

# Polyetheroaryl oxadiazole/pyridine-based ligands: a structural tuning for enhancing G-quadruplex binding

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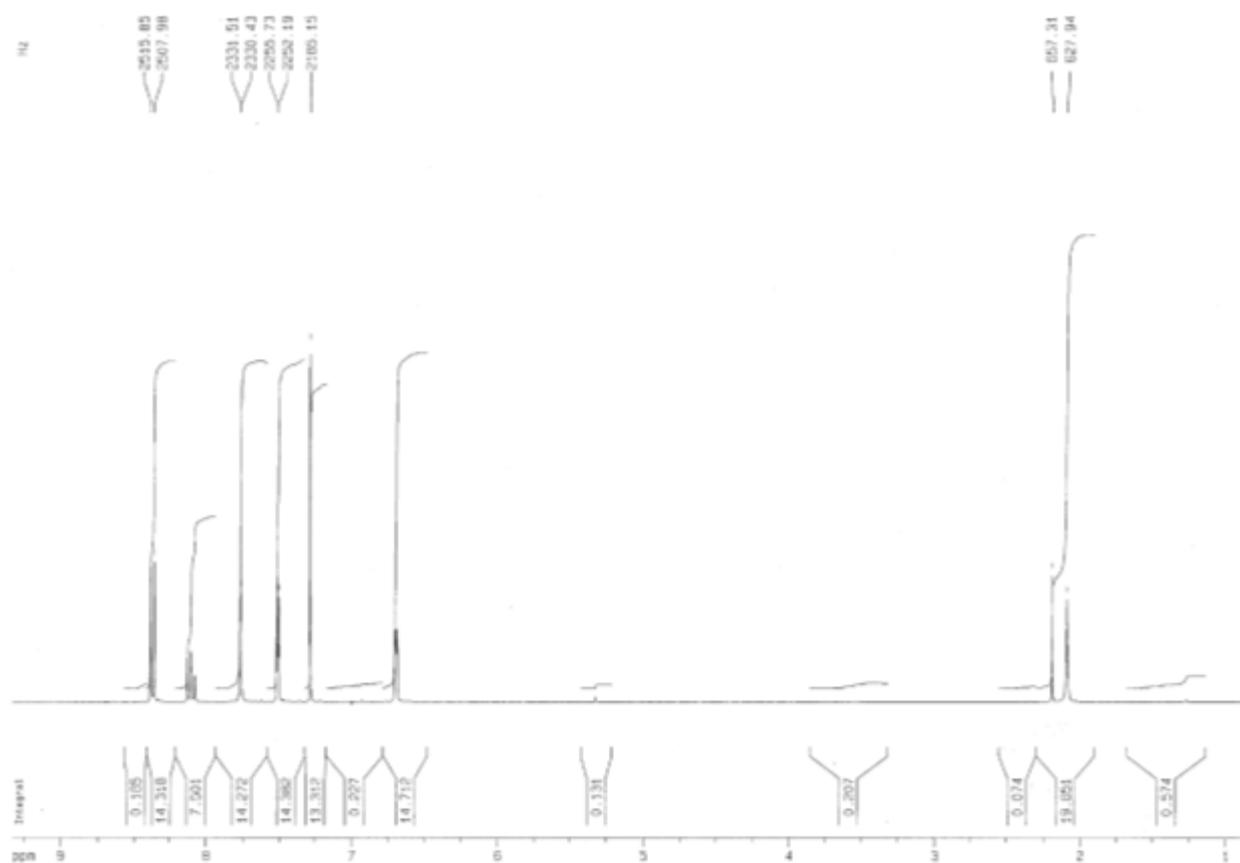
## Supplementary Material

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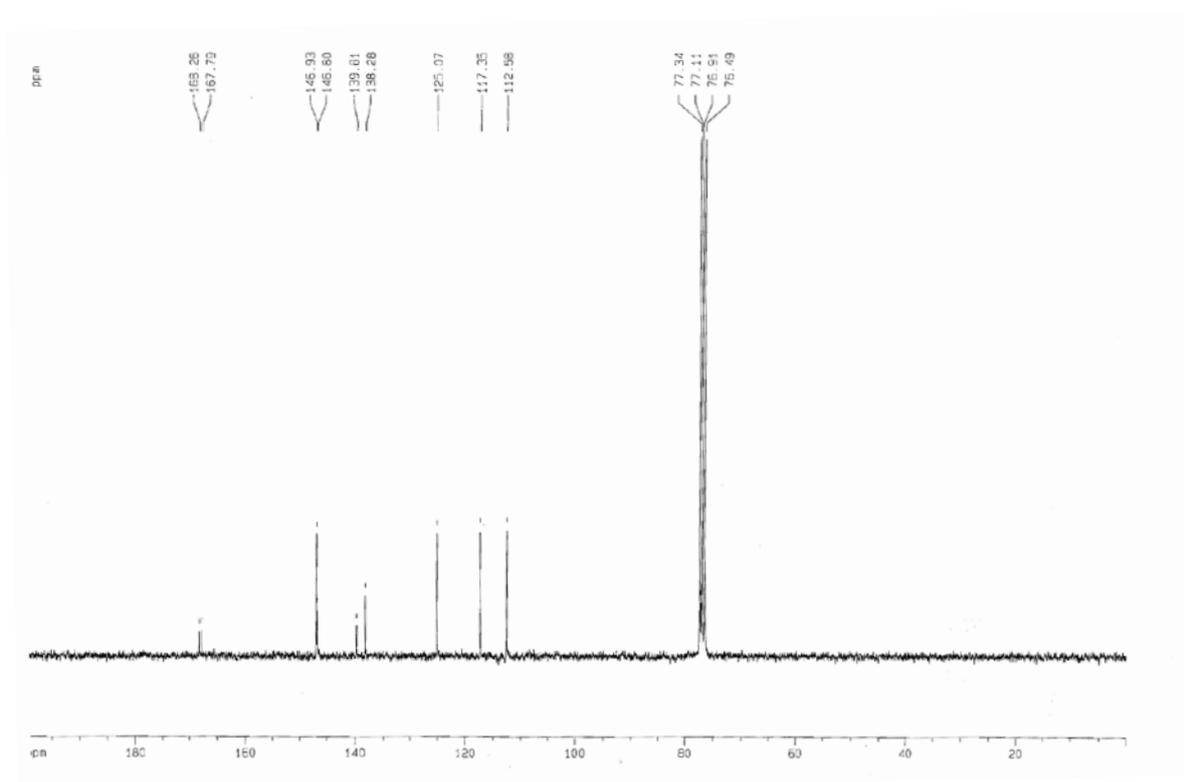
NMRs. <sup>1</sup> H and <sup>13</sup> C NMR characterization of all compounds presented in the main text	page S2-S11
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# NMR characterization:

