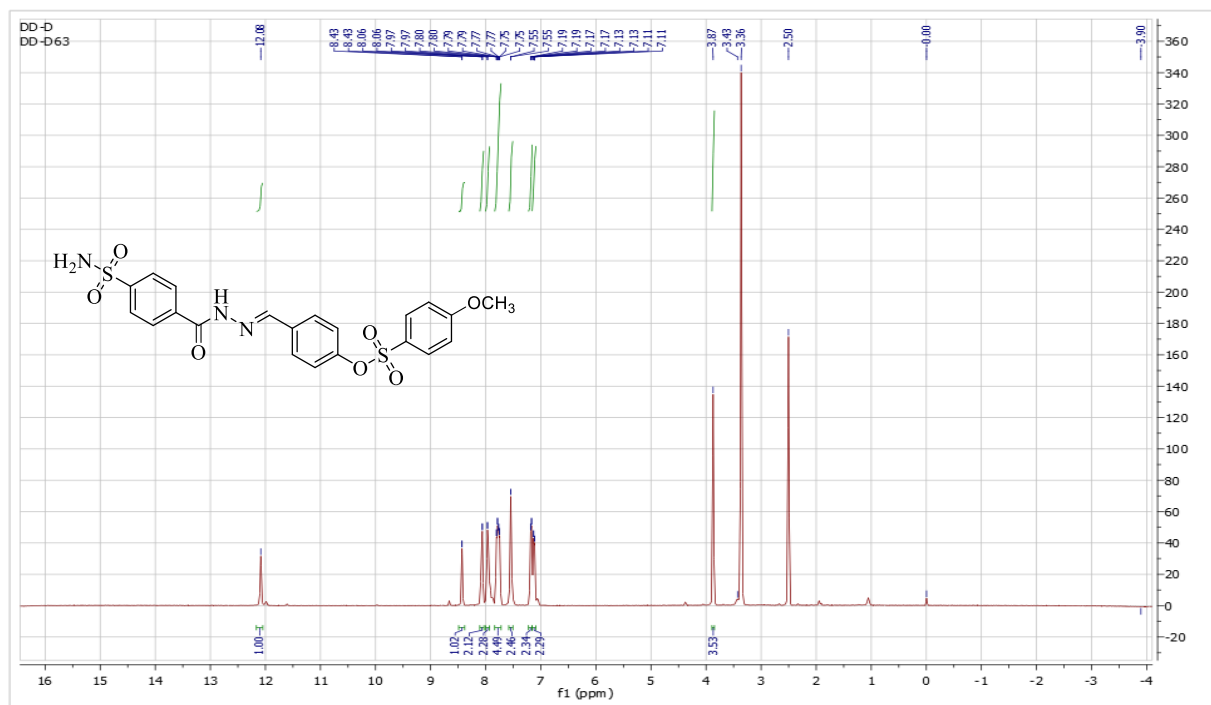
^1H NMR, ^{13}C NMR, HRMS, and FT-IR spectra of **SH2**



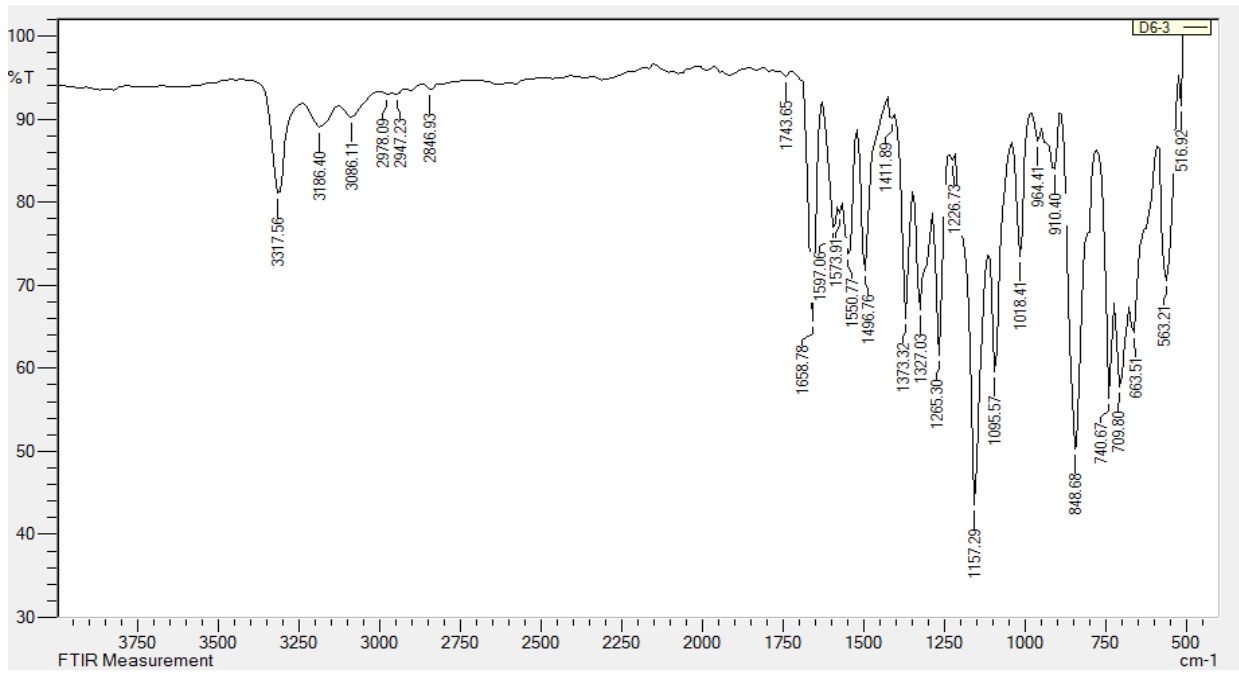
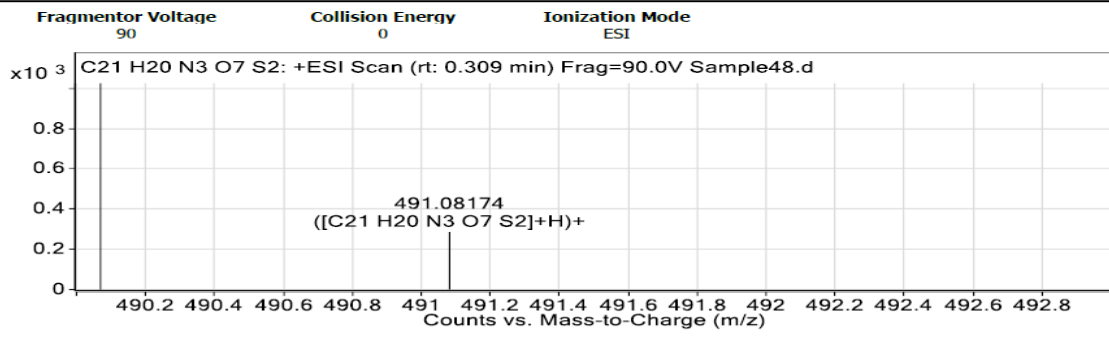
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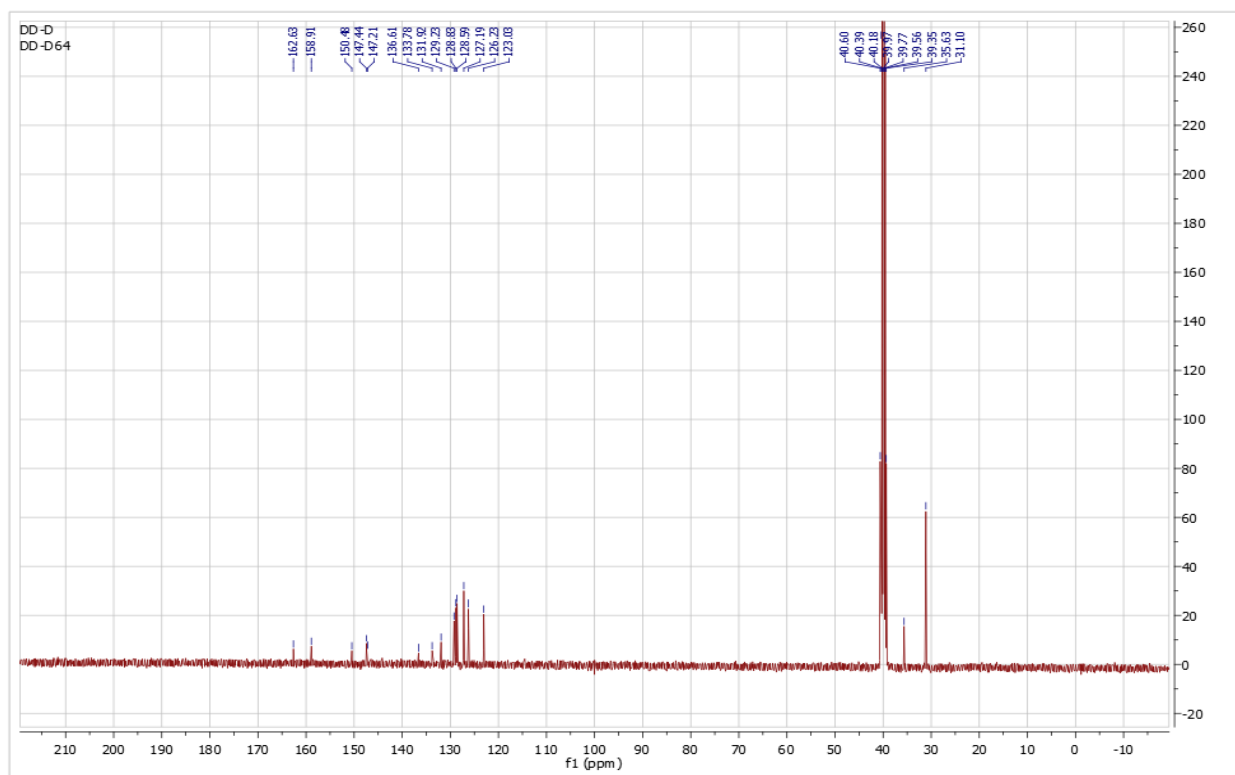
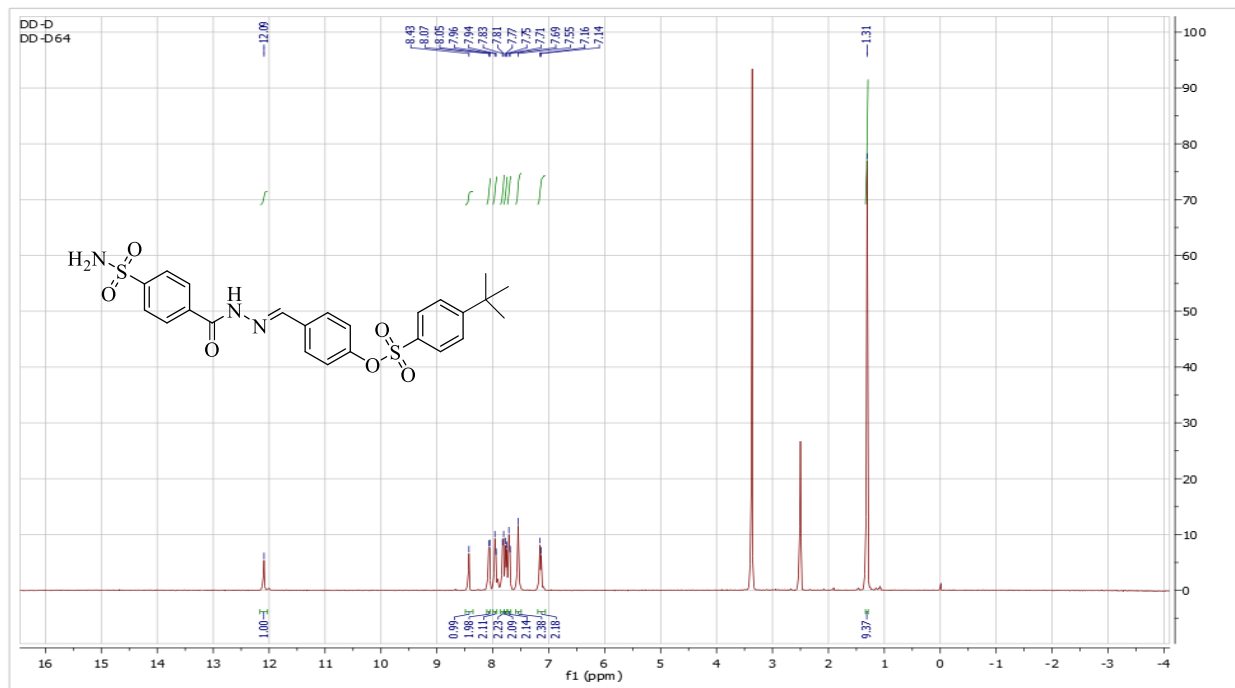
^1H NMR, ^{13}C NMR, HRMS, and FT-IR spectra of **SH3**



