

# A fragment-based approach for the development of G-quadruplex ligands: role of the amidoxime moiety

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## Supplementary Material

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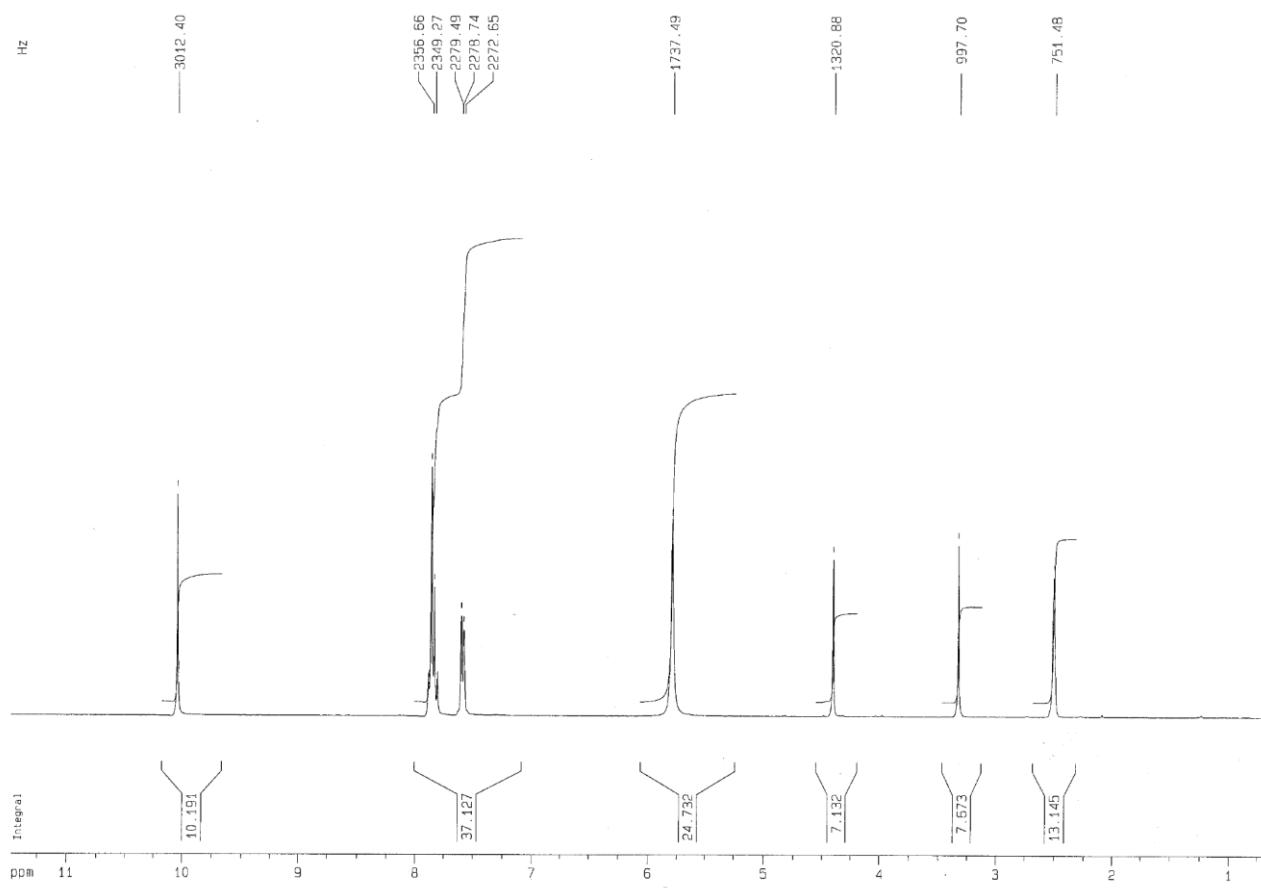