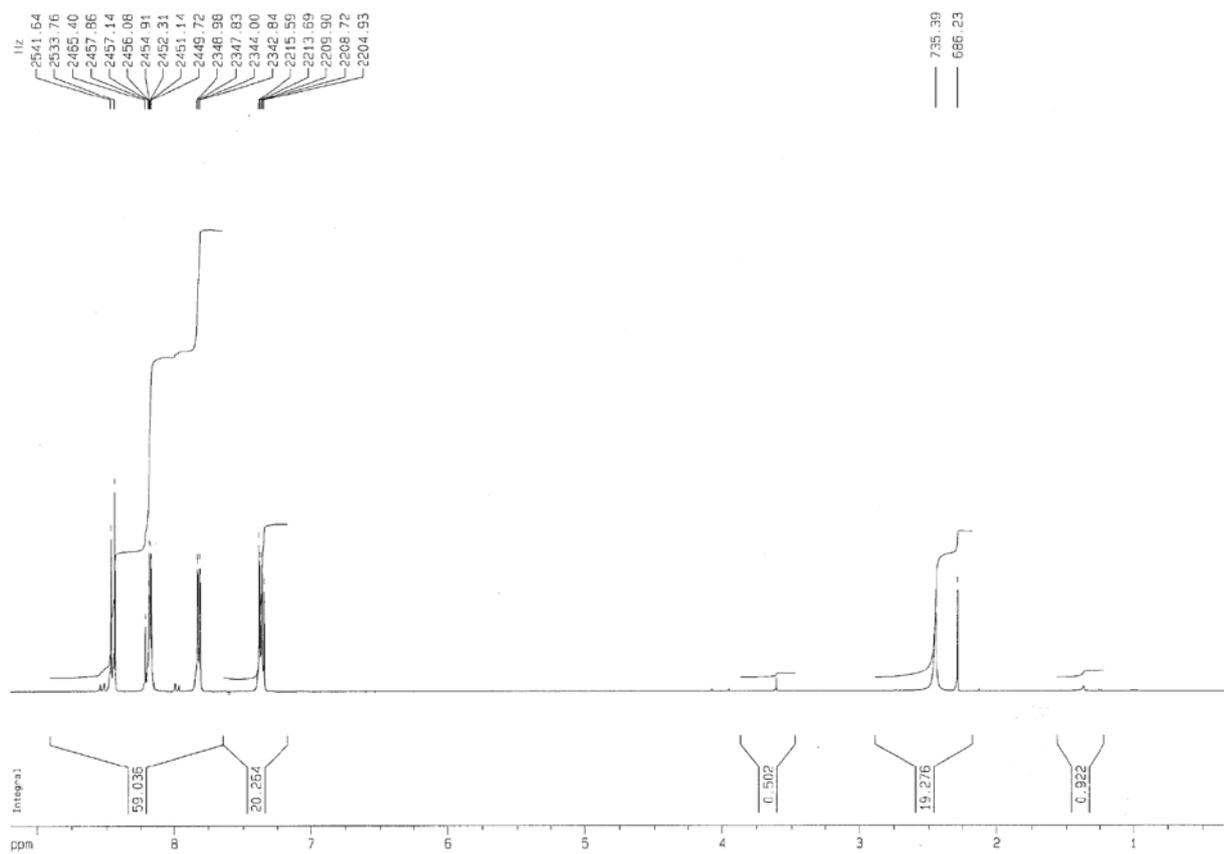
$^1\text{H-NMR} - \text{CDCl}_3: \mathbf{1}$



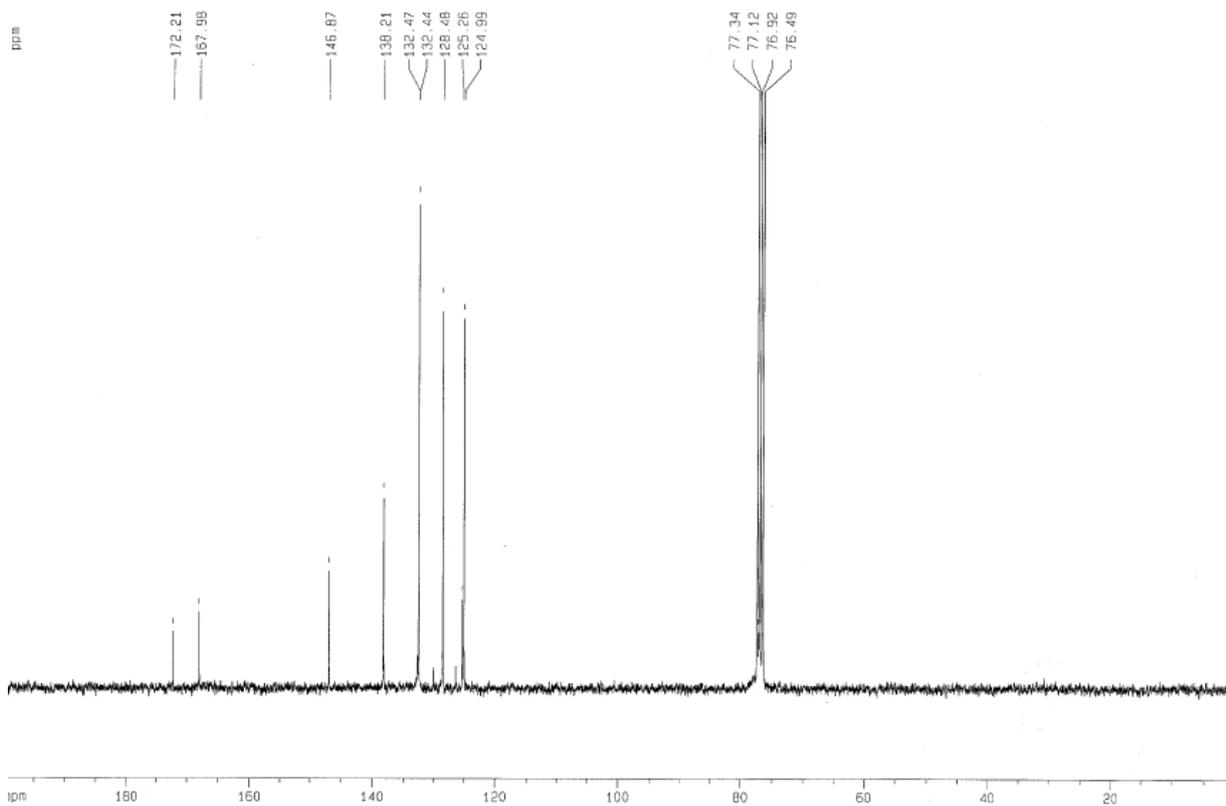
$^{13}\text{C-NMR} - \text{CDCl}_3: \mathbf{1}$