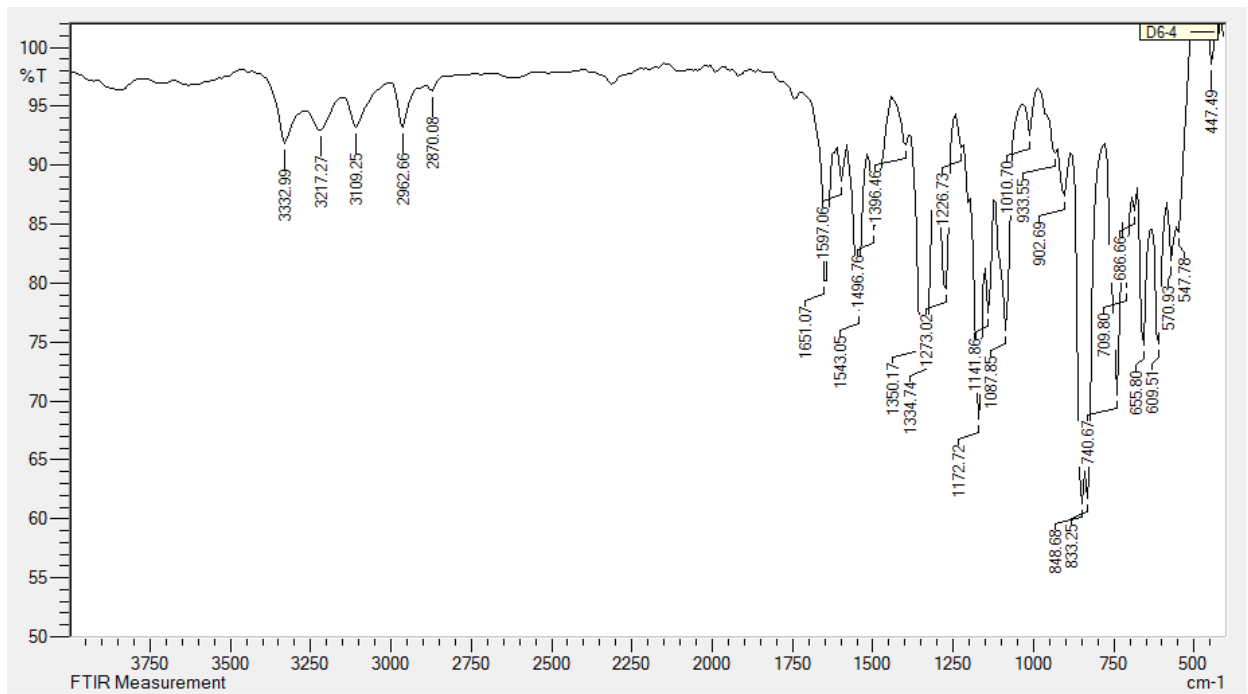
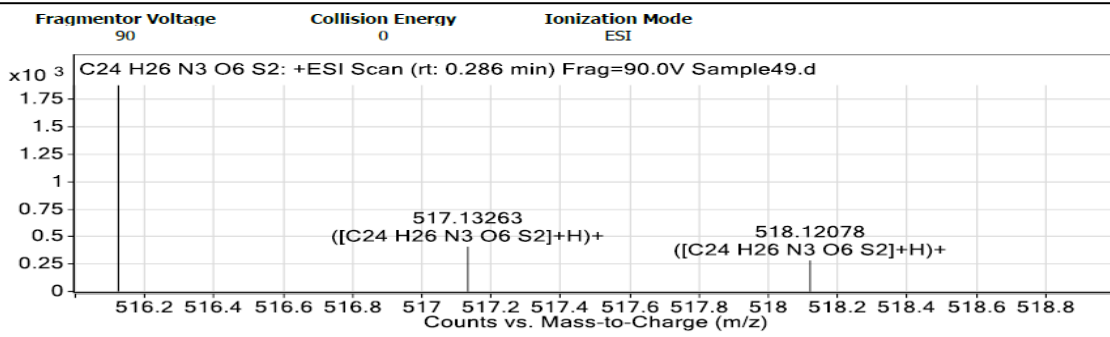
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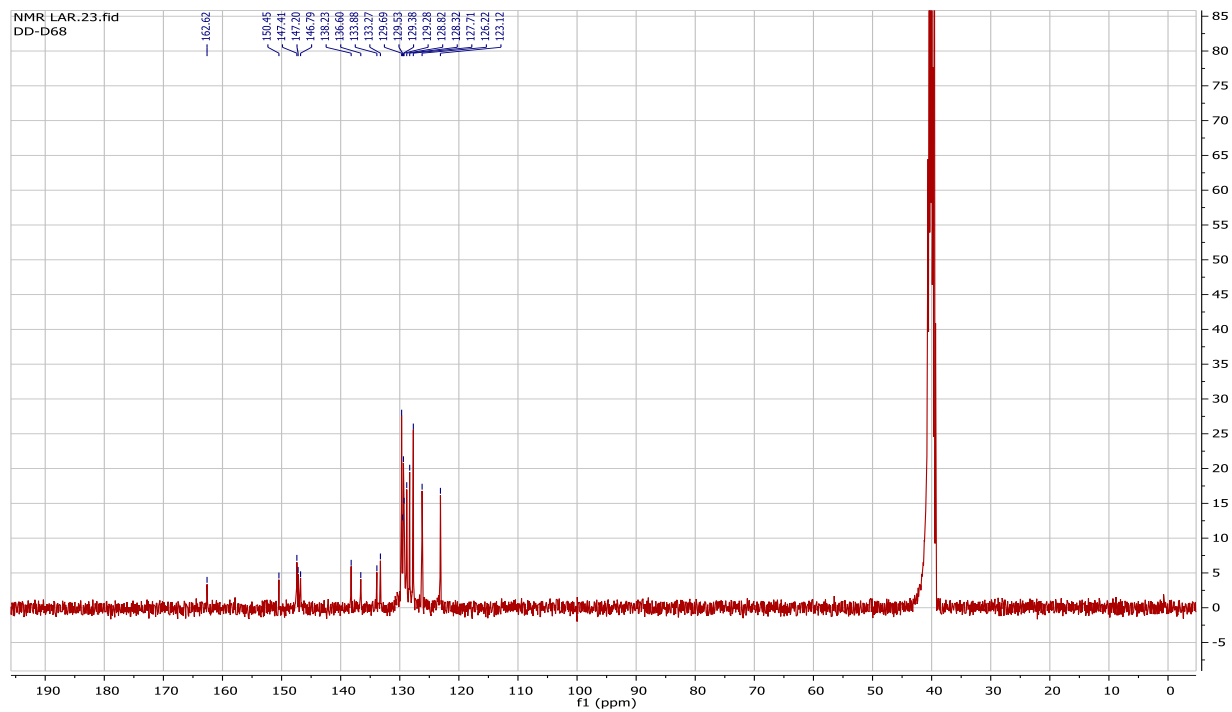
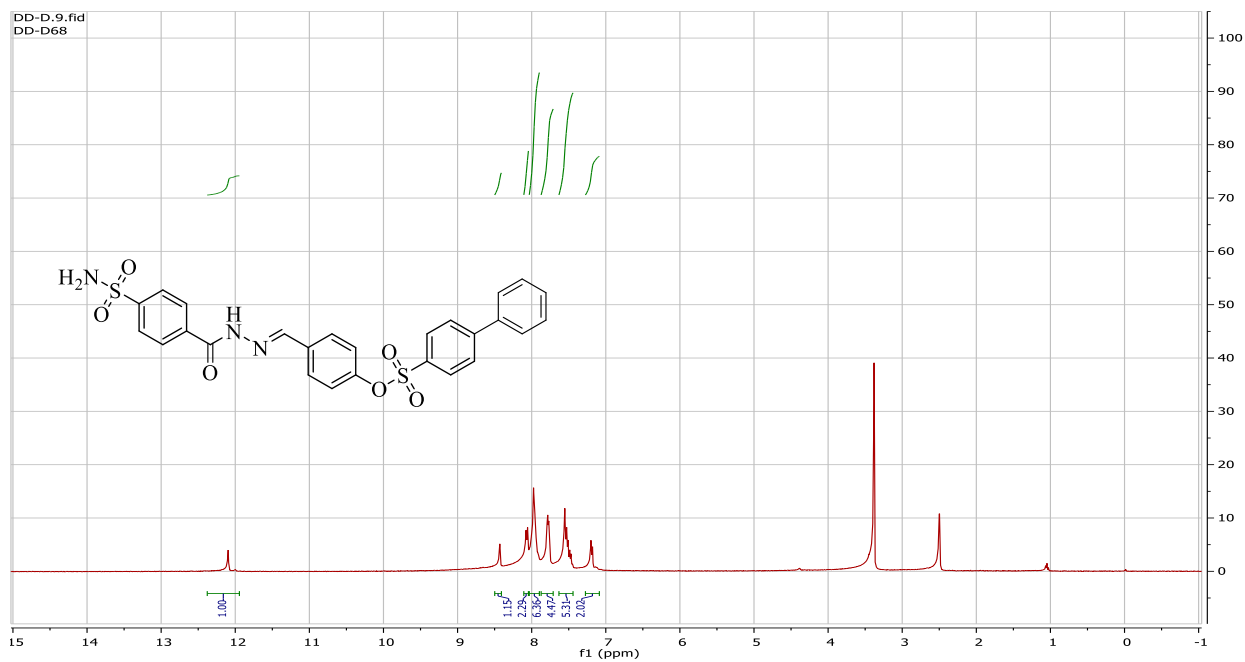
^1H NMR, ^{13}C NMR, HRMS, and FT-IR spectra of **SH4**



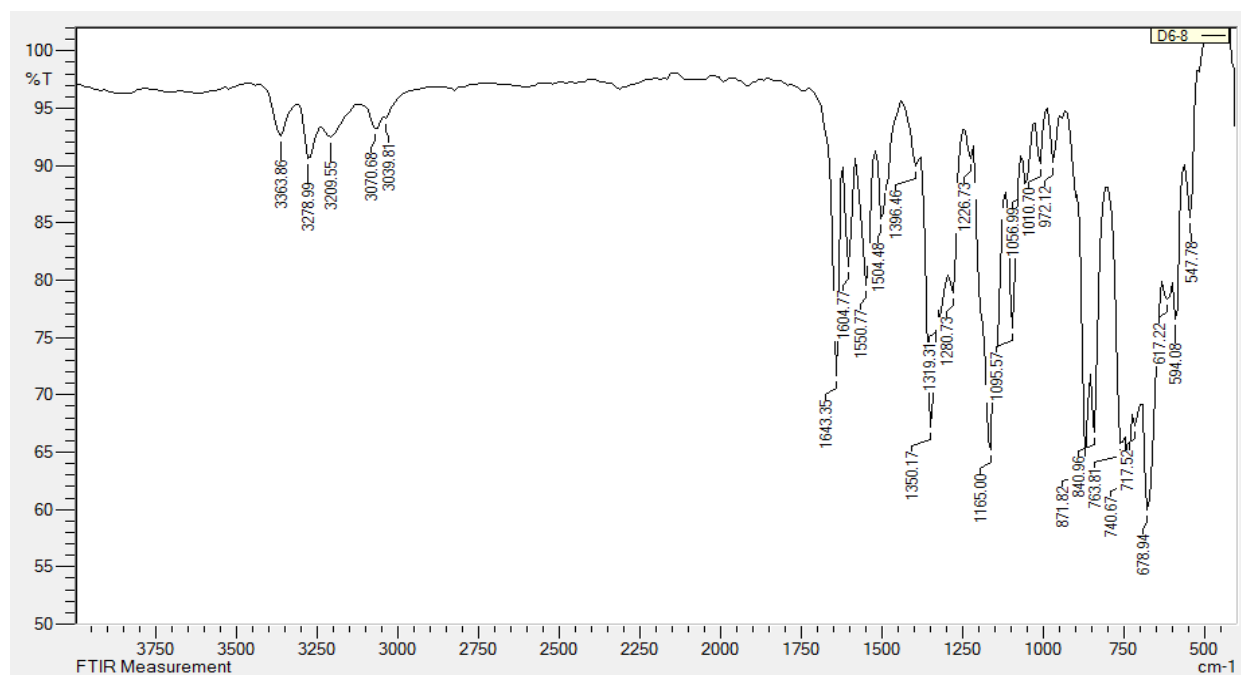
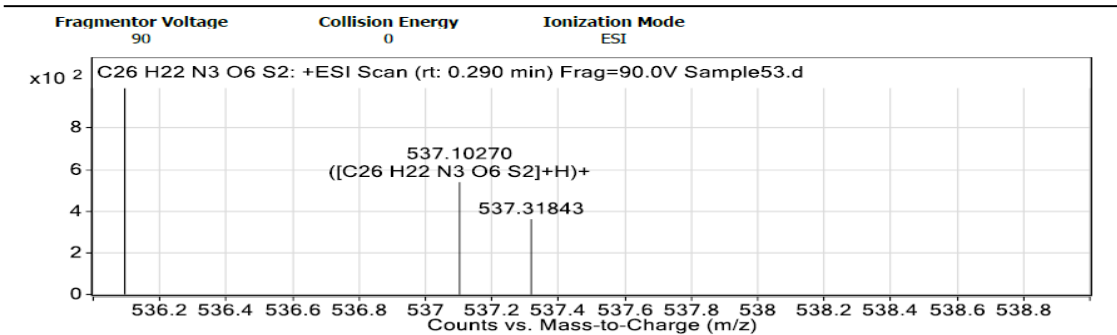
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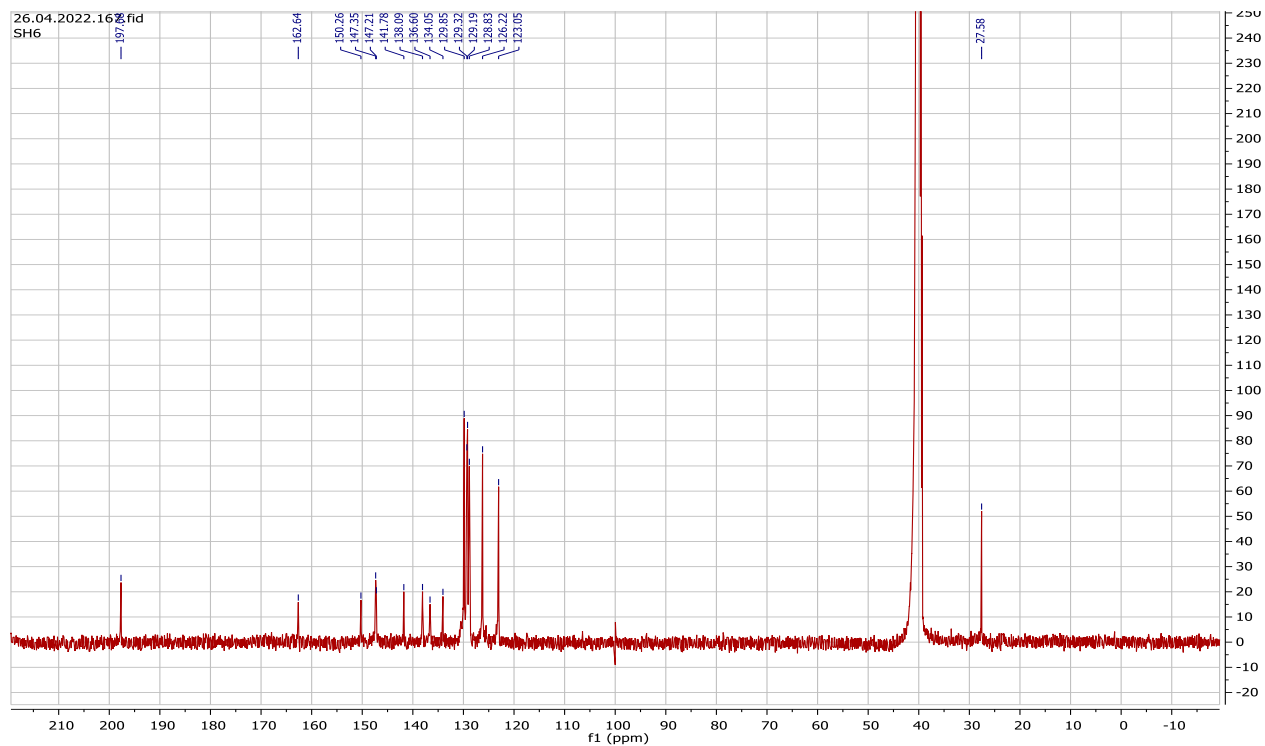
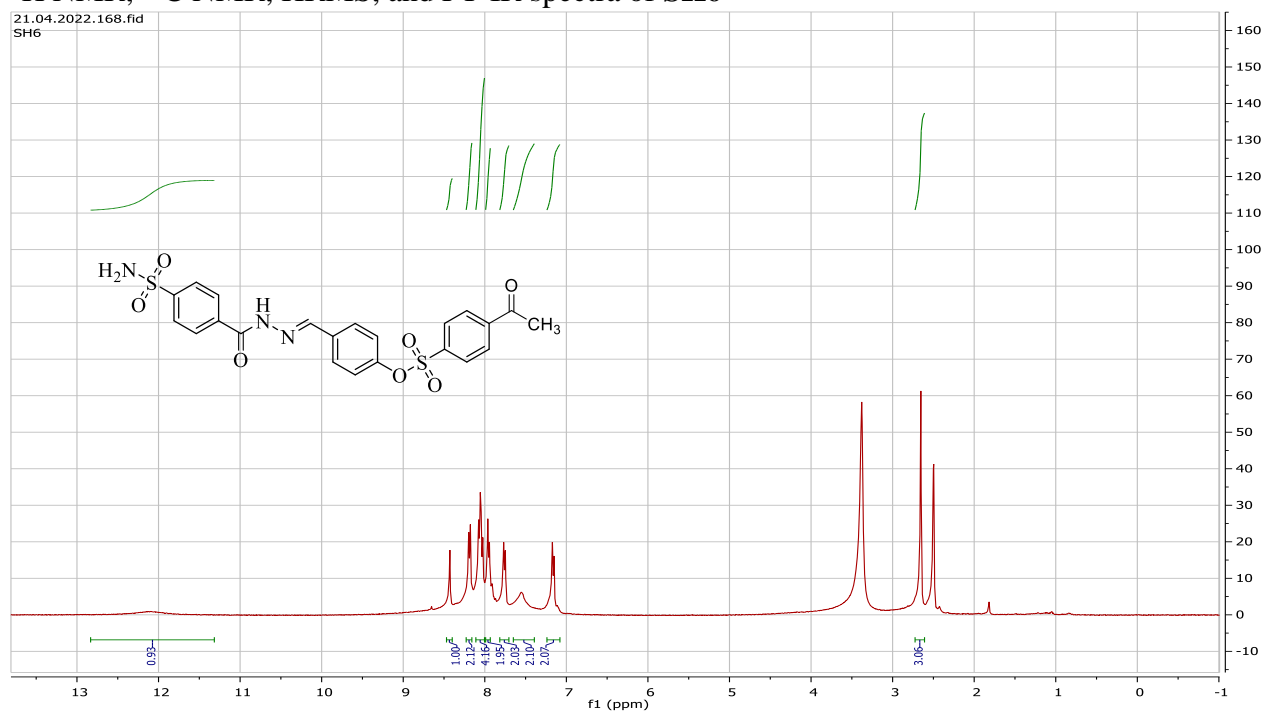
^1H NMR, ^{13}C NMR, HRMS, and FT-IR spectra of SH5