**Table S1.** Oligonucleotides used in this study

Application	Name	Sequence (5'→ 3')
FRET melting	LTR-III	FAM <sup>1</sup> -GGGAGGCCTGGCCTGGCGGGACTGGGG-TAMRA <sup>2</sup>
	hTel	FAM <sup>1</sup> -AGGGTTAGGGTTAGGGTAGGG-TAMRA <sup>2</sup>
	dsDNA	FAM <sup>1</sup> -CTATAGCGCGTATAG-TAMRA <sup>2</sup>
FRET competition	LTR-III labeled	FAM <sup>1</sup> -GGGAGGCCTGGCCTGGCGGGACTGGGG-TAMRA <sup>2</sup>
	LTR-III unlabeled	GGGAGGCCTGGCCTGGCGGGACTGGGG
	hTel unlabeled	AGGGTTAGGGTTAGGGTTAGGG
CD	LTR-III	GGGAGGCCTGGCCTGGCGGGACTGGGG
	hTel	AGGGTTAGGGTTAGGGTTAGGG
<i>Taq</i> polymerase stop assay	Taq primer	GGCAAAAAGCAGCTGCTTATATGCAG
	non-G4 cnt	TTGTCGTTAAAGTCTGACTGCGAGCTCTCAGATCCTGCATAT
	LTR-III	AAGCAGCTGCTTTTGCC
	hTel	TTTTGGGAGGCCTGGCCTGGCGGGACTGGGGTTTCTGC ATATAAGCAGCTGCTTTGCC