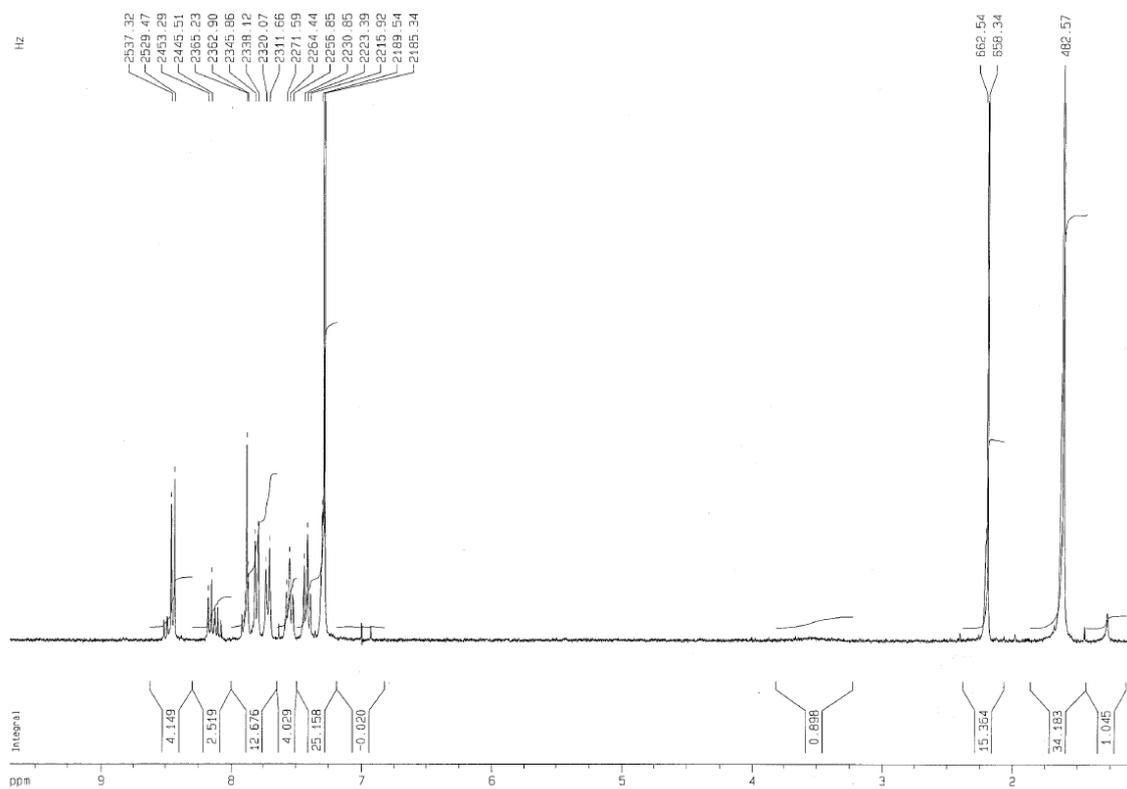
<sup>1</sup>H-NMR – CDCl<sub>3</sub>: **2**



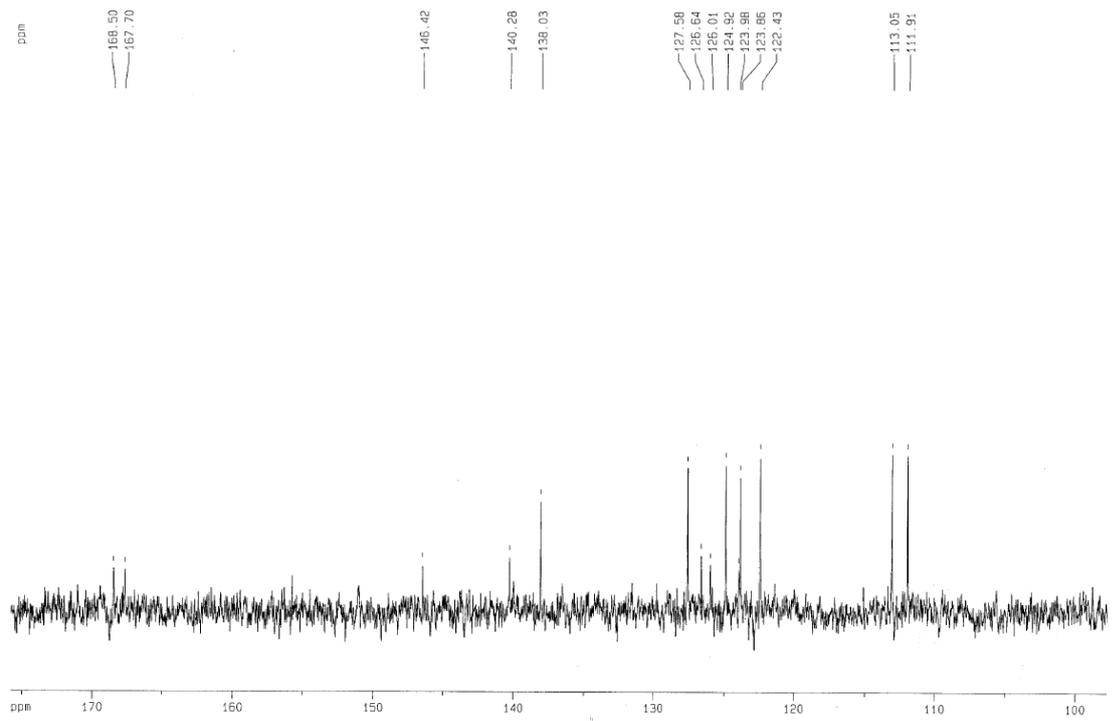
<sup>13</sup>C-NMR – DMSO d<sub>6</sub>: **2**