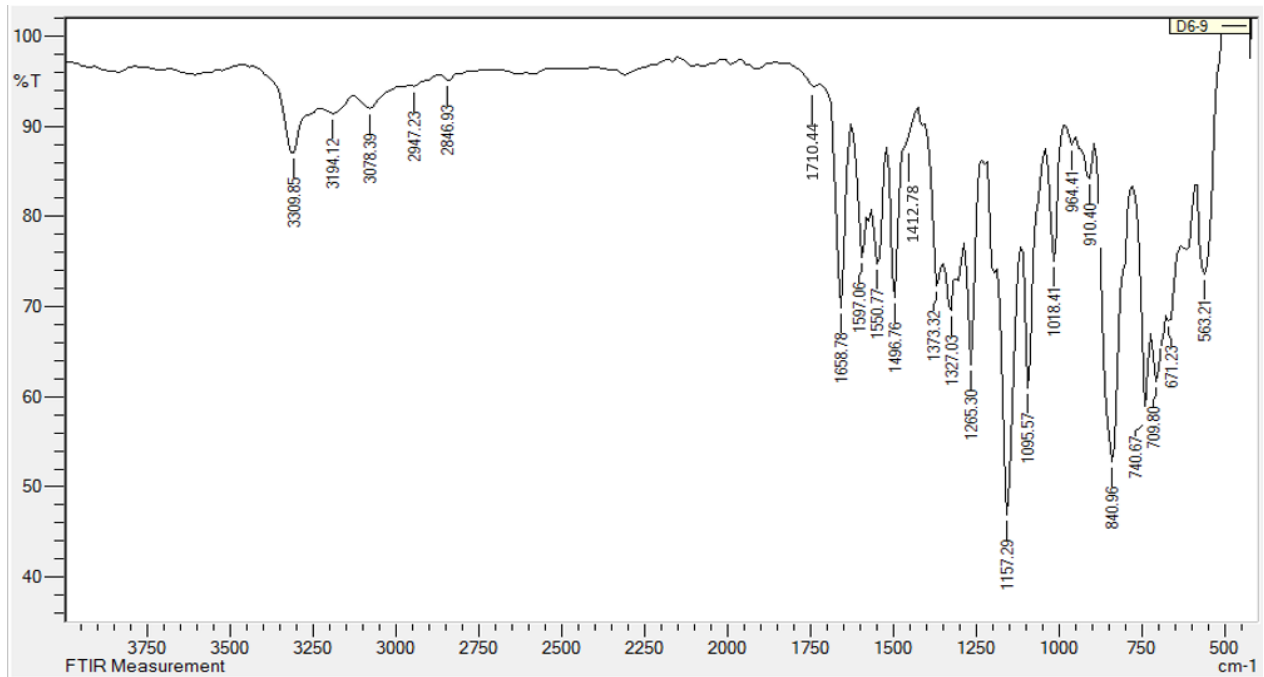
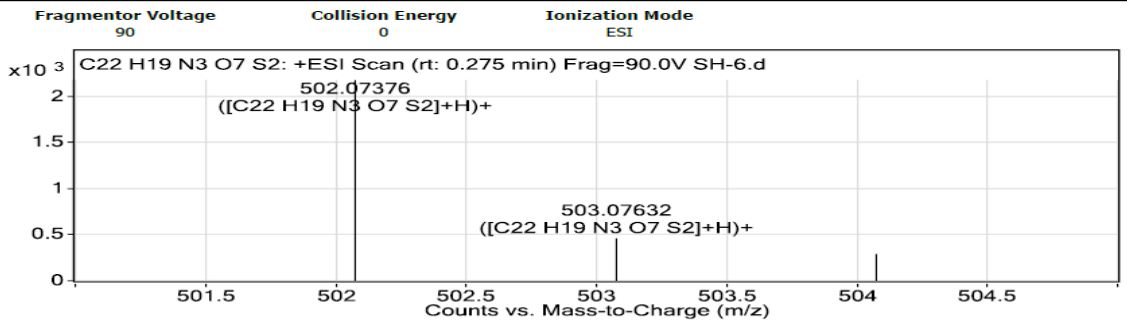
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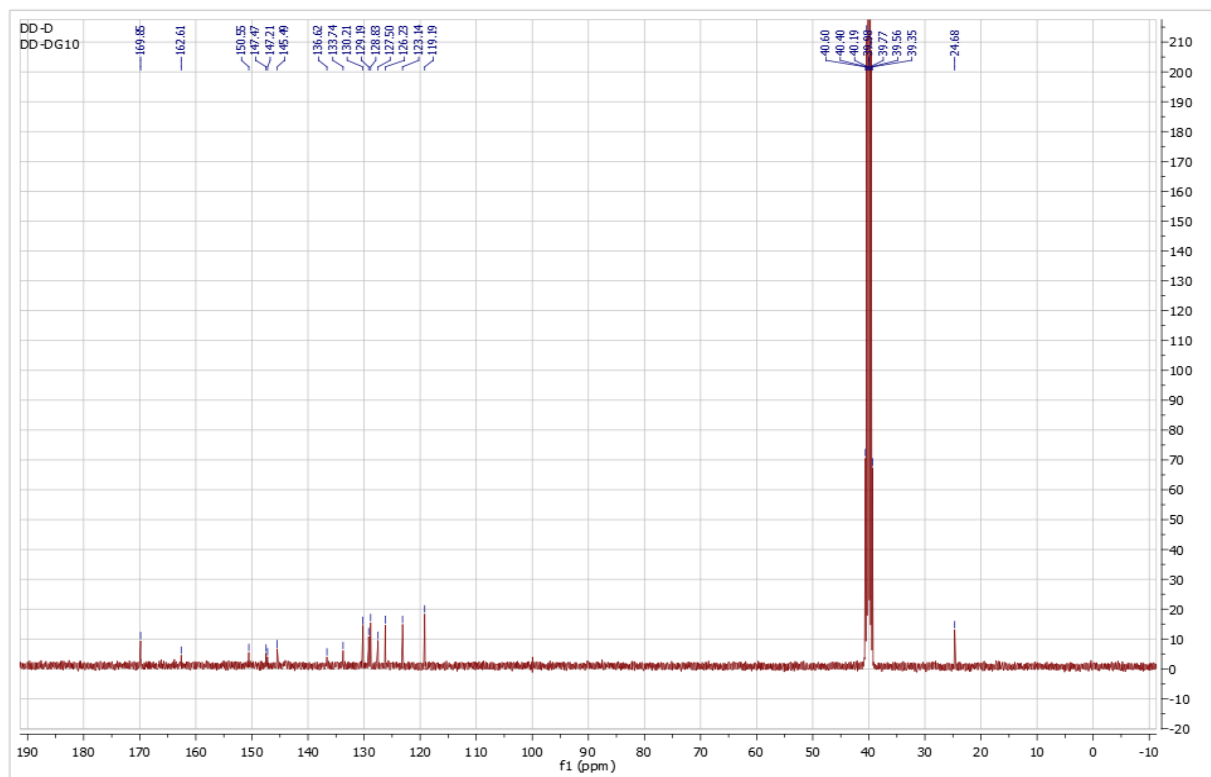
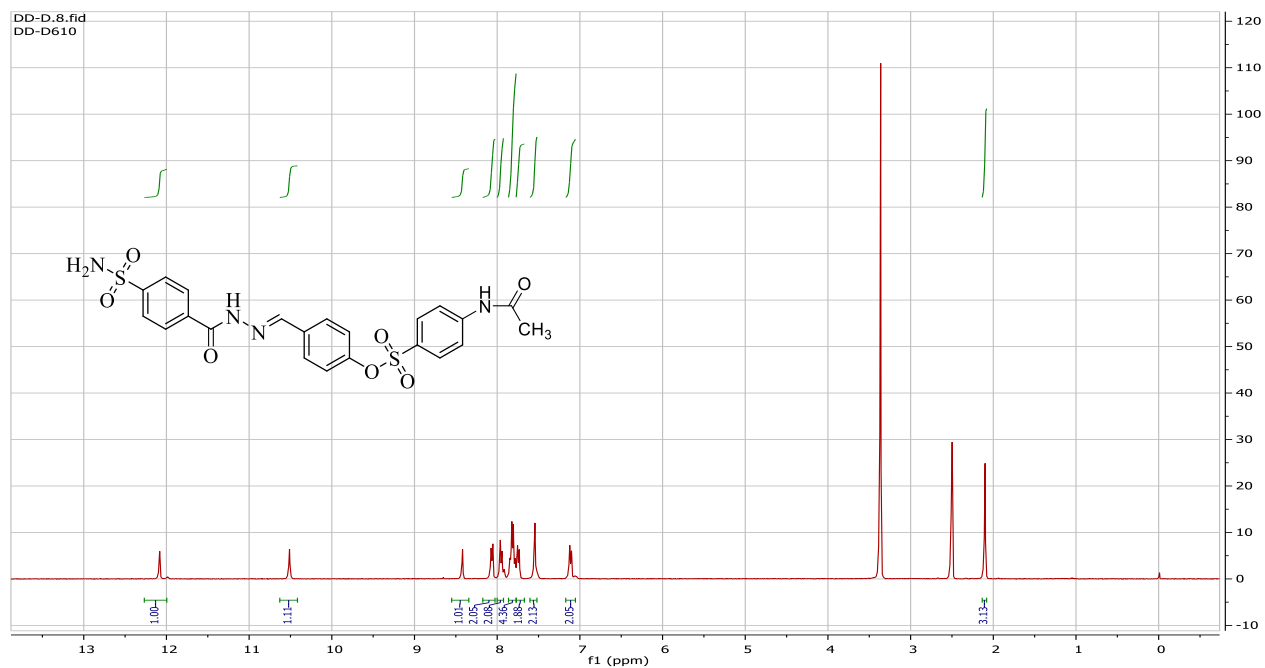
¹H NMR, ¹³C NMR, HRMS, and FT-IR spectra of SH6