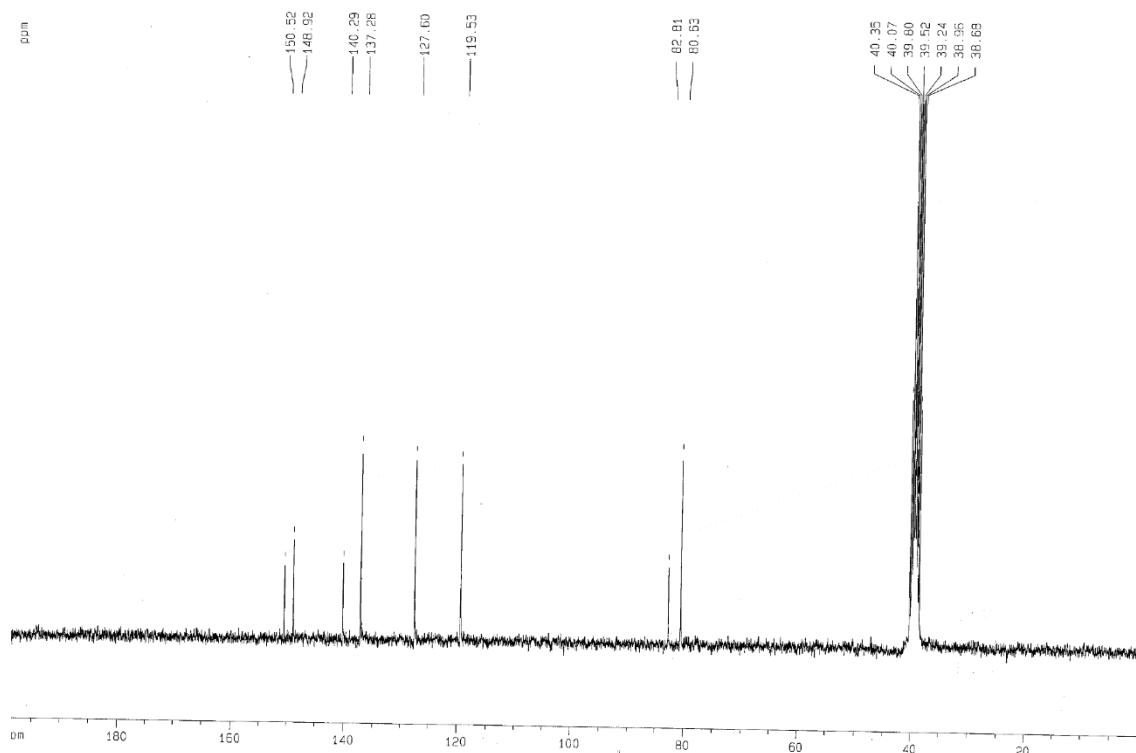
<sup>1</sup> 6-carboxyfluorescein. <sup>2</sup> 6-carboxy-tetramethylrhodamine.

## NMR characterization:

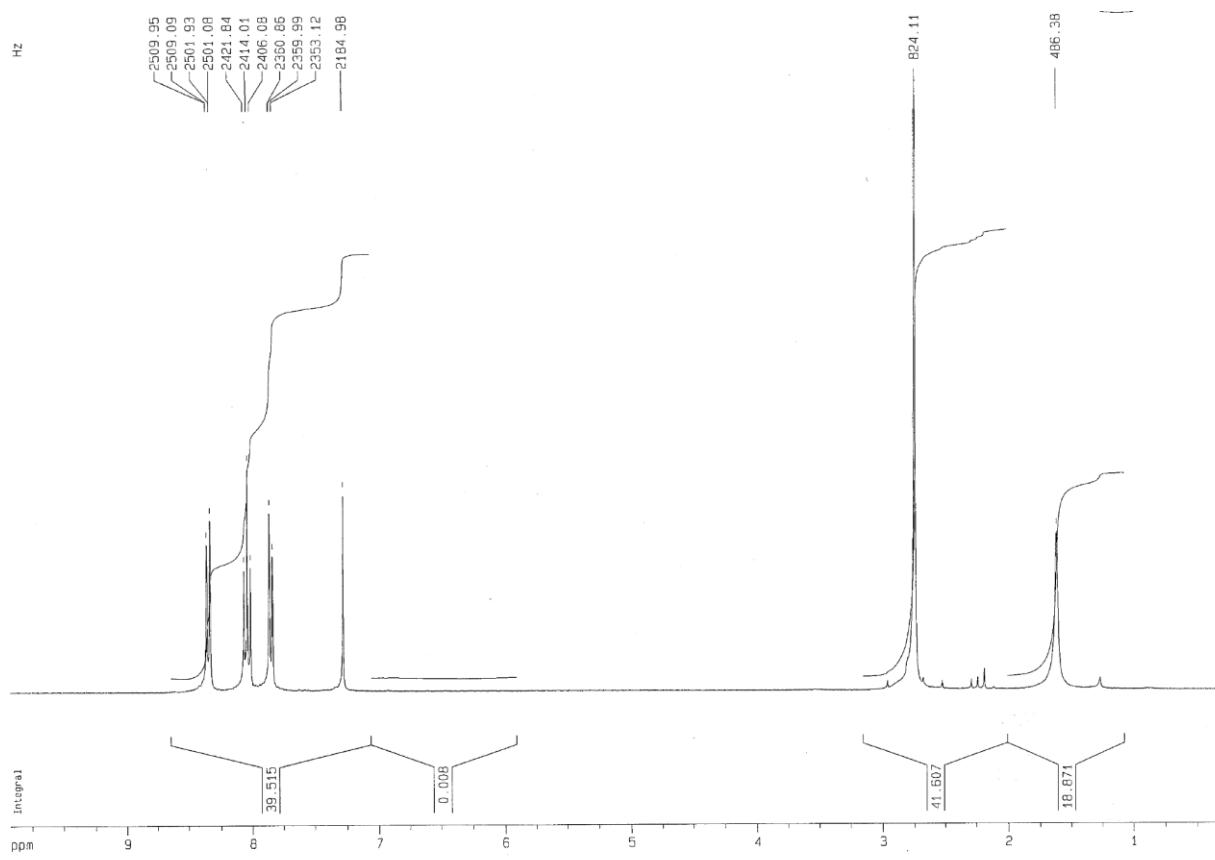
<sup>1</sup>H-NMR – DMSO d6: Fragment 5



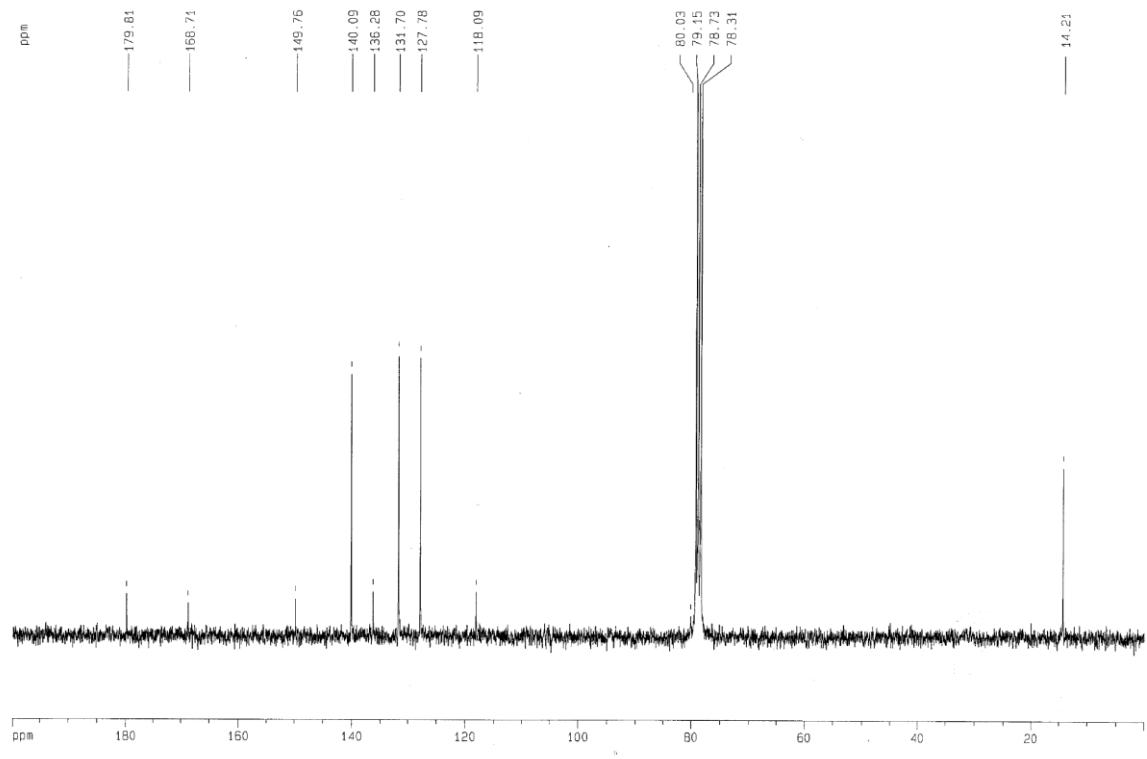