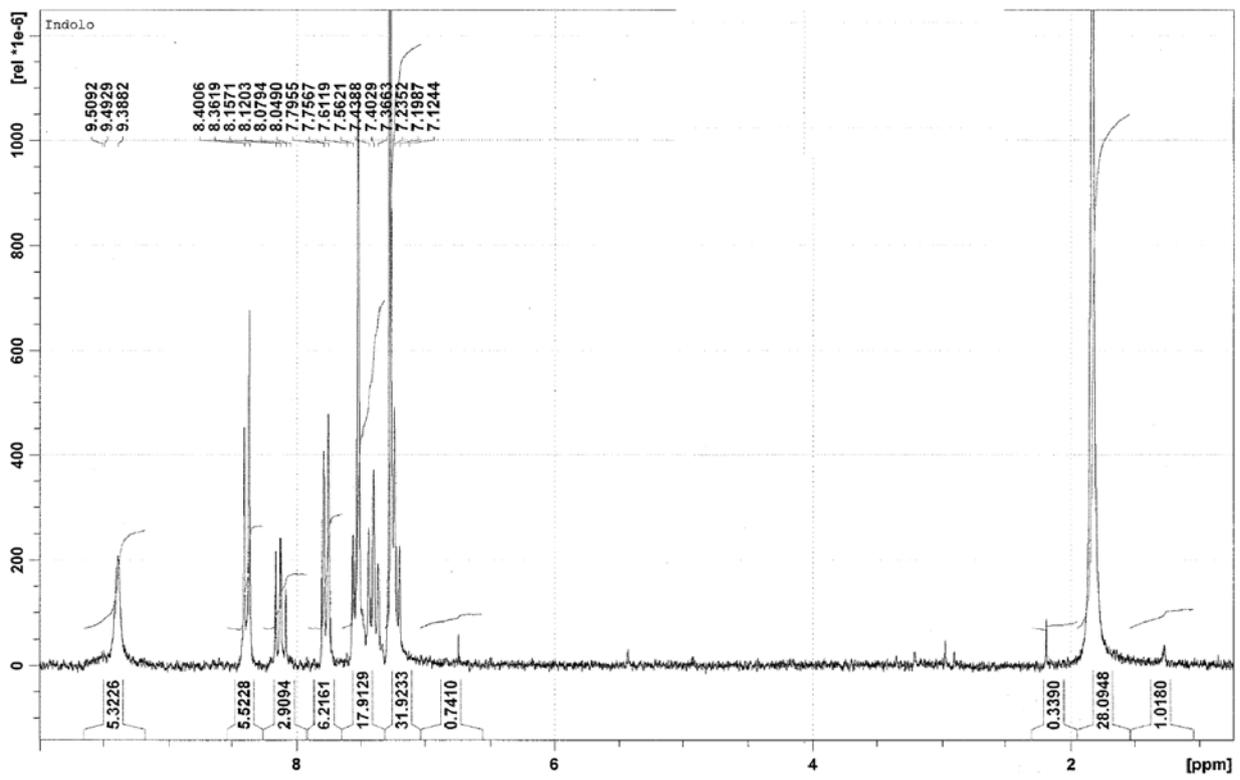
<sup>1</sup>H-NMR – CDCl<sub>3</sub>: 3



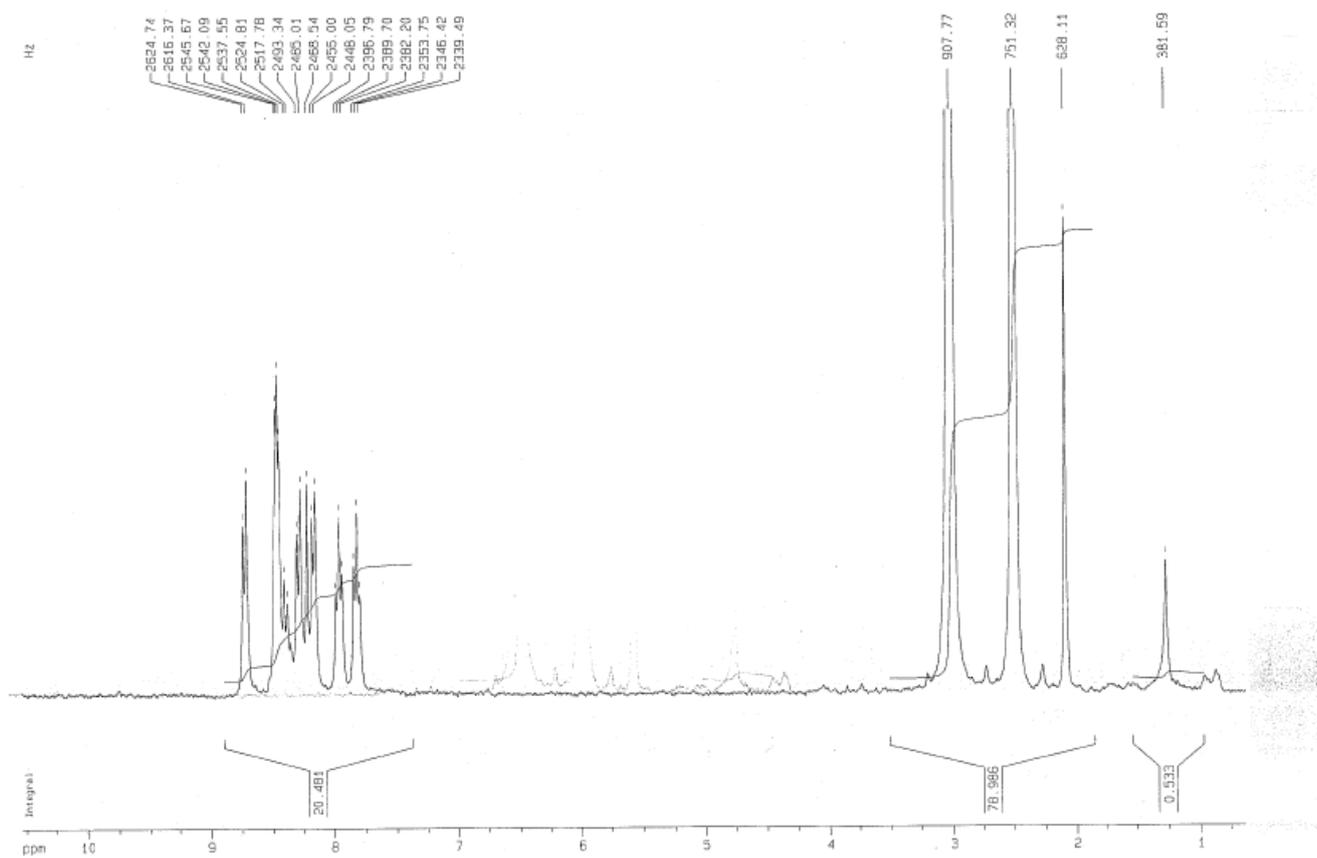
<sup>13</sup>C-NMR – CDCl<sub>3</sub>: 3