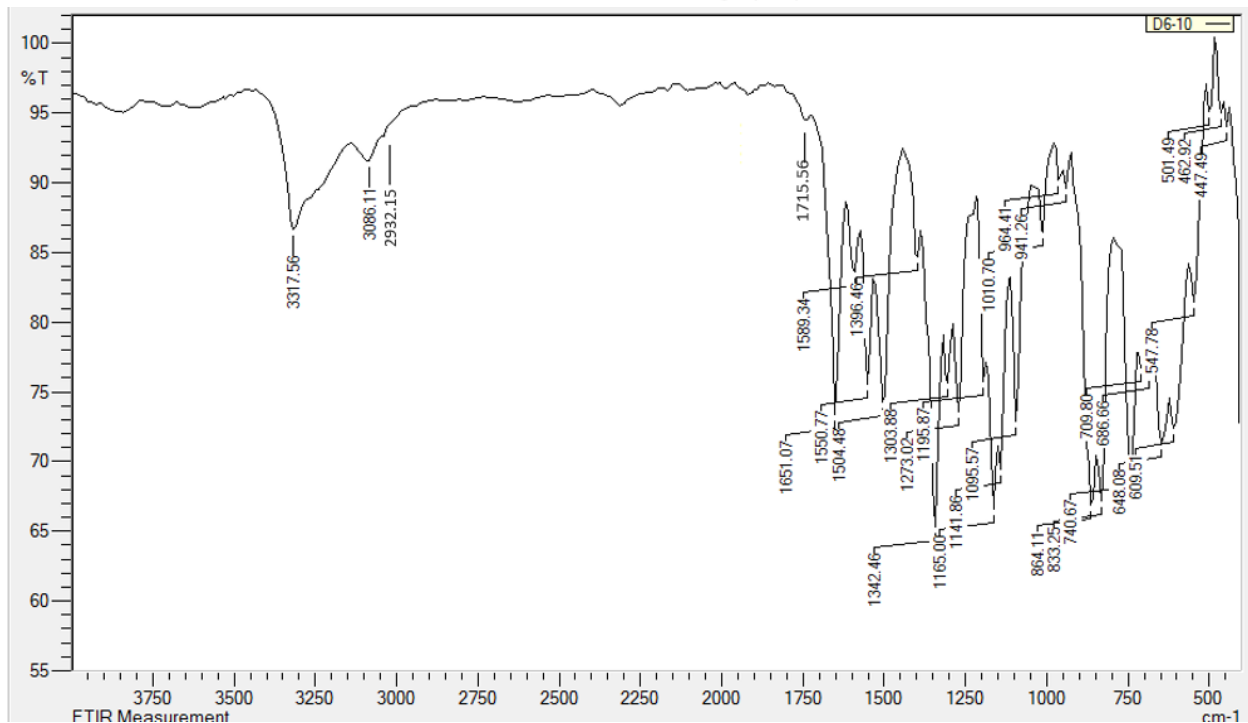
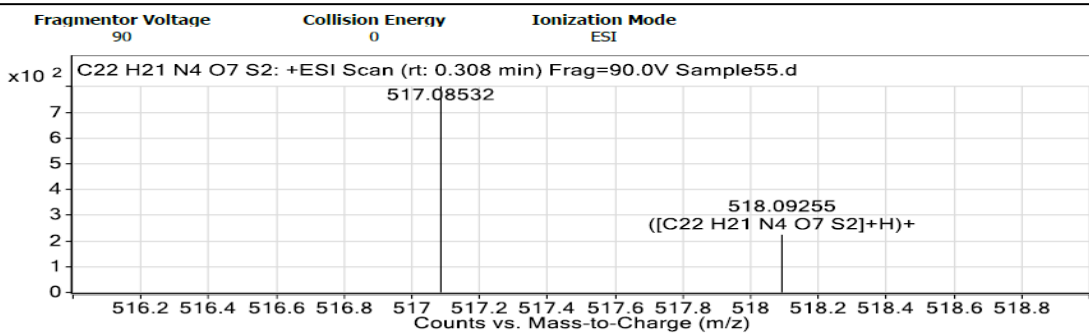
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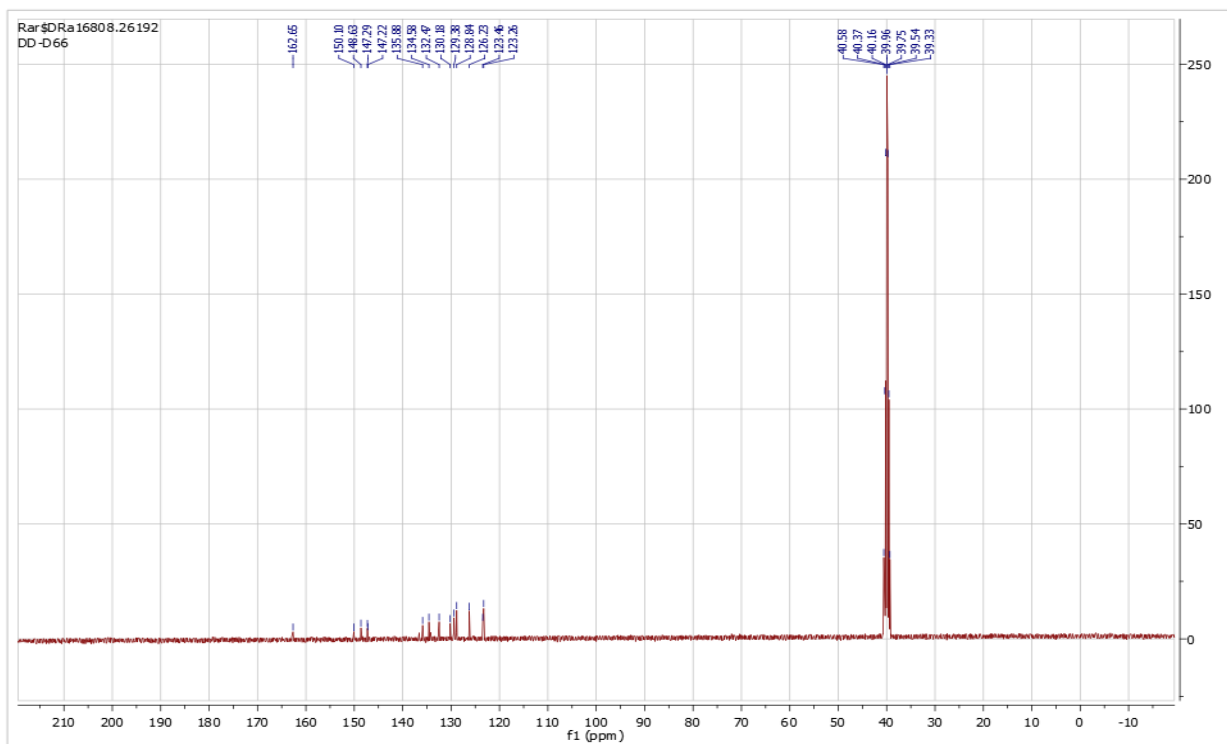
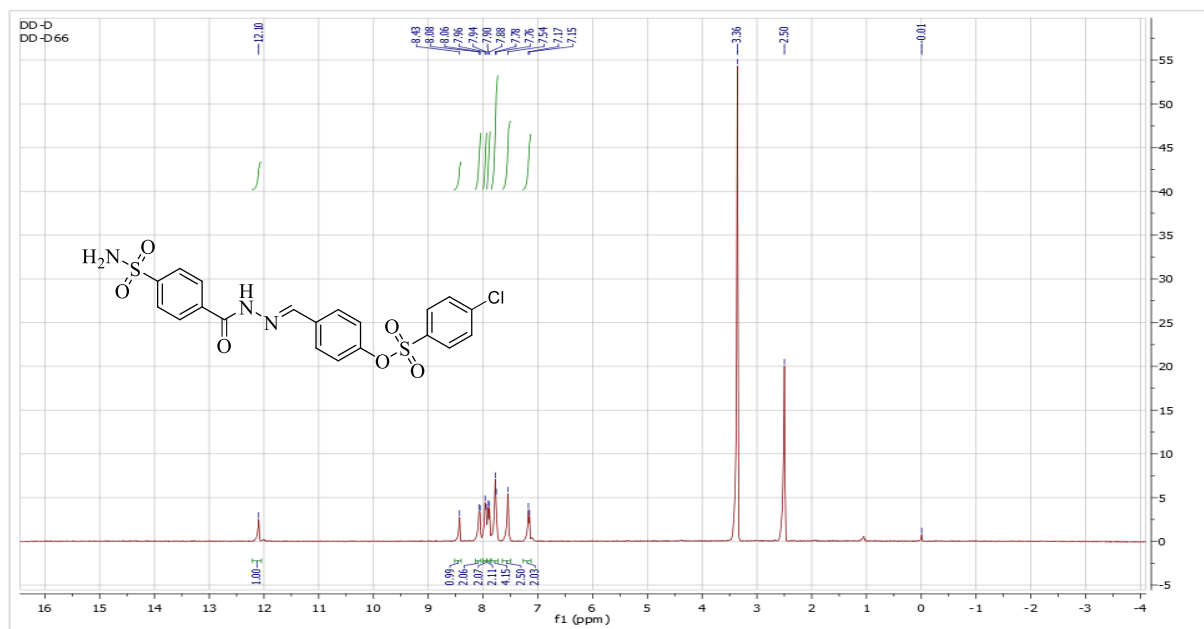
¹H NMR, ¹³C NMR, HRMS, and FT-IR spectra of SH7



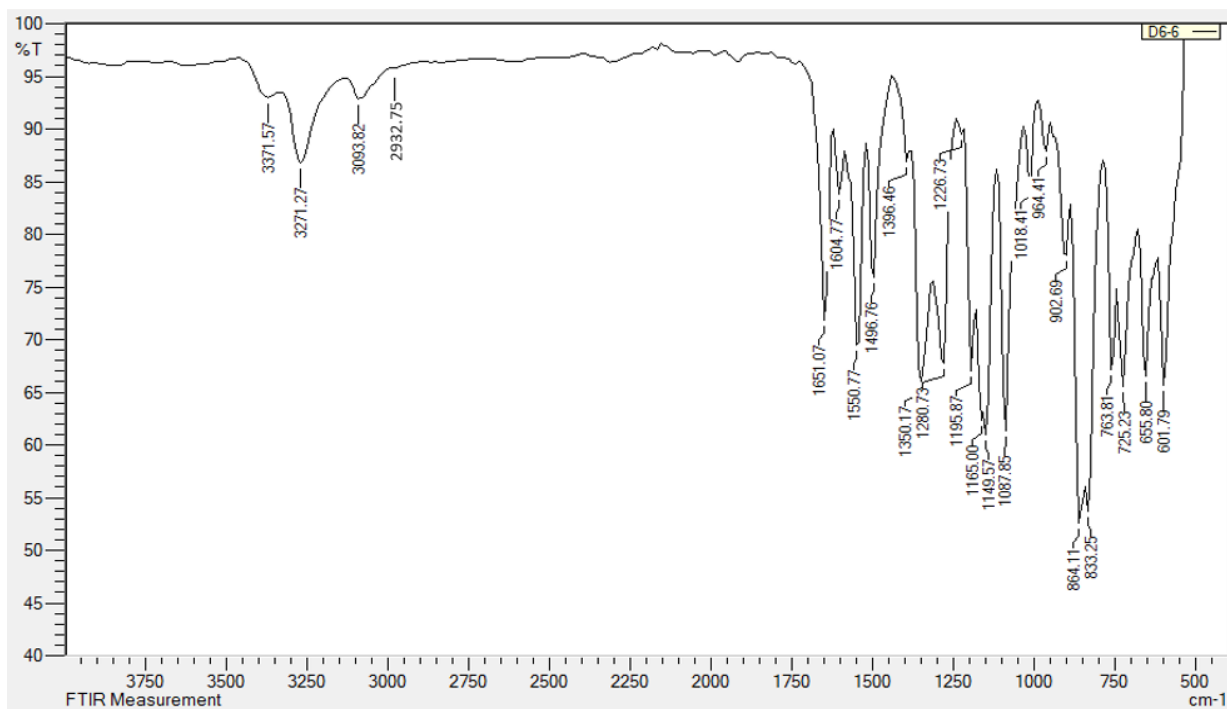
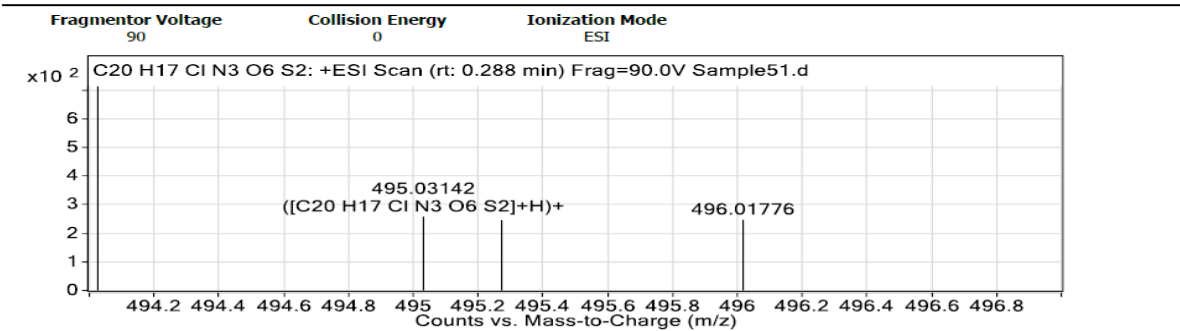
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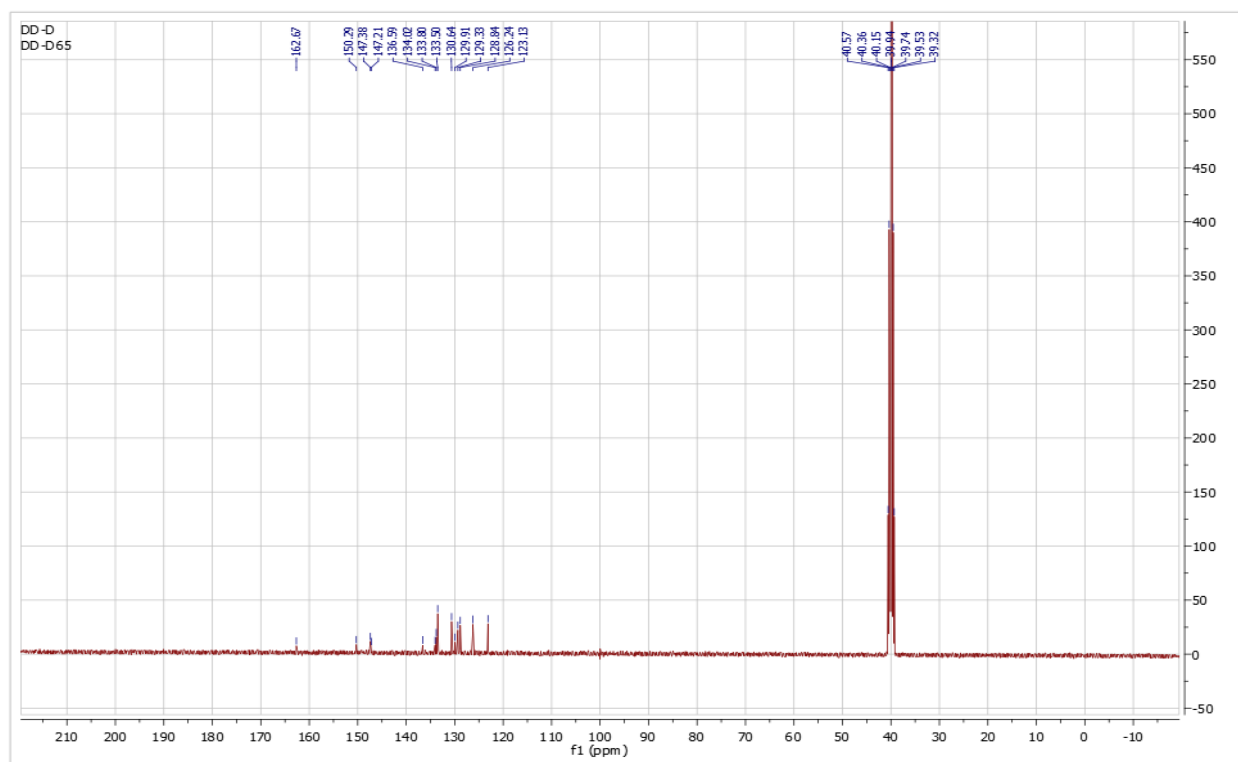
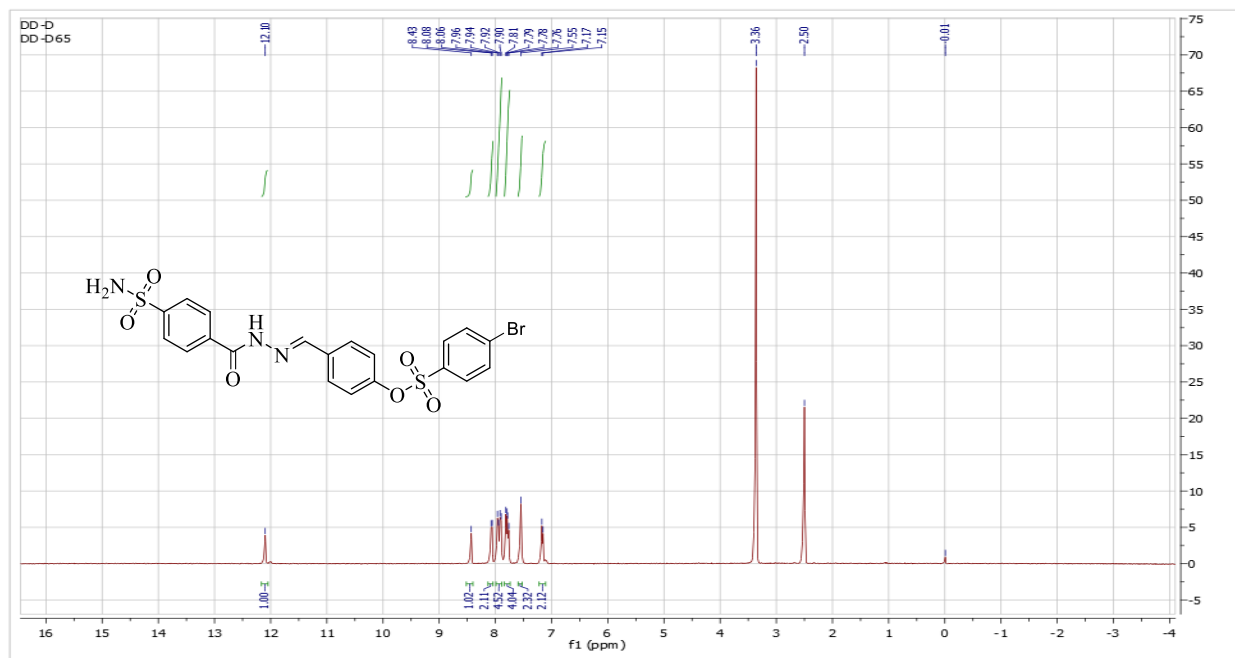
^1H NMR, ^{13}C NMR, HRMS, and FT-IR spectra of **SH8**