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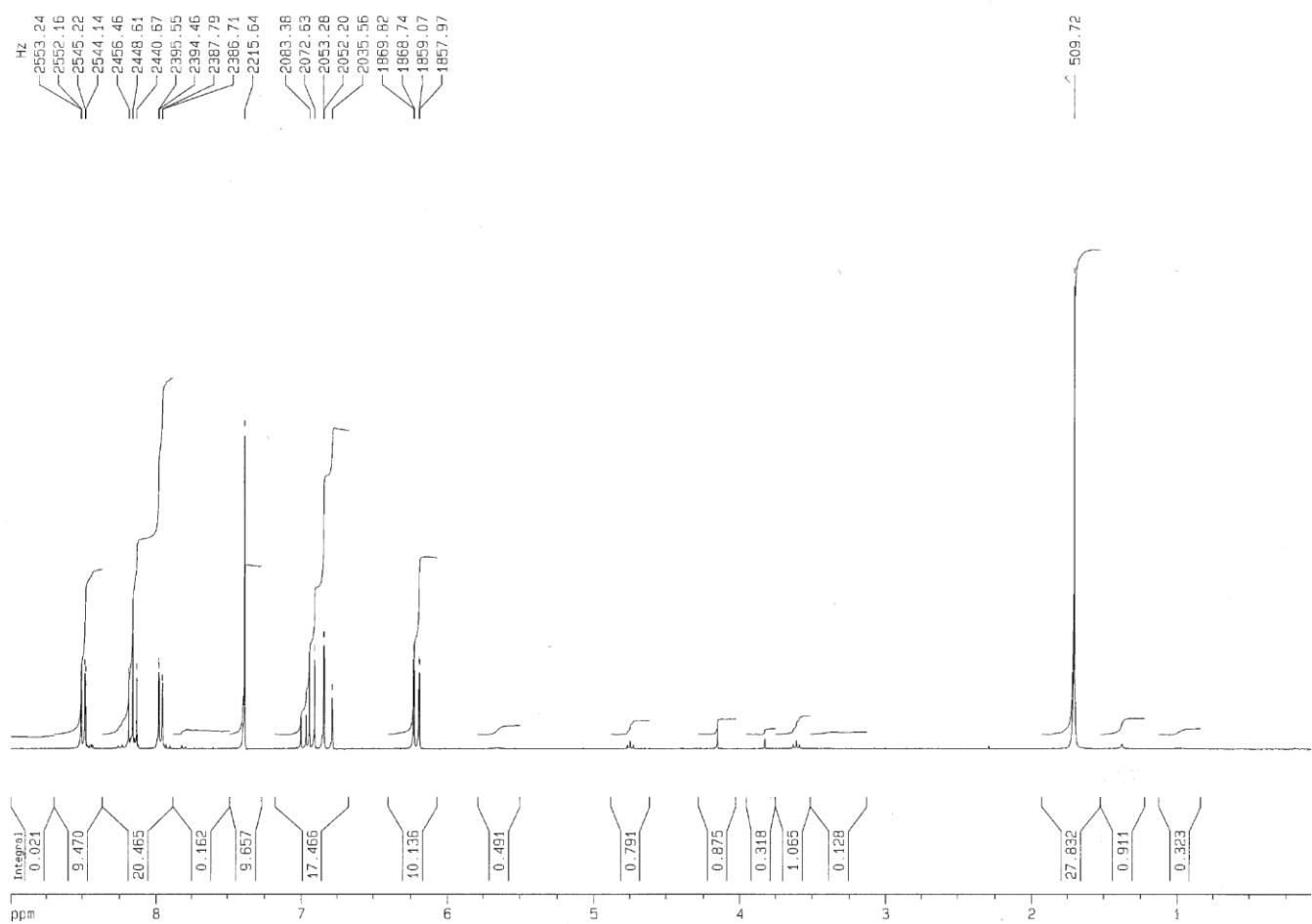
<sup>1</sup>H-NMR – DMSO d6: Fragment **16**



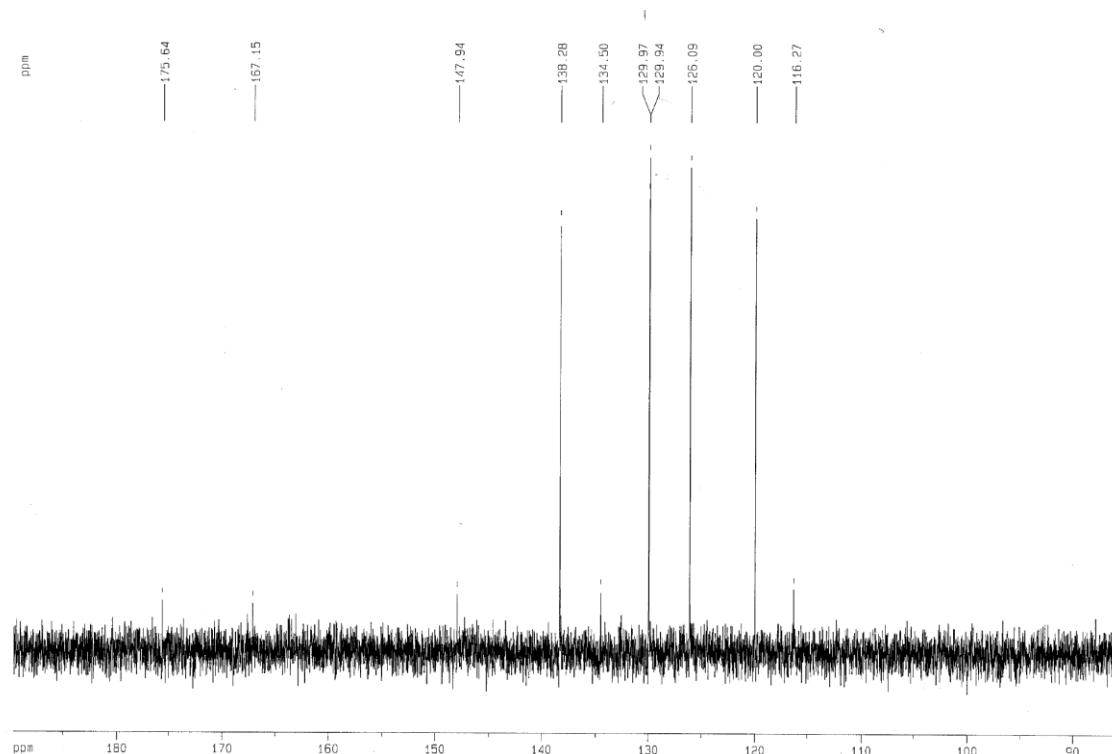
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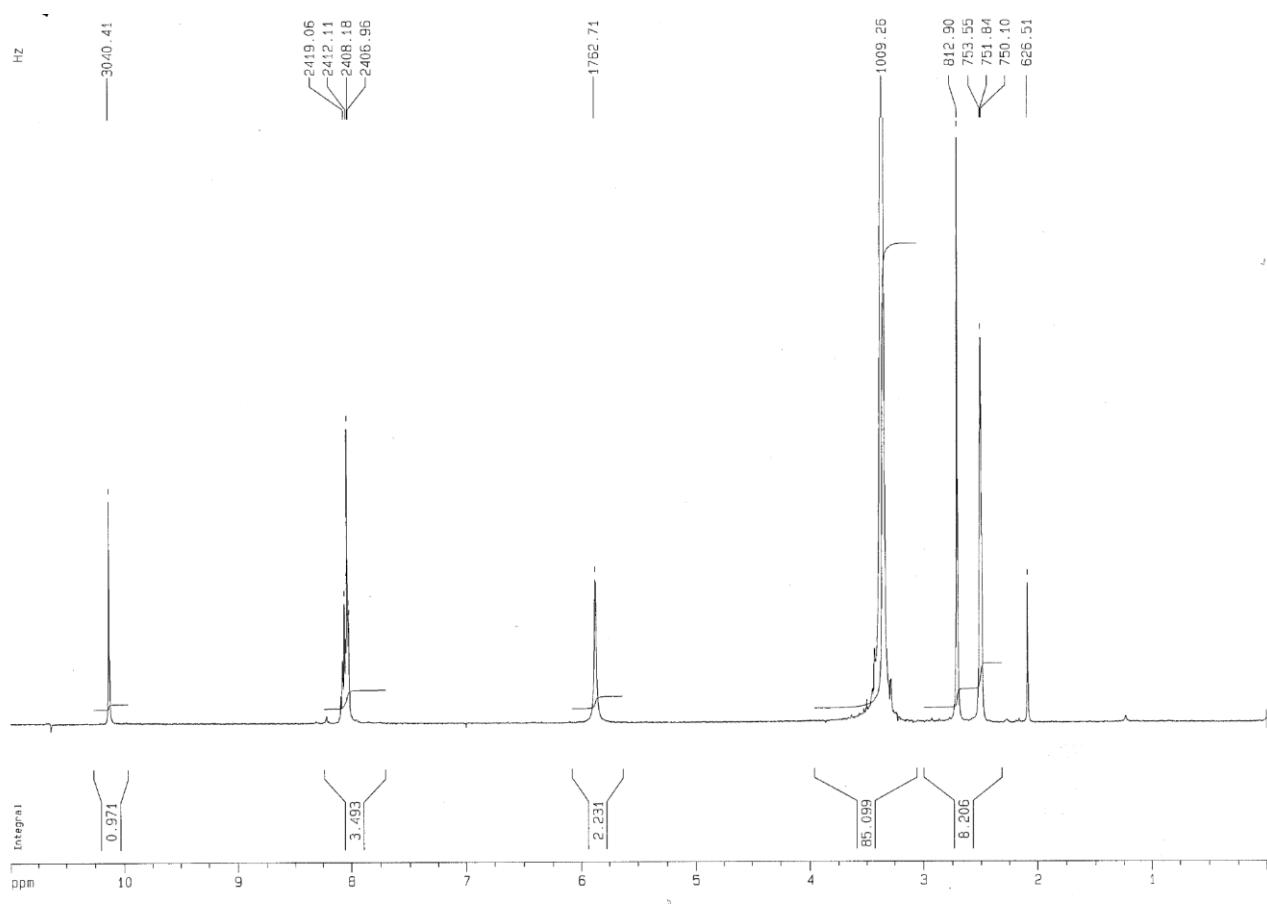