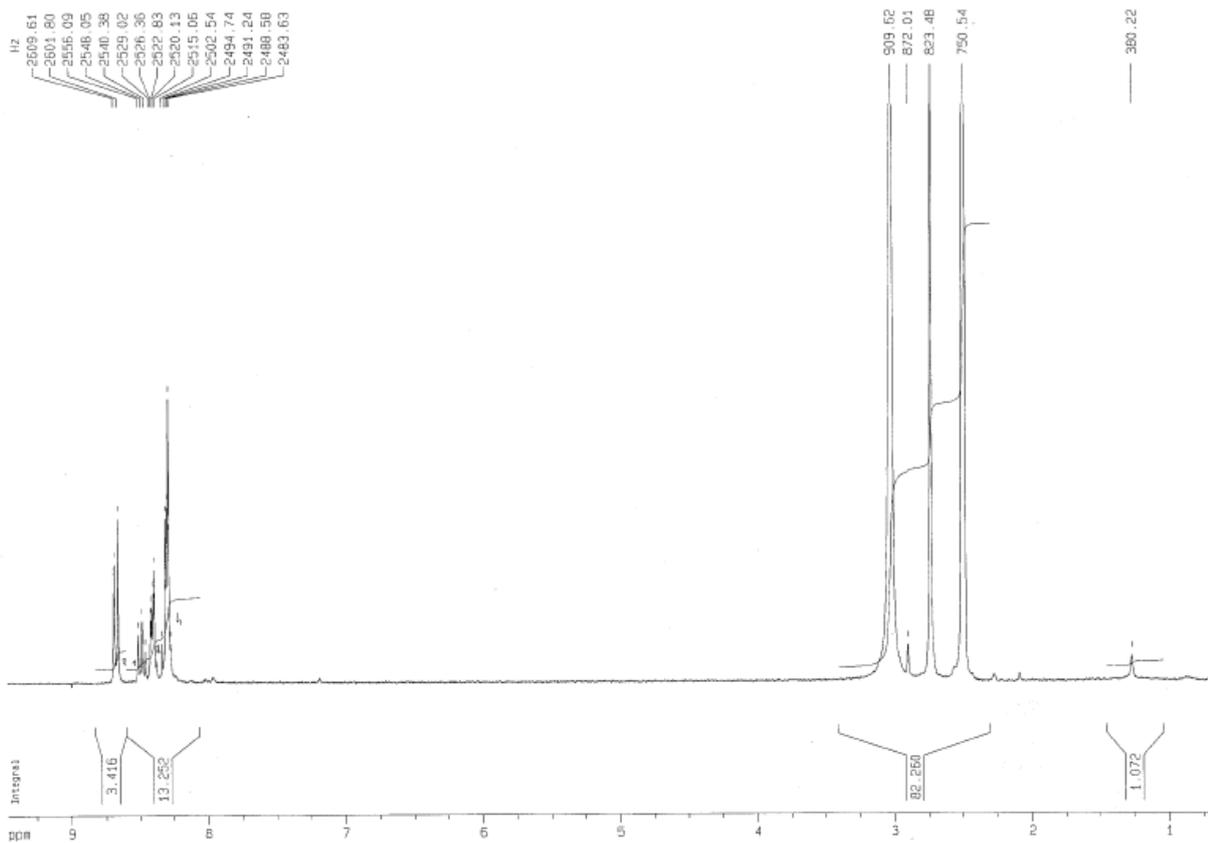


$^1\text{H}$ -NMR – DMSO  $d_6$ : 4

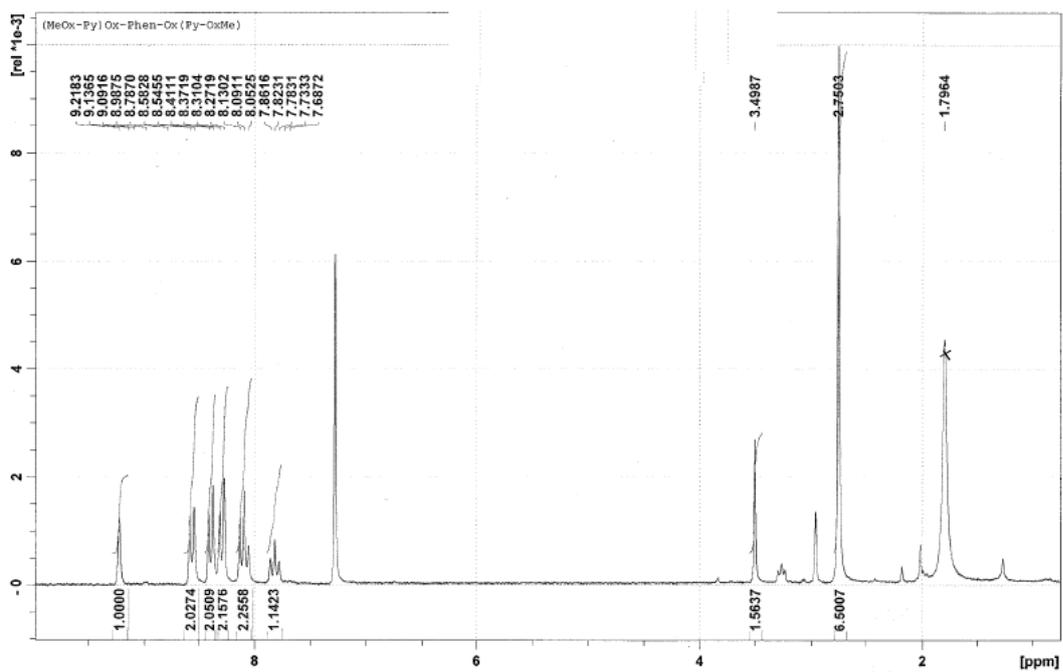


$^1\text{H}$ -NMR – DMSO  $d_6$ : Fragment 5

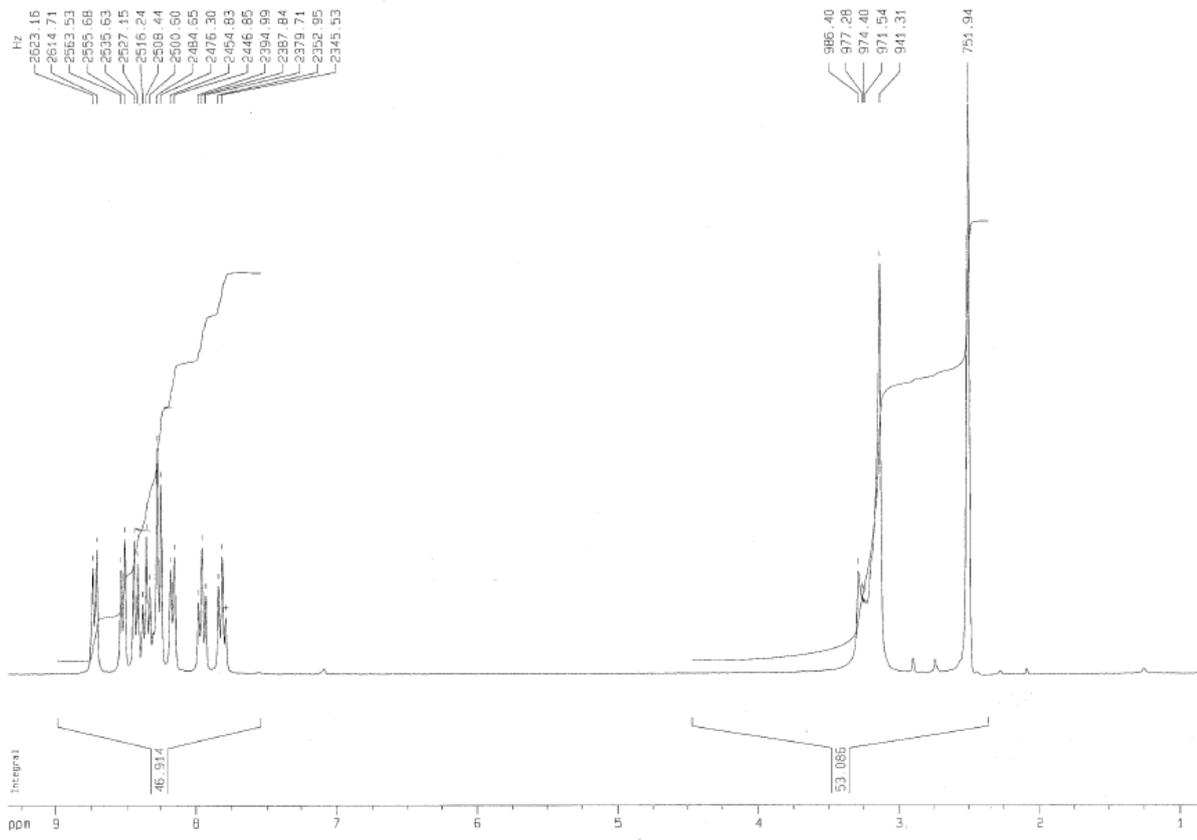




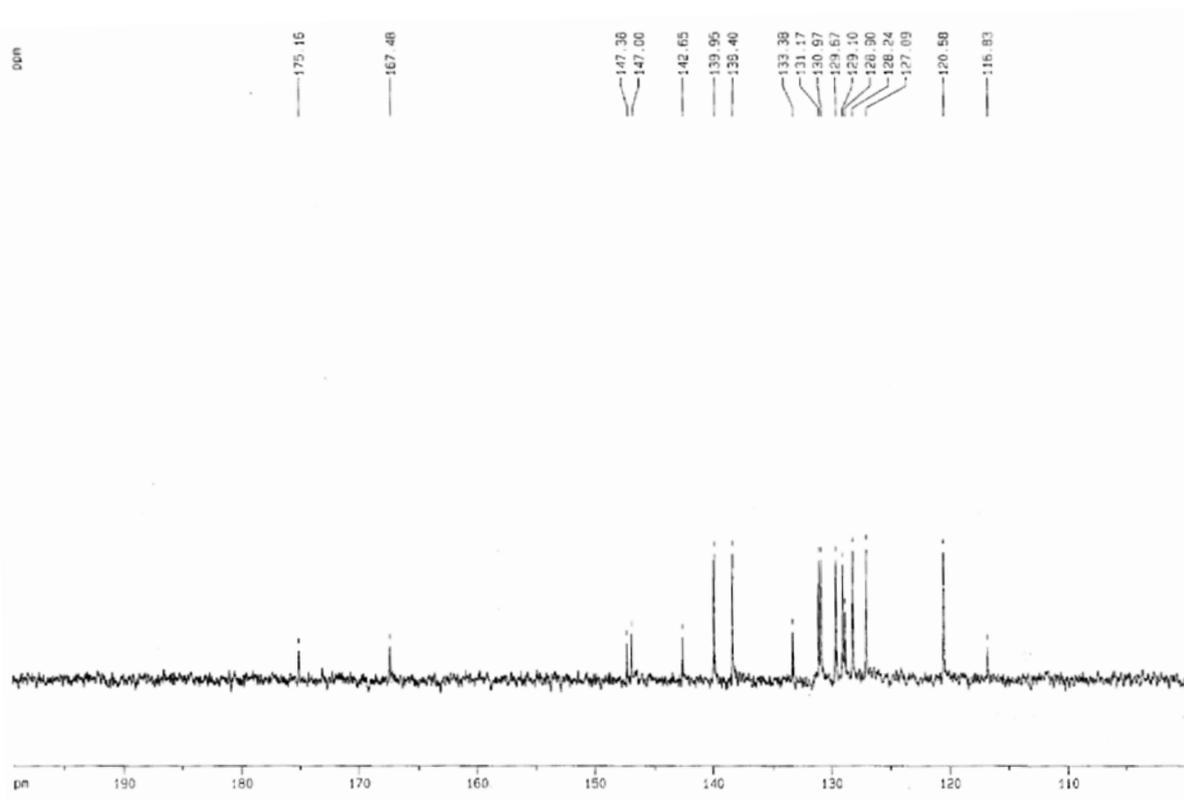