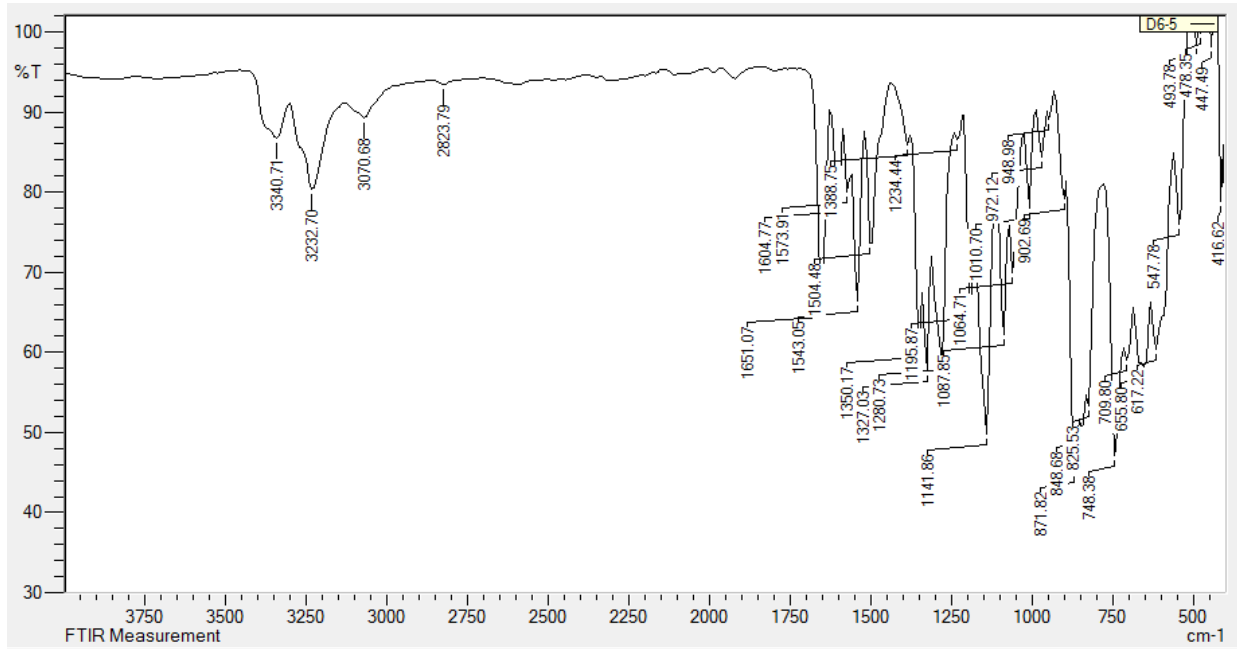
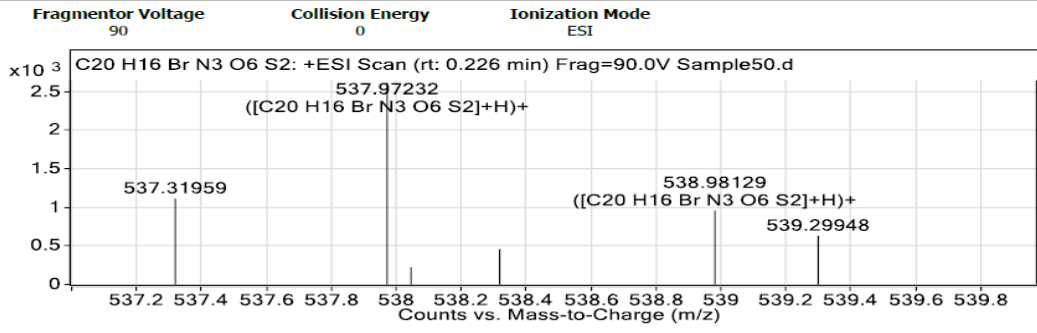
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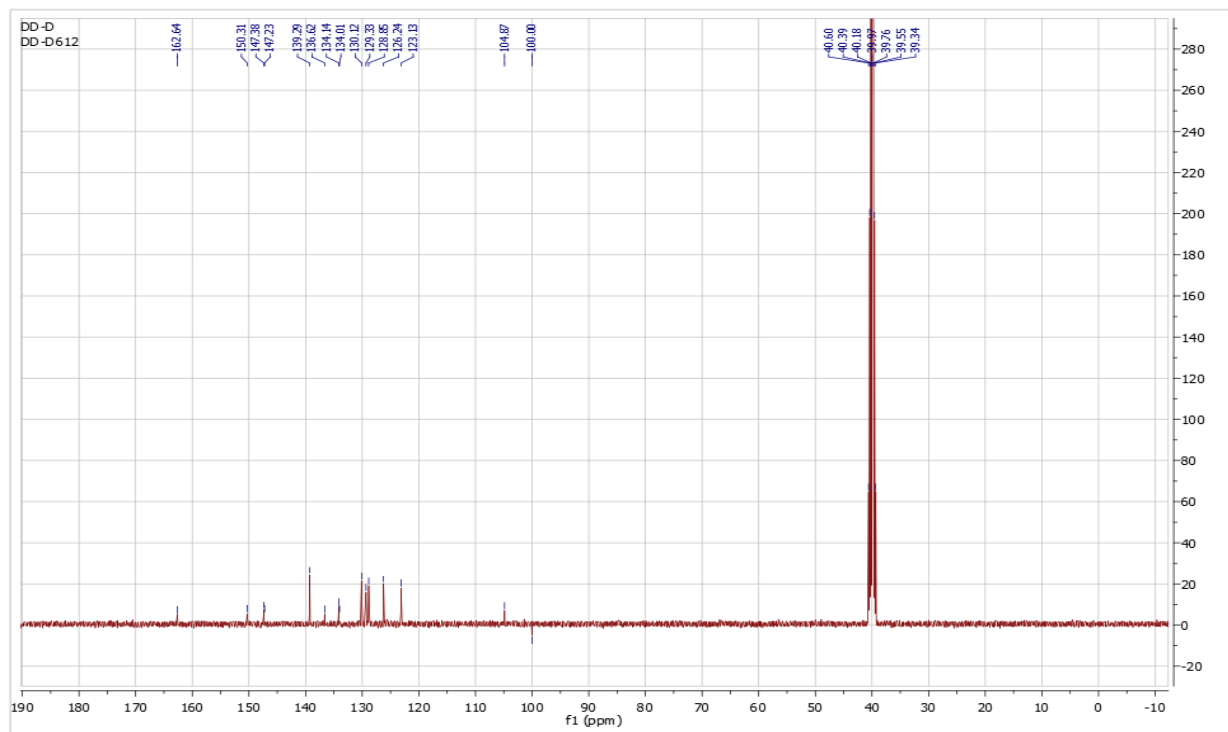
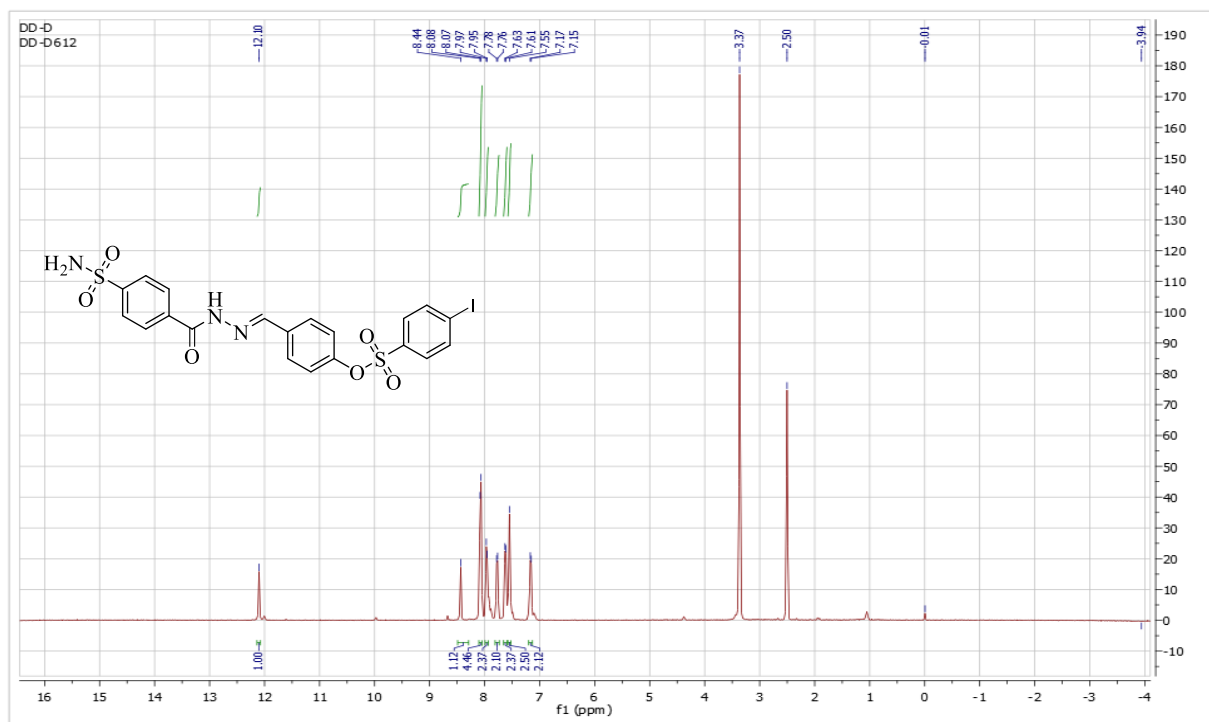
^1H NMR, ^{13}C NMR, HRMS, and FT-IR spectra of **SH9**