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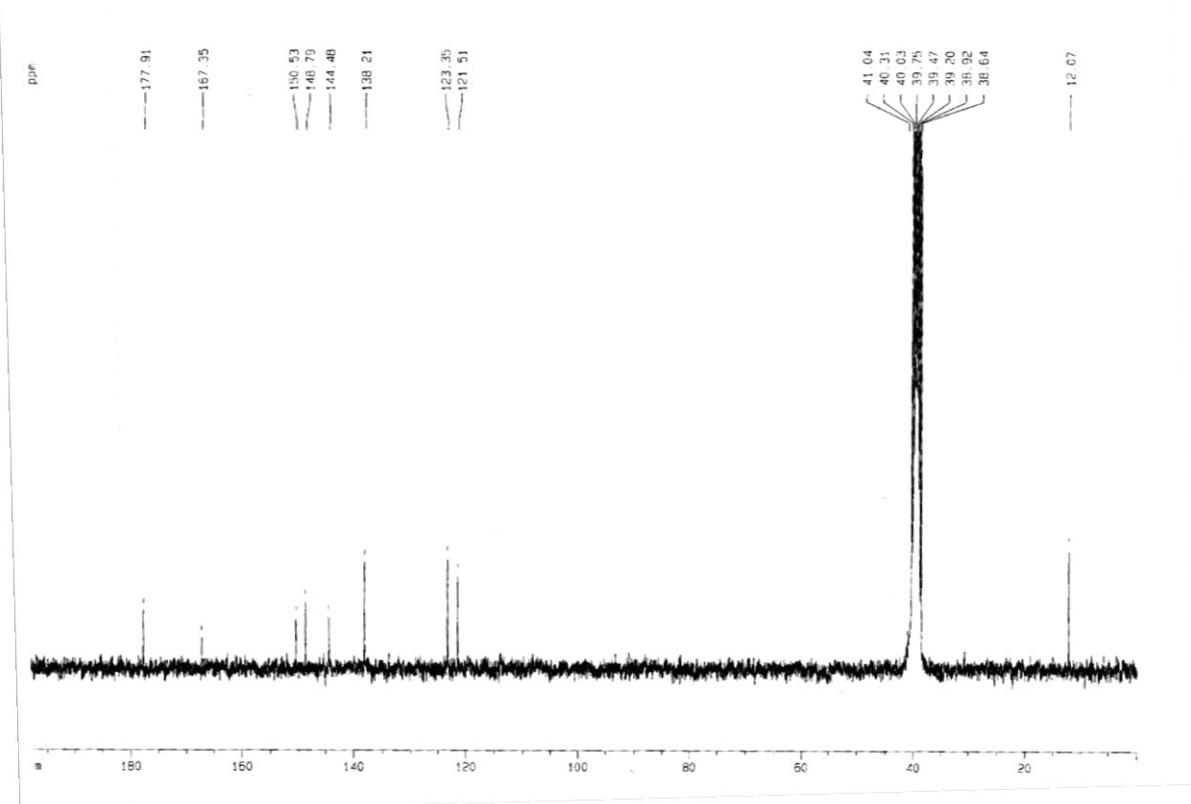
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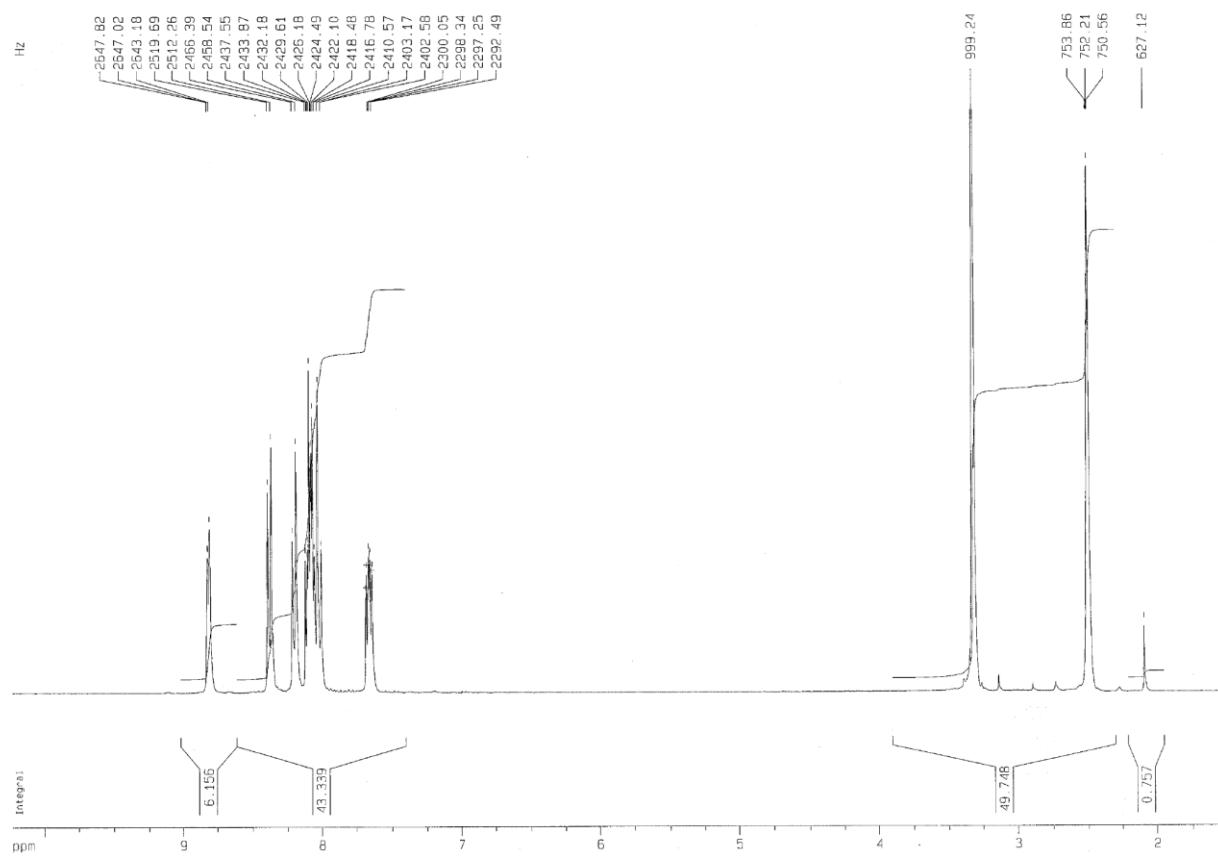
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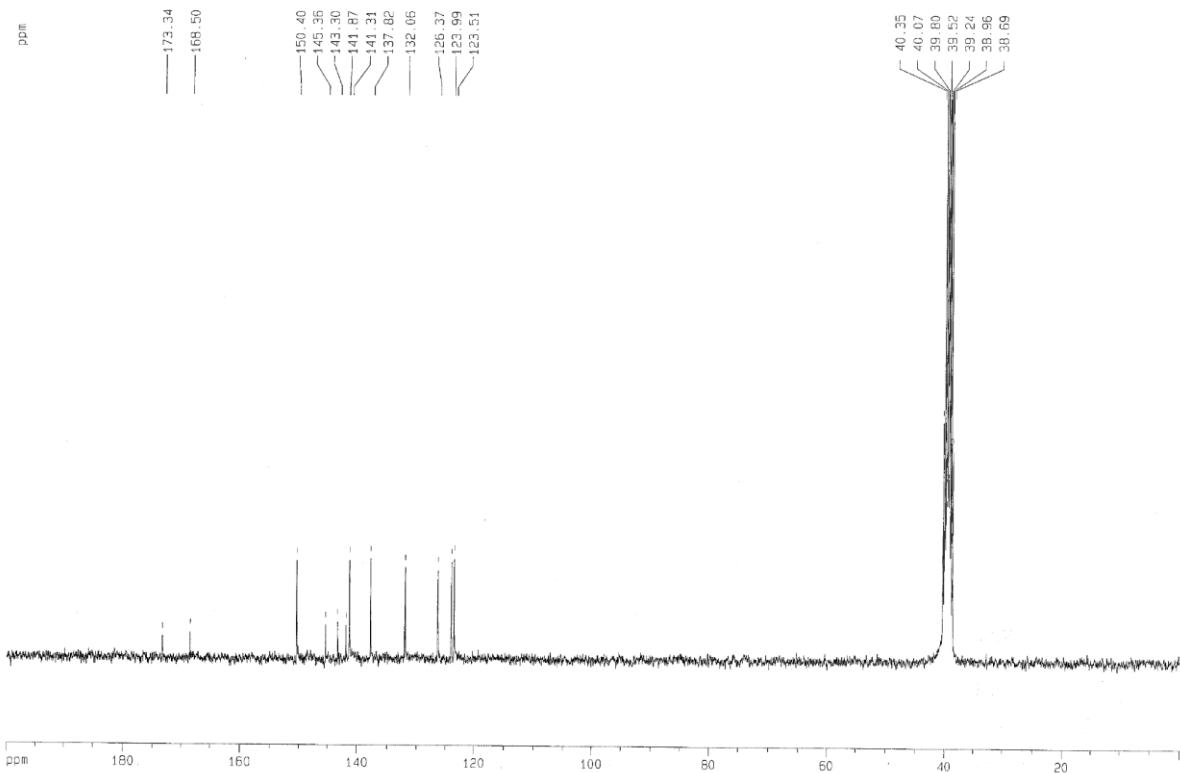