<sup>1</sup>H-NMR – CDCl<sub>3</sub>: Fragment 7



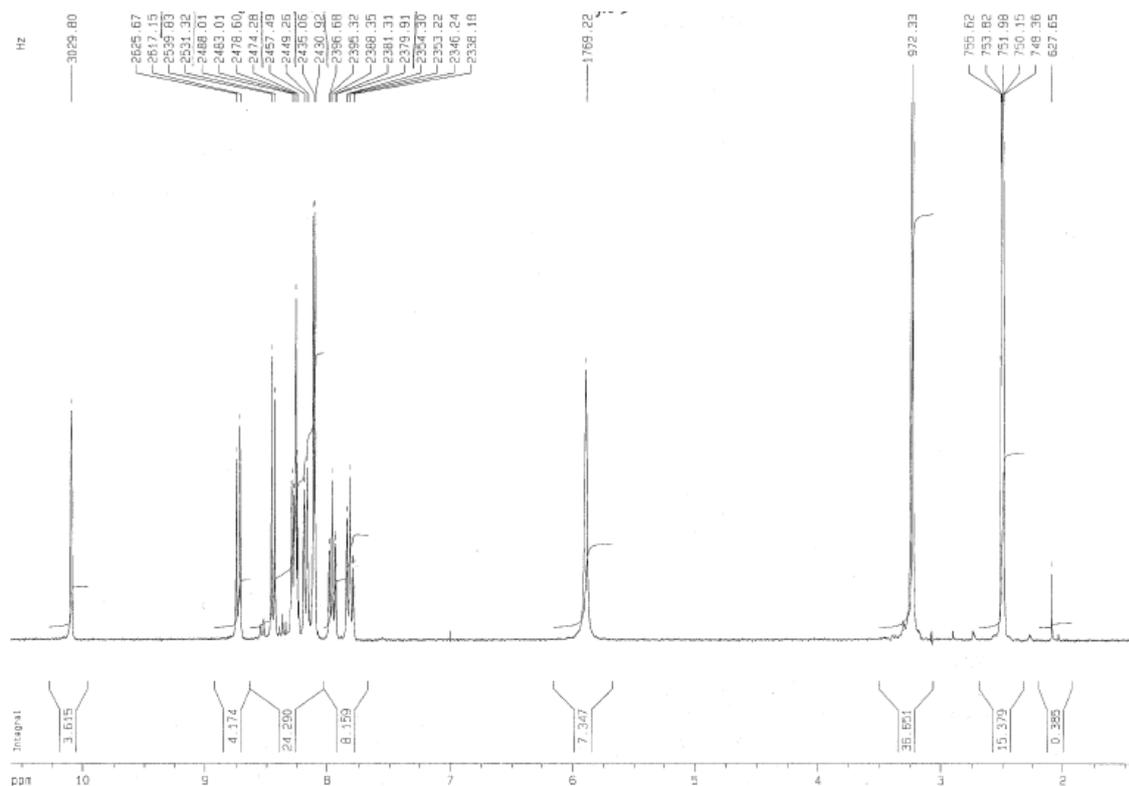
<sup>1</sup>H-NMR – DMSO d<sub>6</sub>: 15



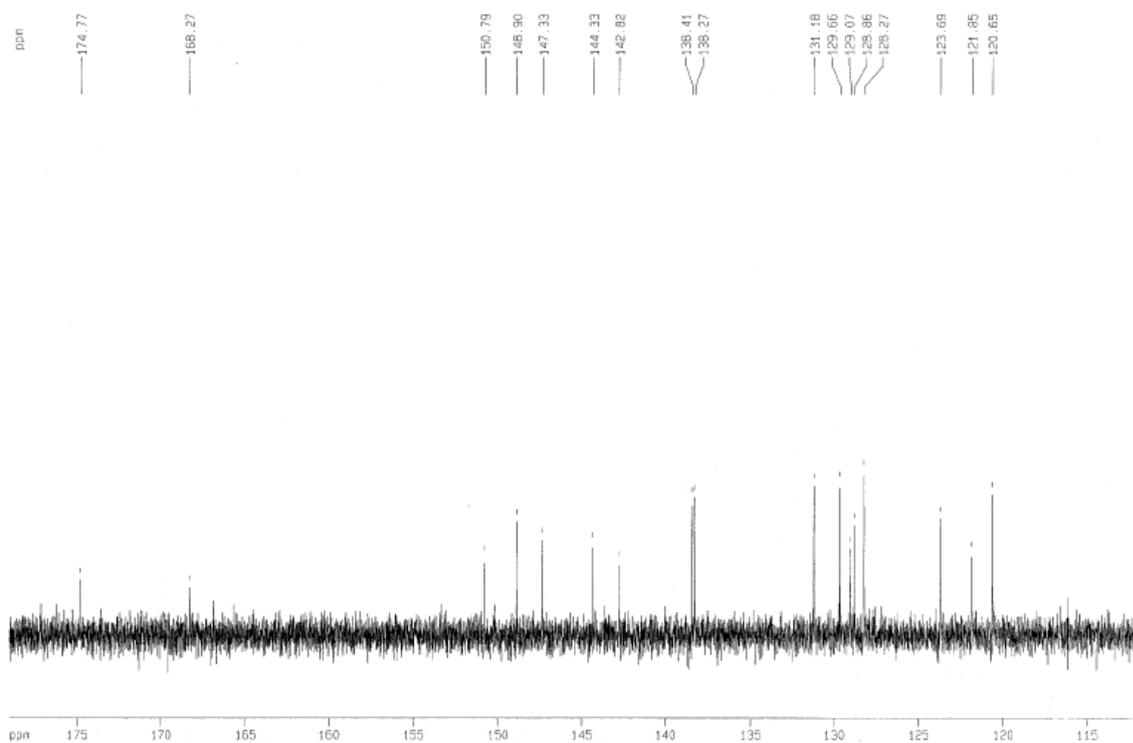
<sup>13</sup>C-NMR – DMSO d<sub>6</sub>: 15