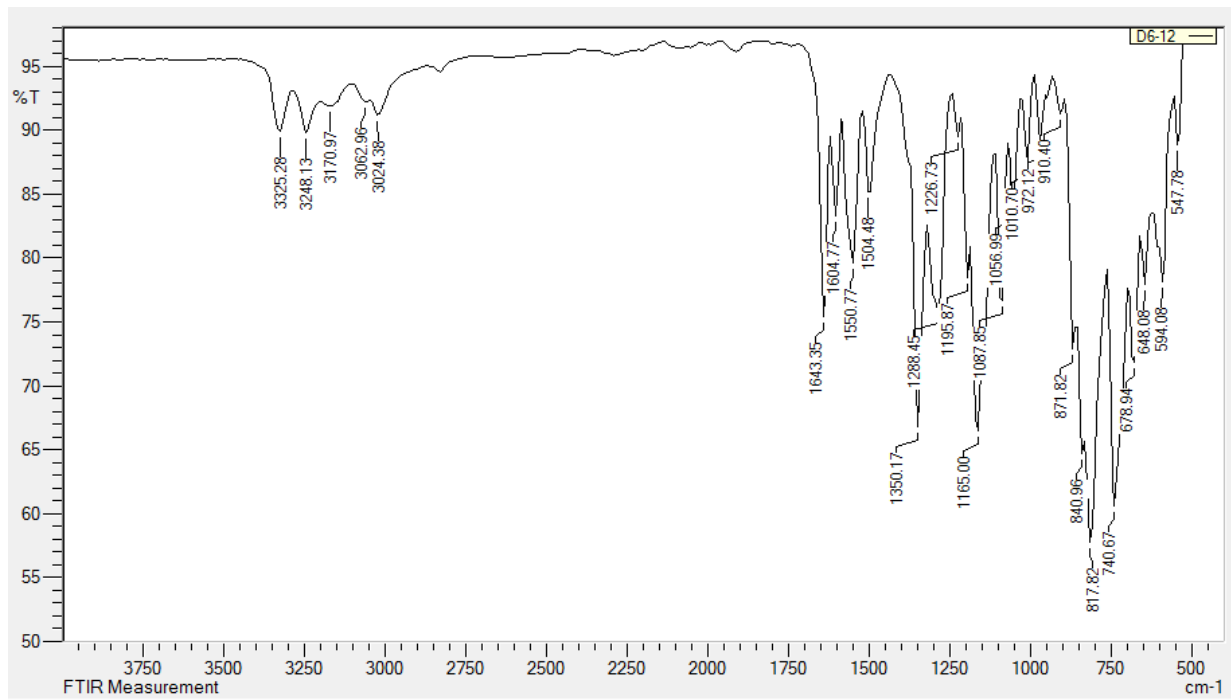
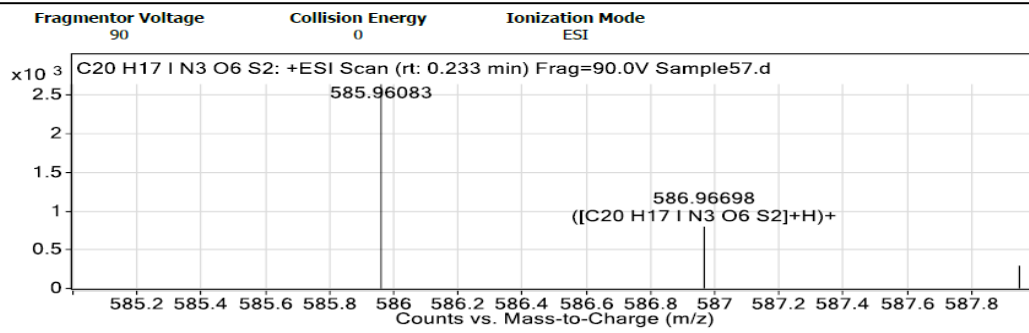
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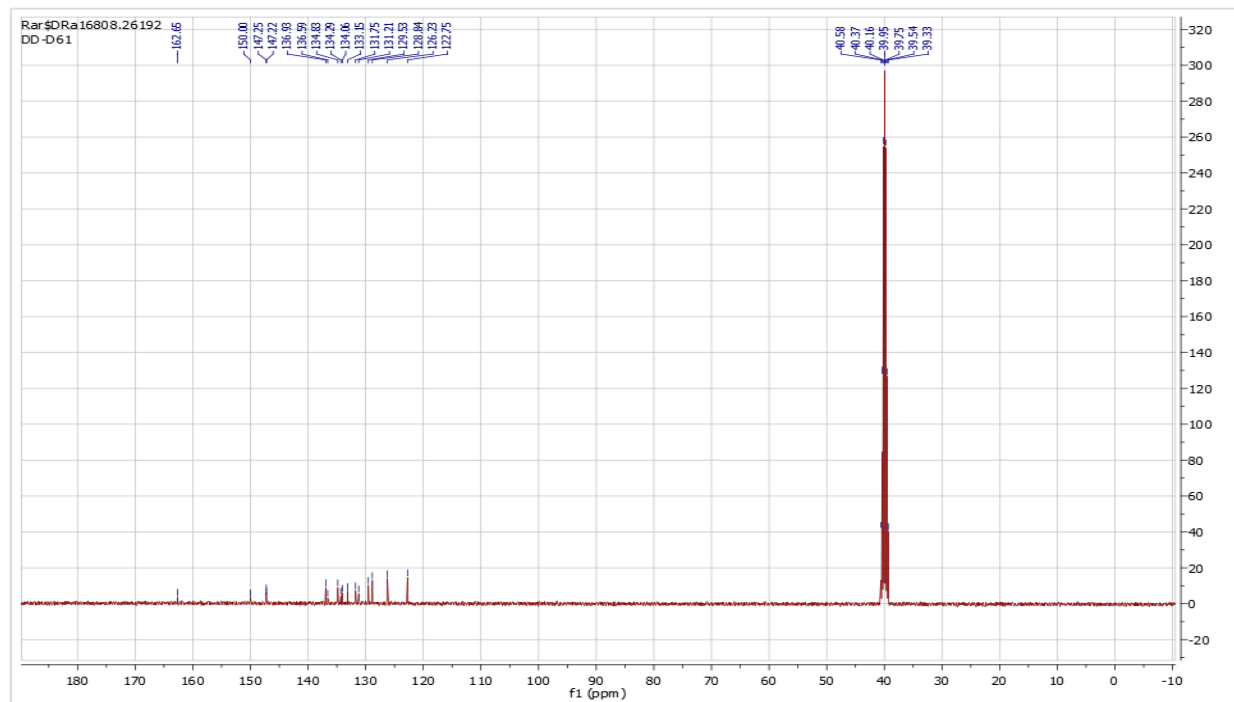
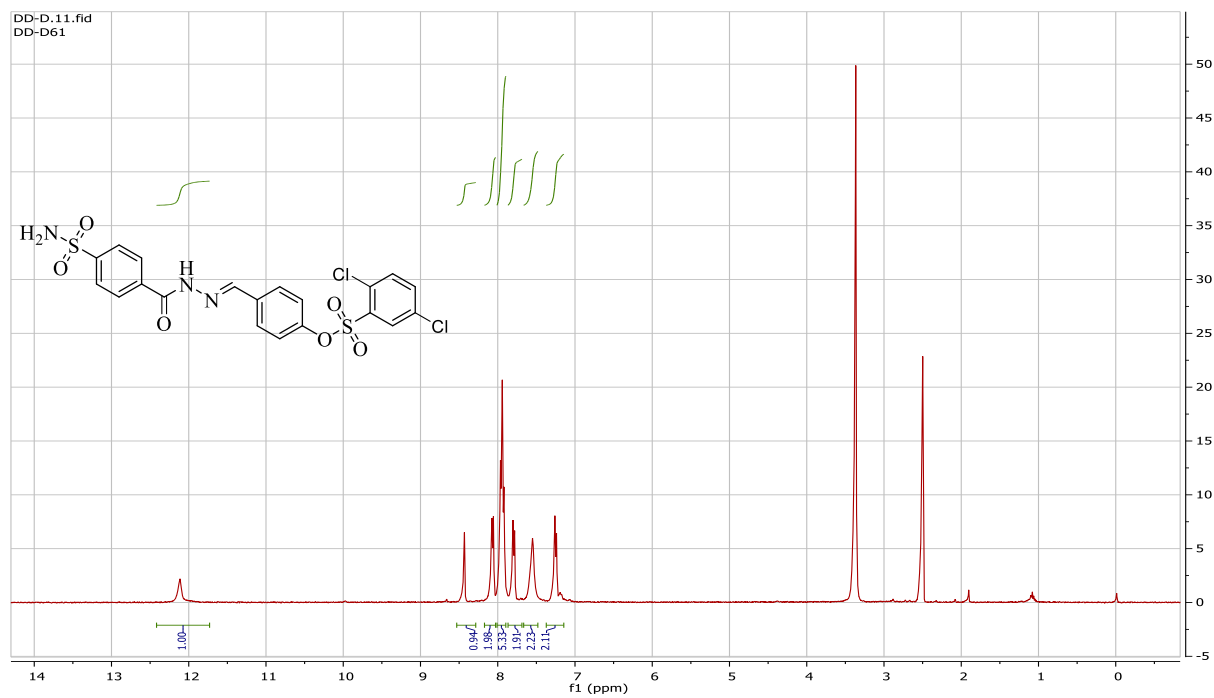
^1H NMR, ^{13}C NMR, HRMS, and FT-IR spectra of **SH10**



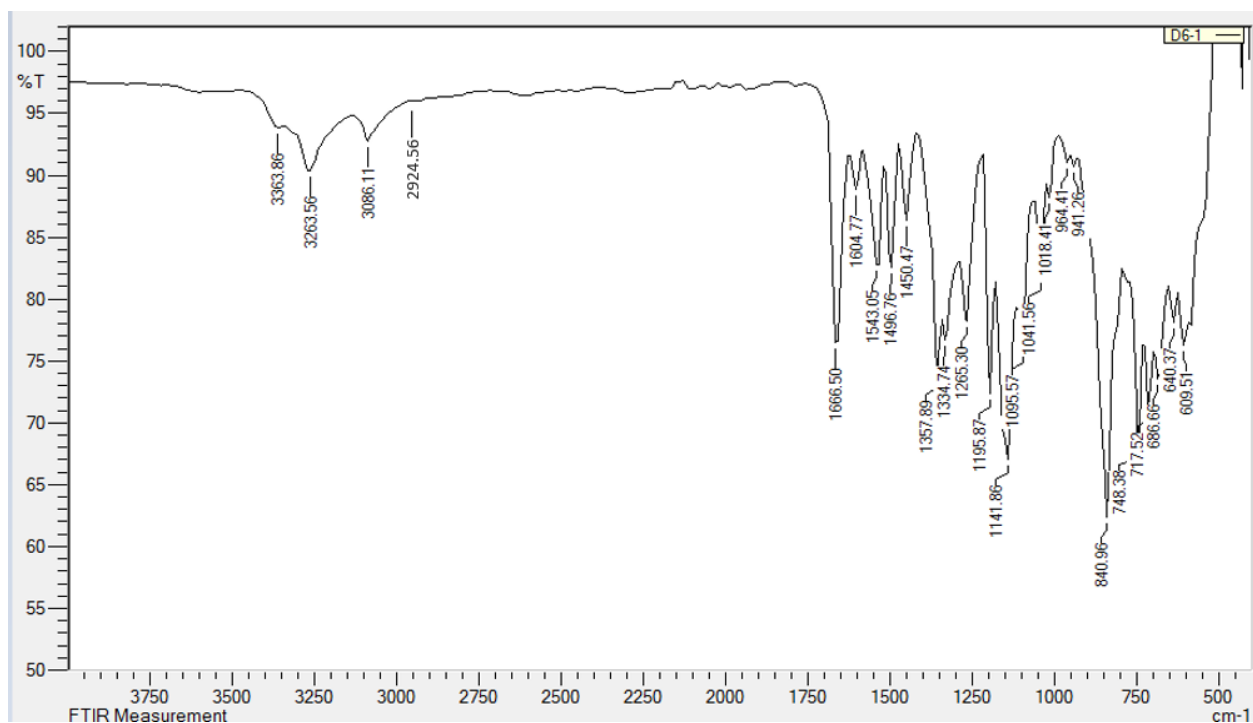
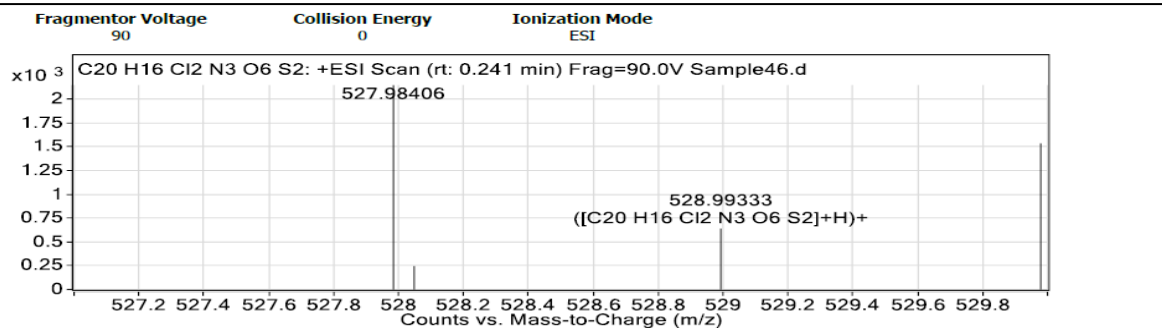
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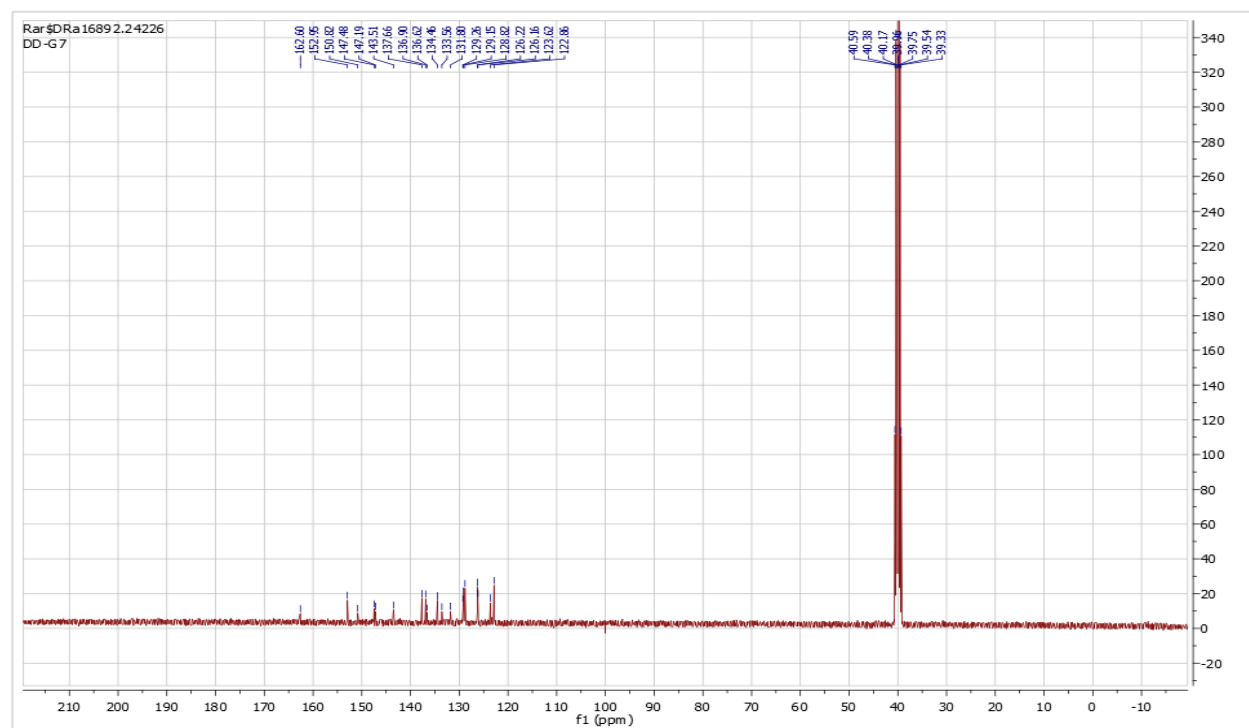
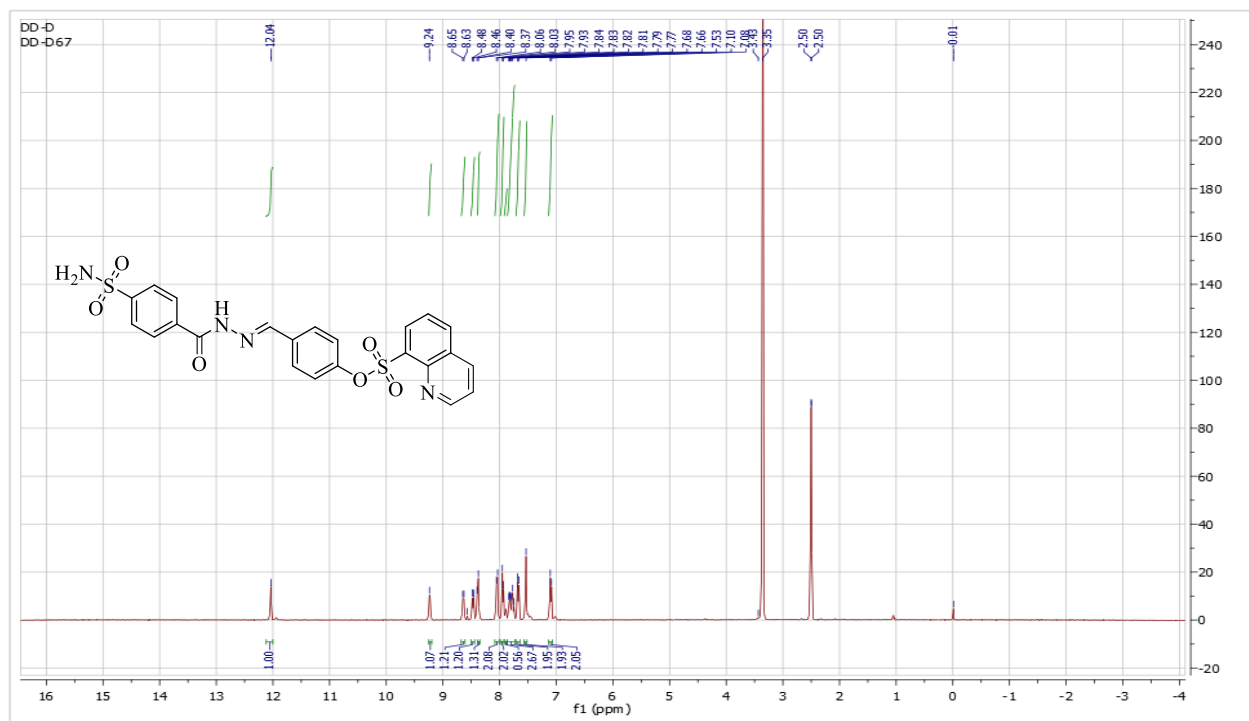
^1H NMR, ^{13}C NMR, HRMS, and FT-IR spectra of **SH11**