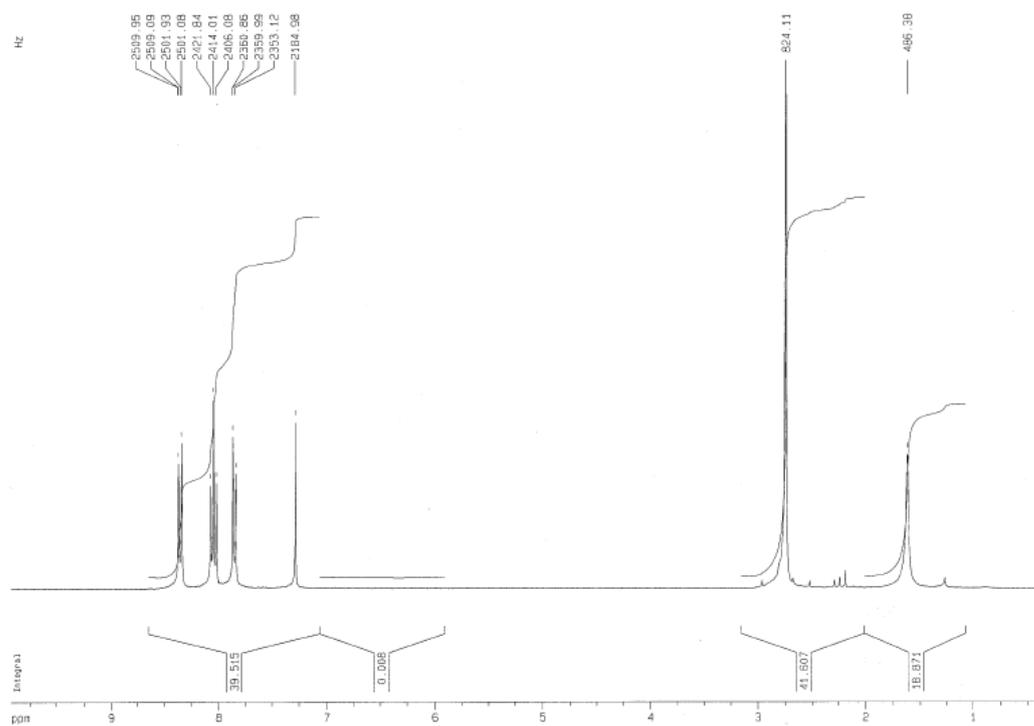
<sup>1</sup>H-NMR – DMSO d6: 16



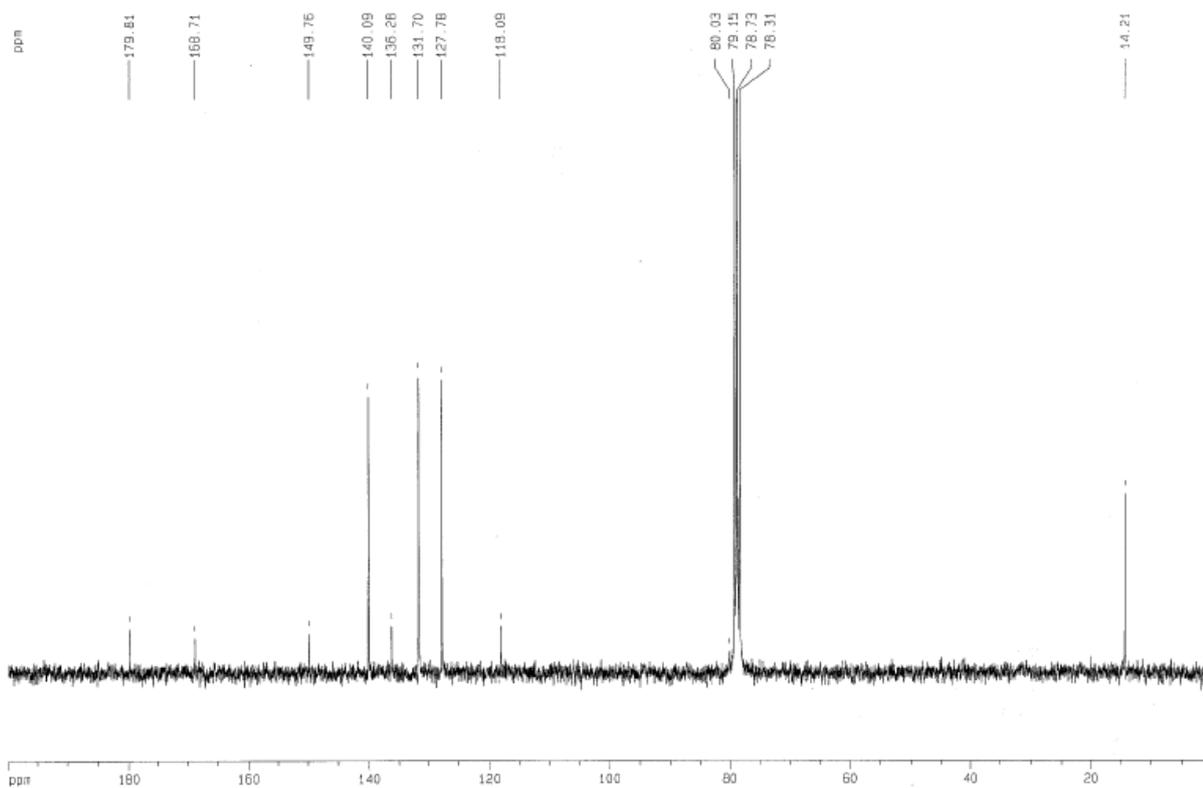
<sup>13</sup>C-NMR – DMSO d6: 16



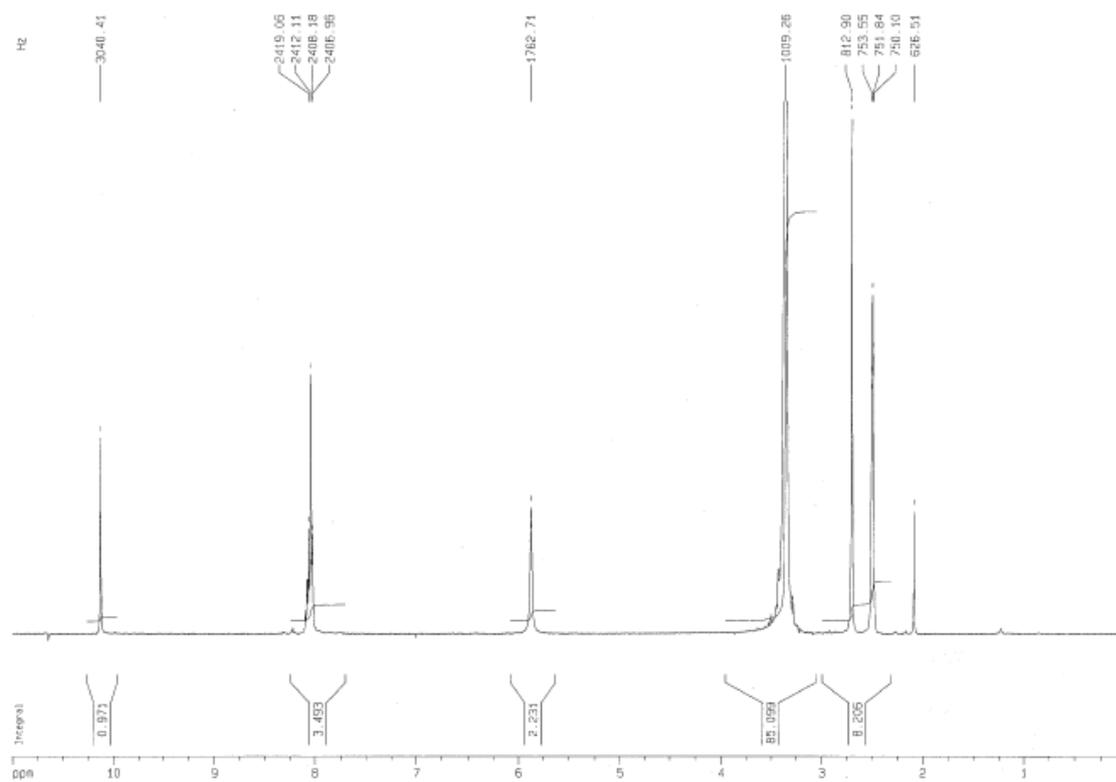
$^1\text{H-NMR} - \text{CDCl}_3: 17$



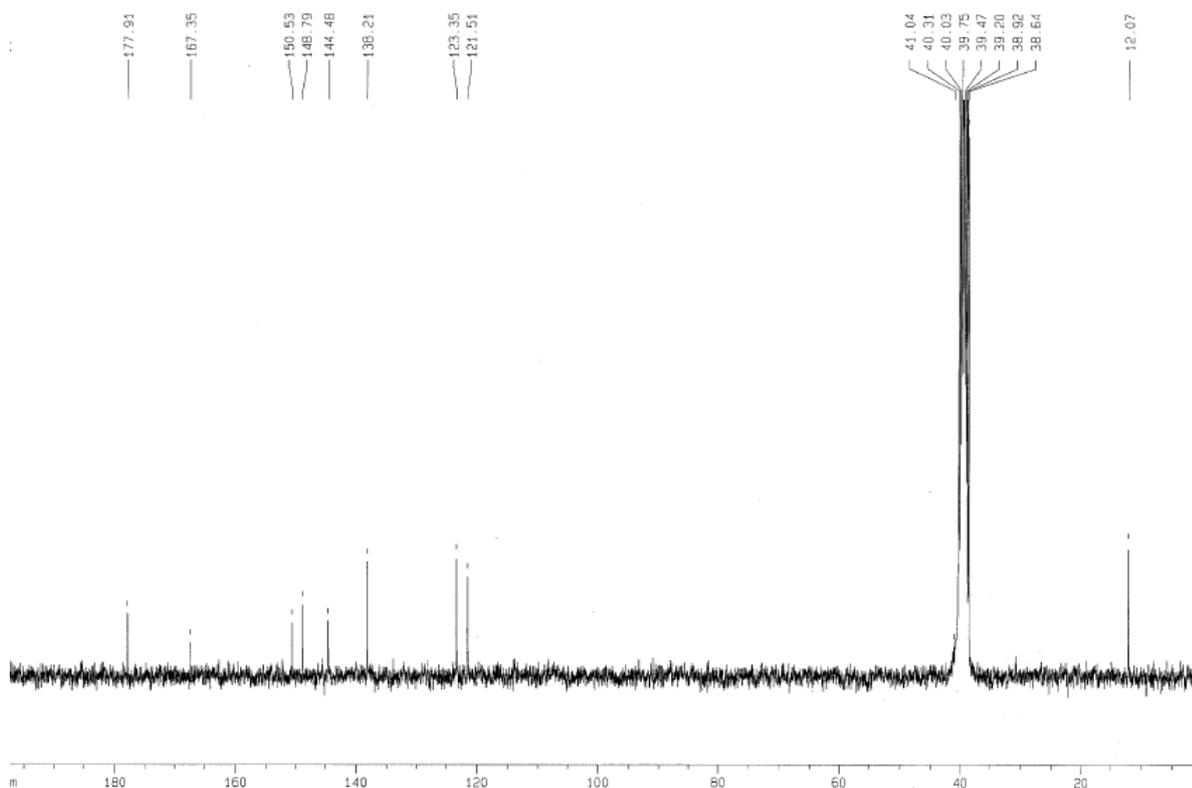