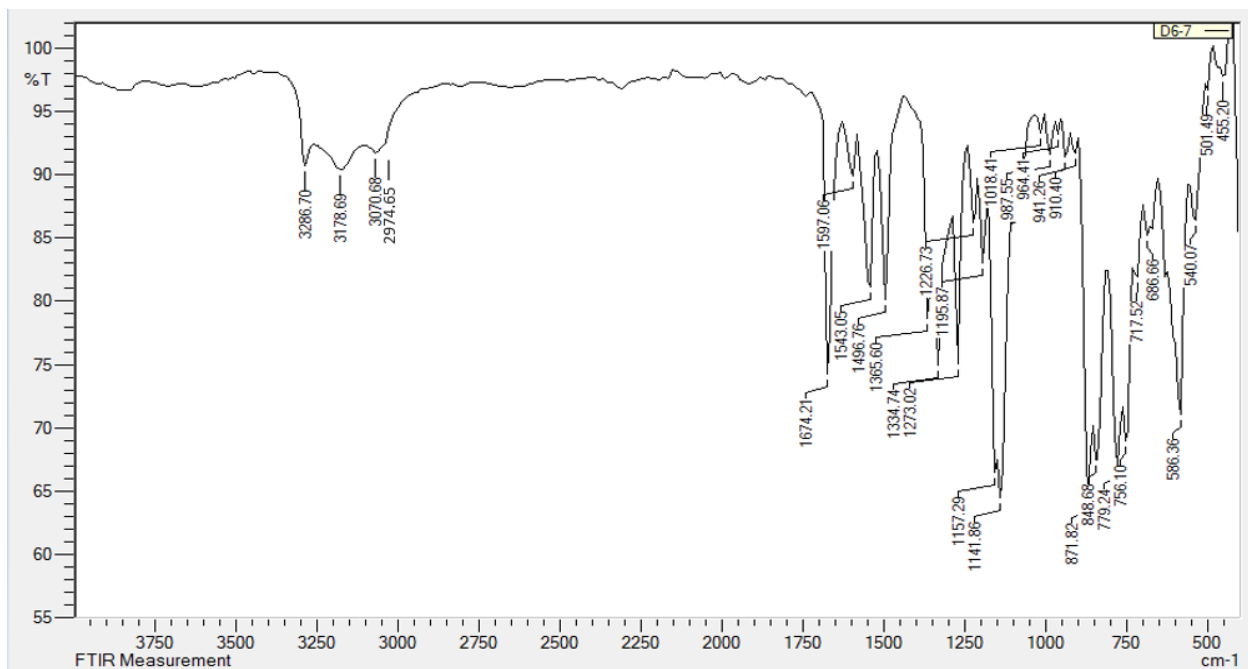
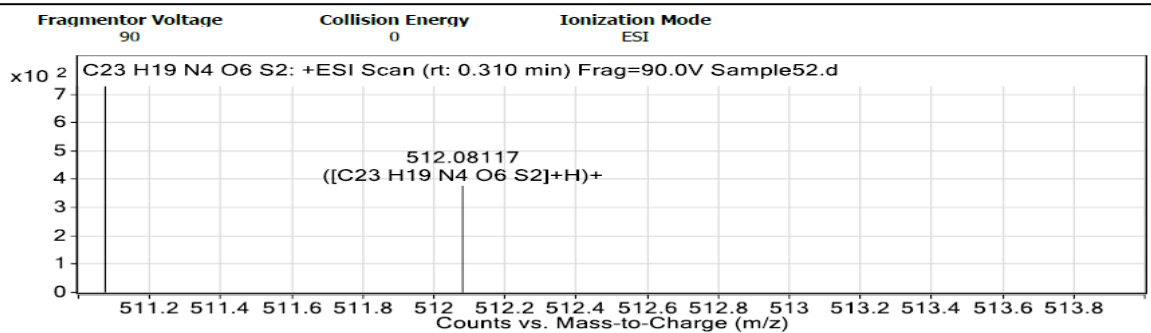
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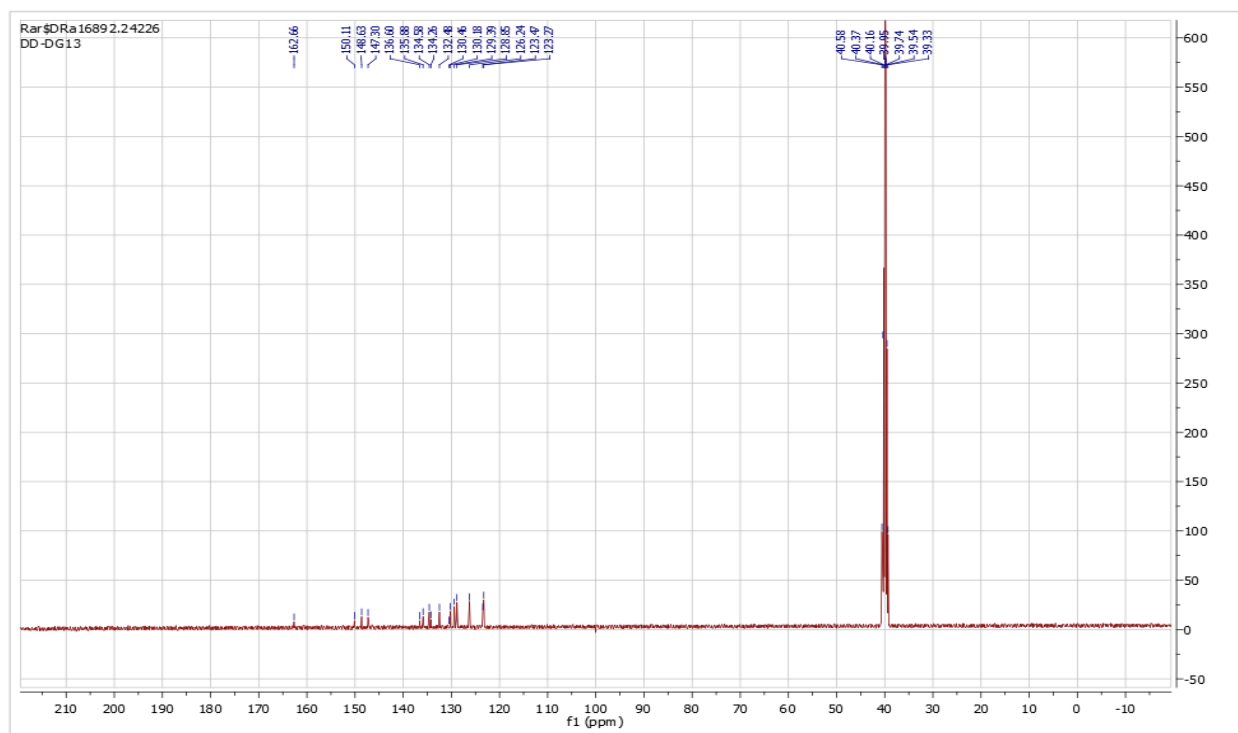
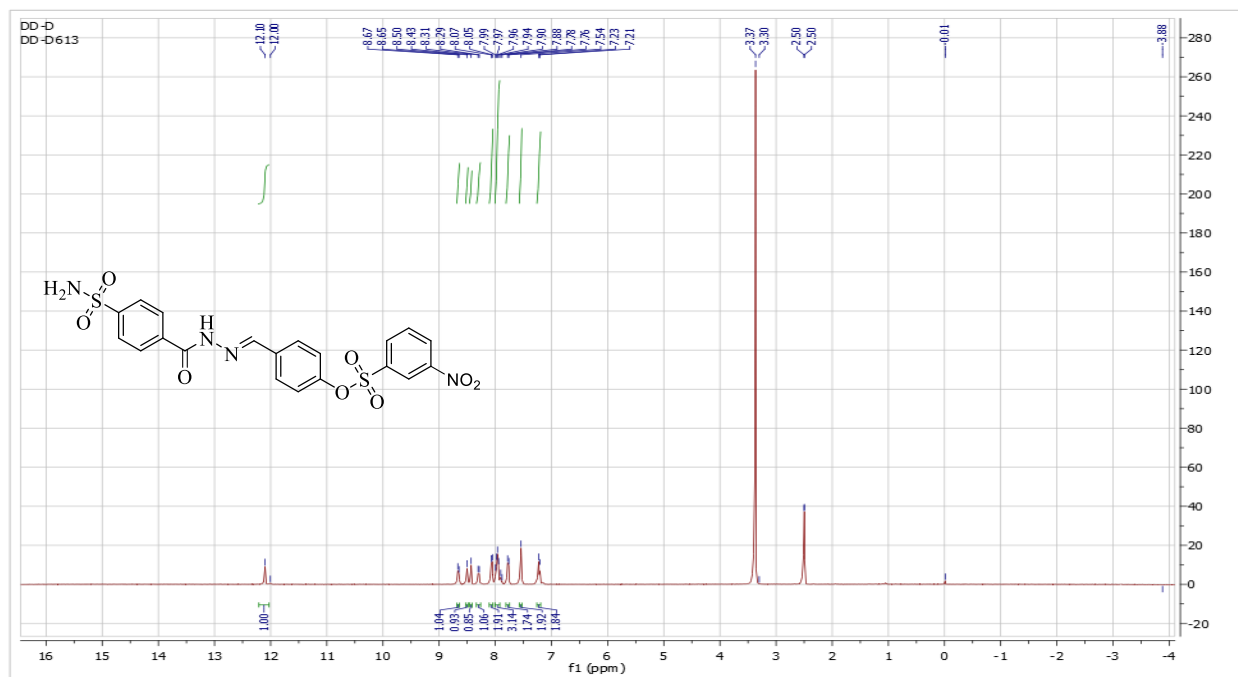
^1H NMR, ^{13}C NMR, HRMS, and FT-IR spectra of **SH12**



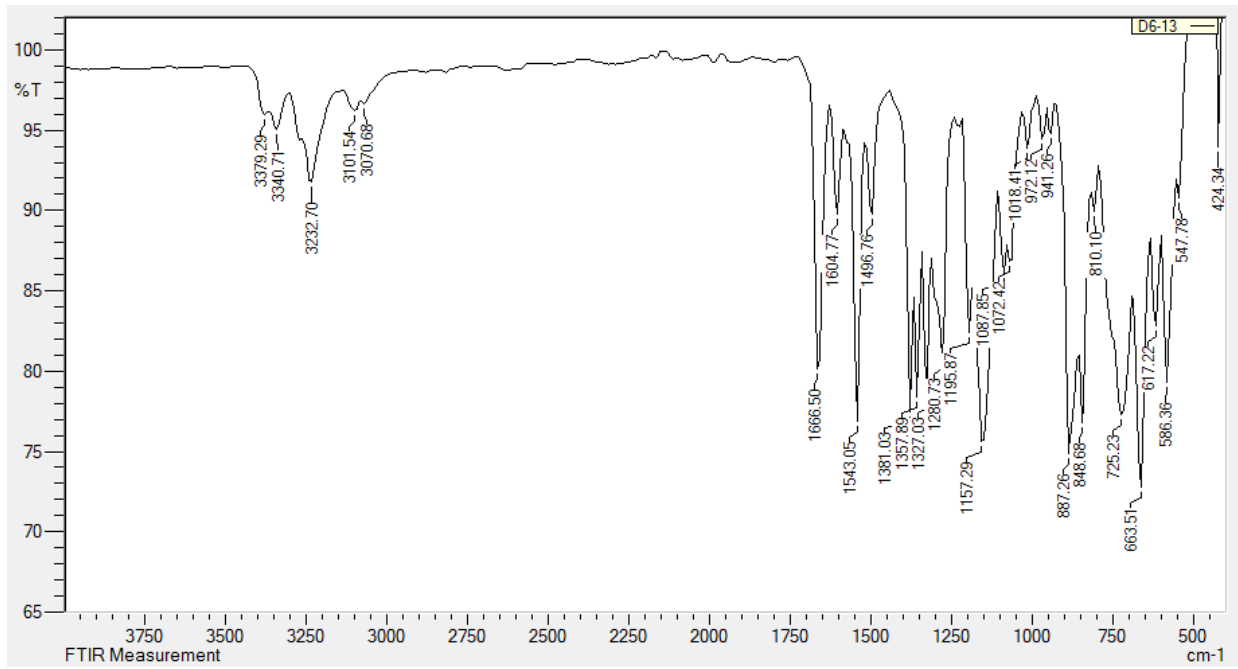
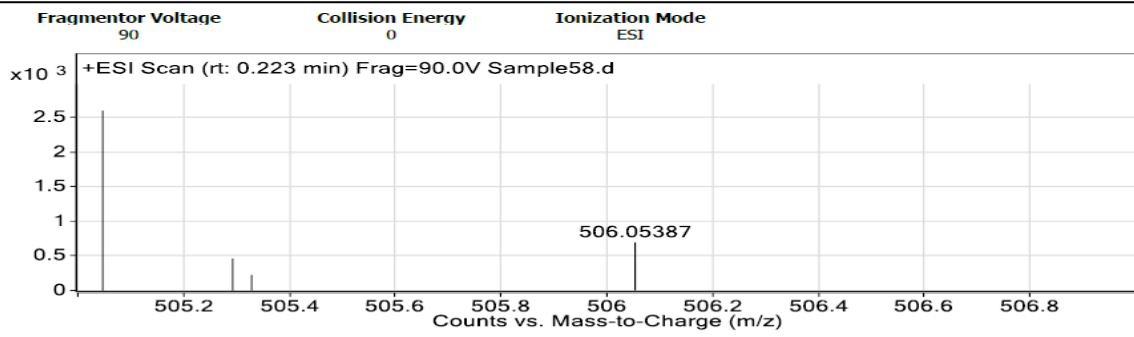
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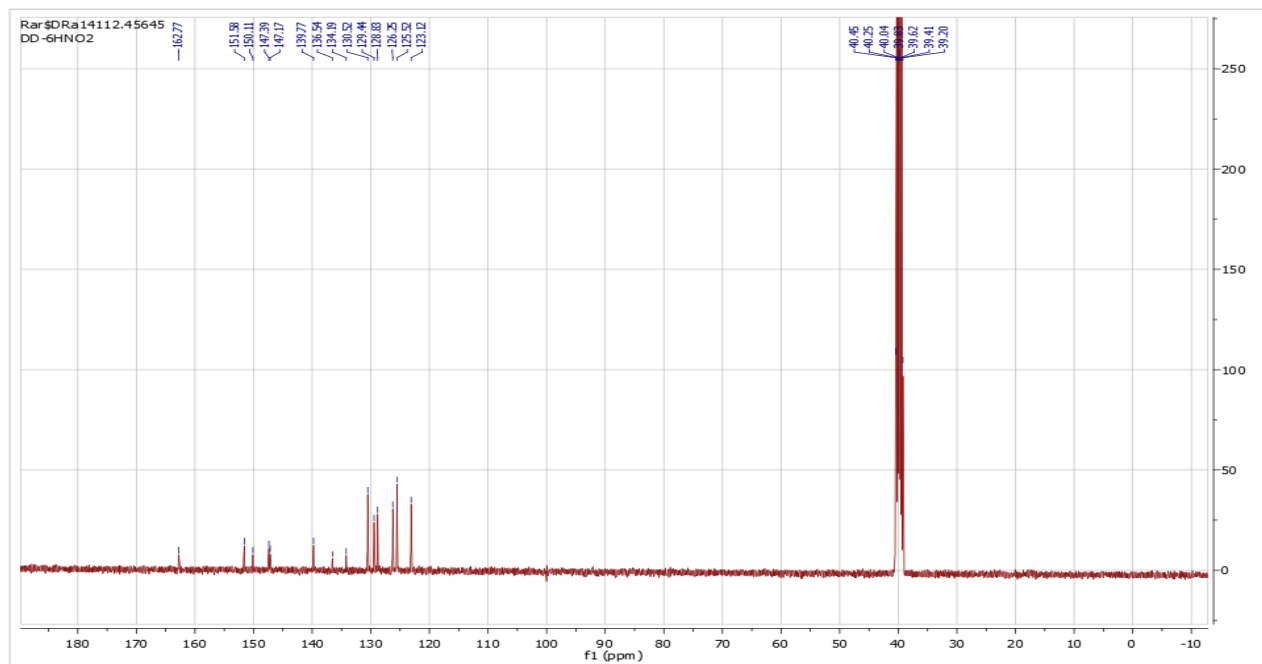
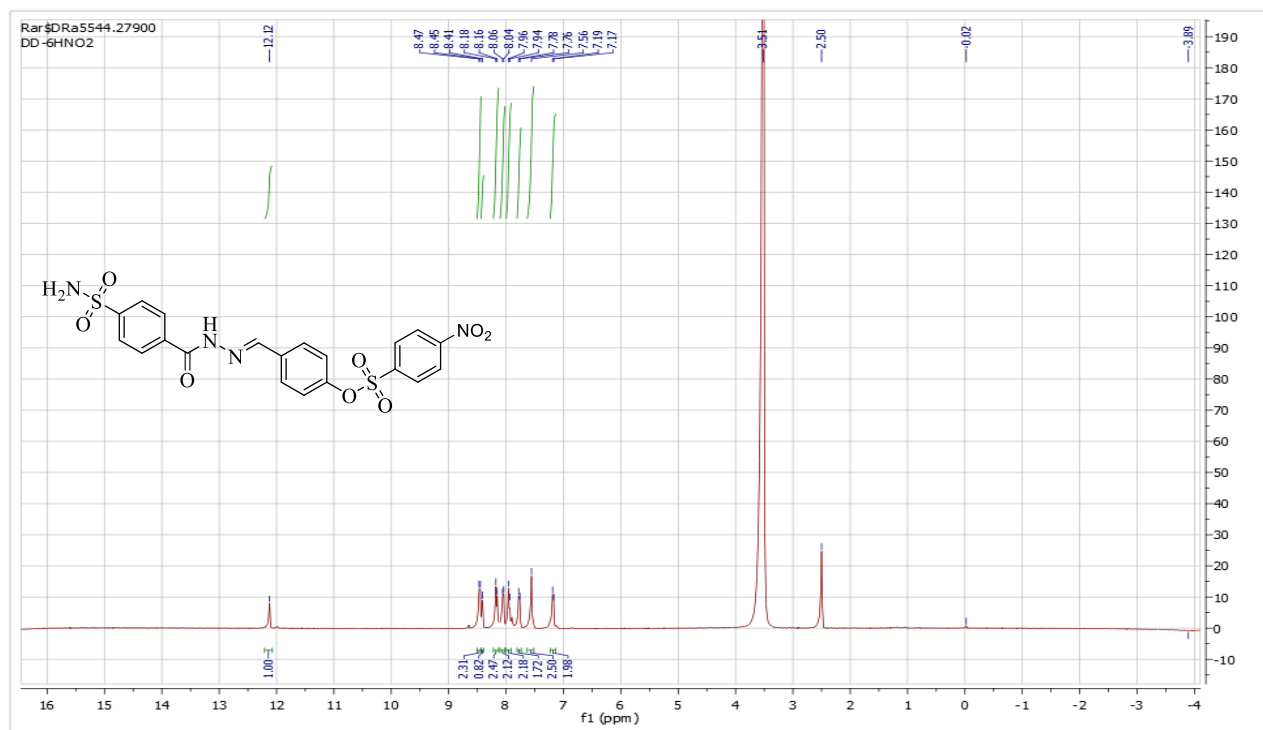
^1H NMR, ^{13}C NMR, HRMS, and FT-IR spectra of **SH13**



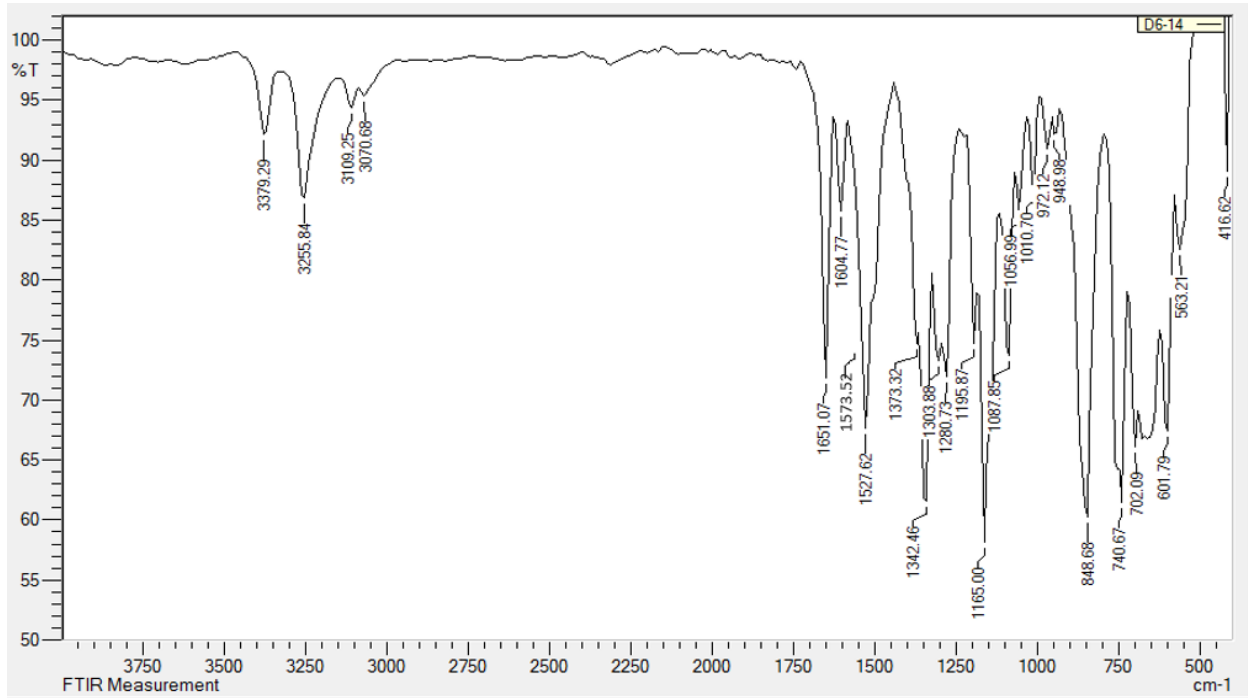
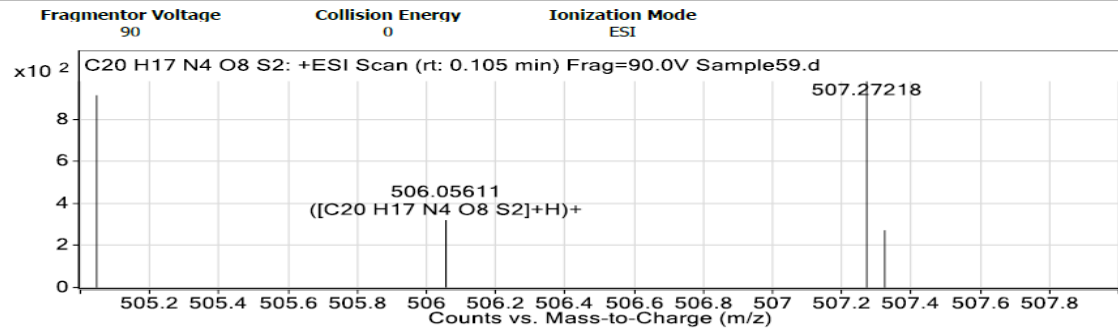
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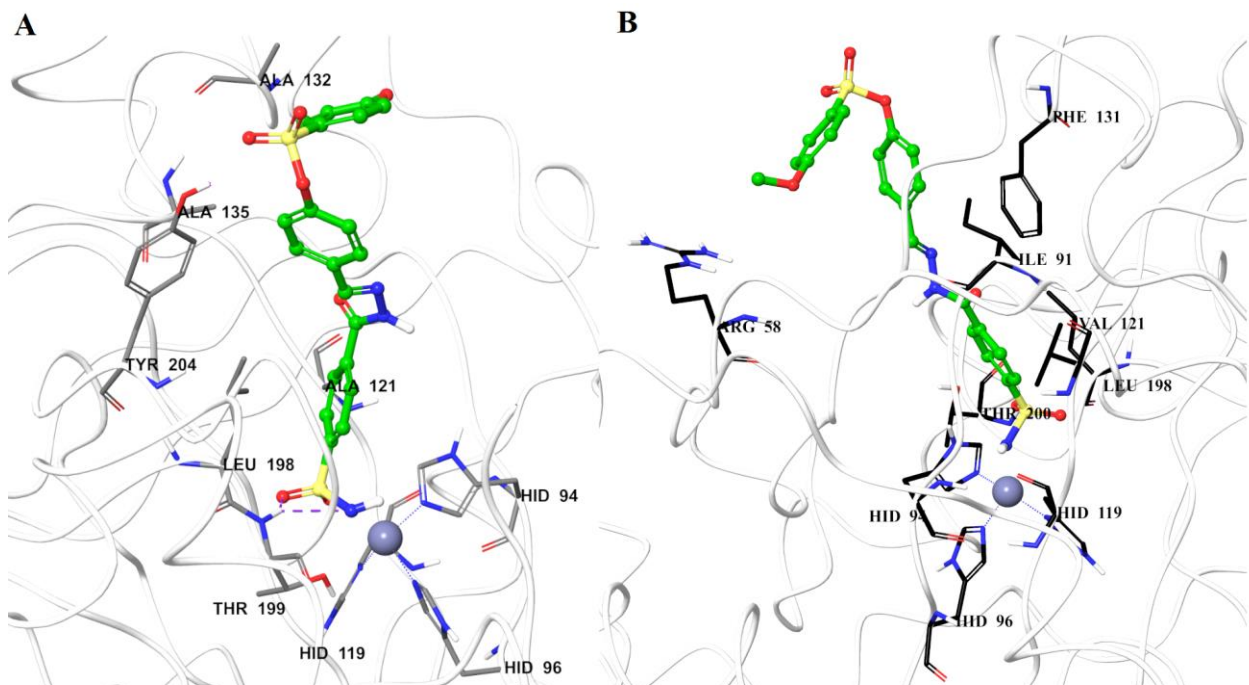


^1H NMR, ^{13}C NMR, HRMS, and FT-IR spectra of **SH14**



User Spectra





Binding mode of **SH3** in the active site of hCA I (A) and II (B). Ligand is represented as green color stick and balls, protein backbone as a white thin tube, hydrogen bonds as purple dashes, and important amino acid residues as gray and black sticks, for hCA I and II, respectively. The zinc ion is shown as a faded blue sphere.