$^{13}\text{C-NMR} - \text{CDCl}_3 \text{ d}_6: 17$

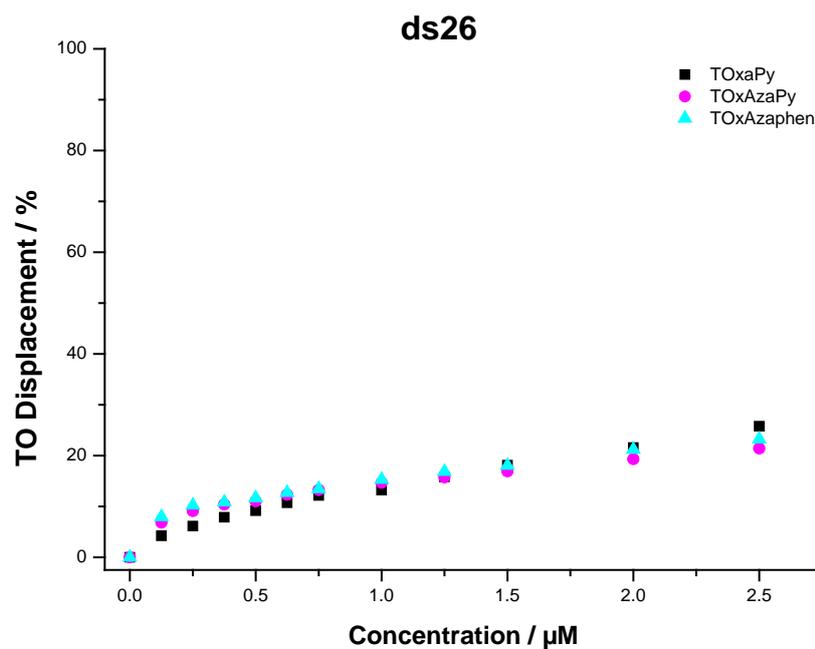


<sup>1</sup>H-NMR – DMSO d6: 18



<sup>13</sup>C-NMR – DMSO d6: 18





**Figure S1:** G4-FID plots of TOxAzaPy and TOxAzaPhen in the presence of ds26 (ds DNA). TOxPy is used as a reference compound.