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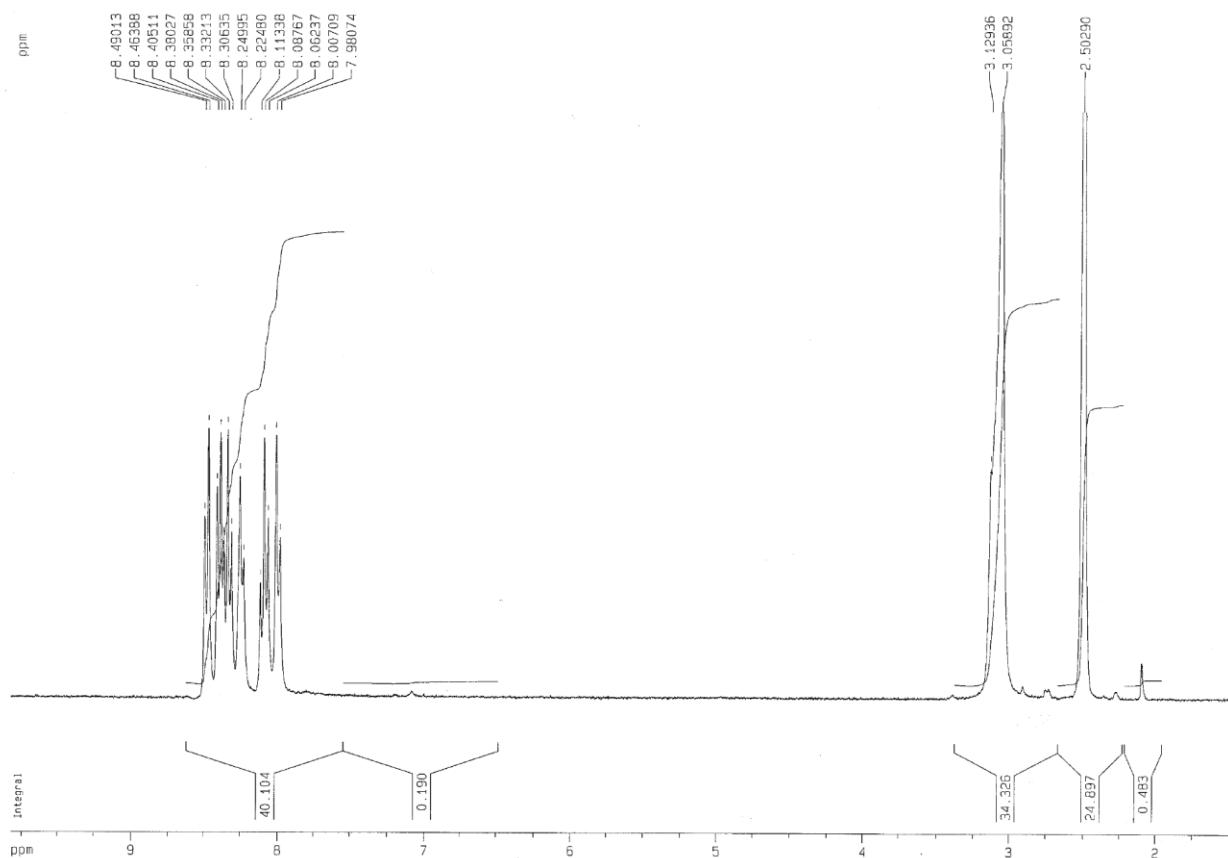
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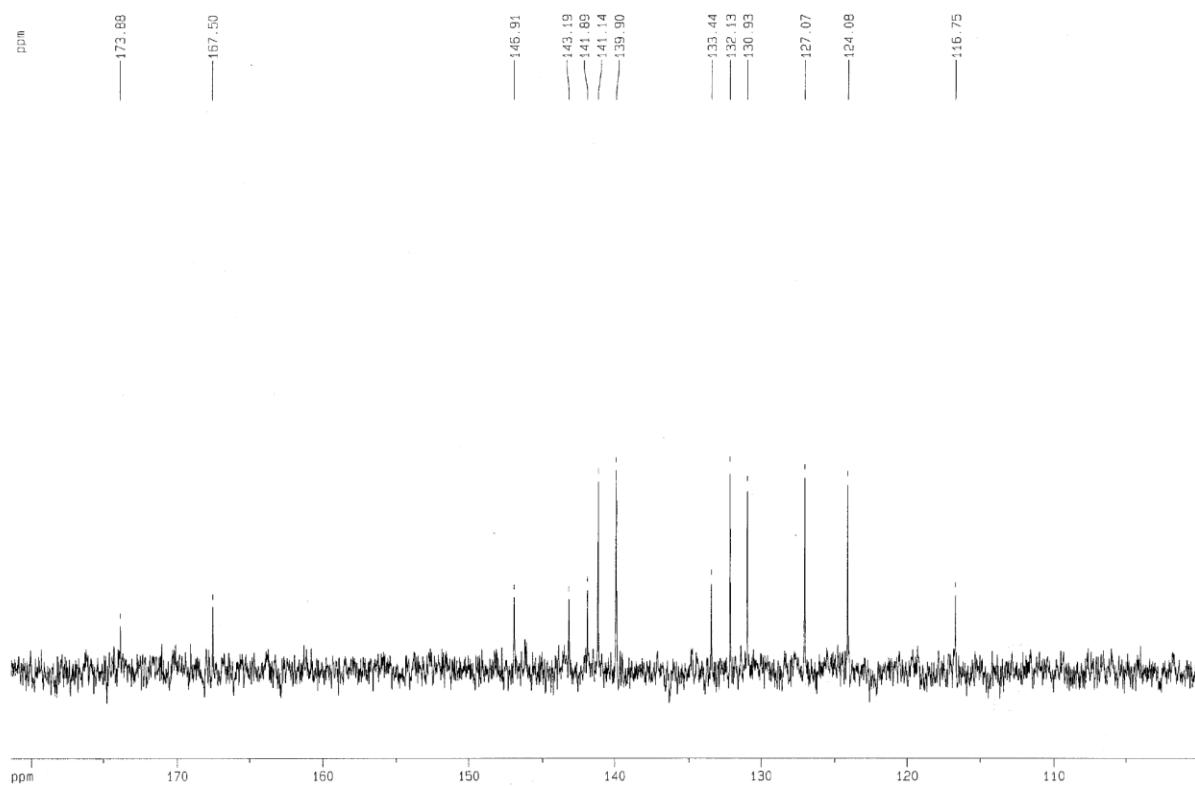
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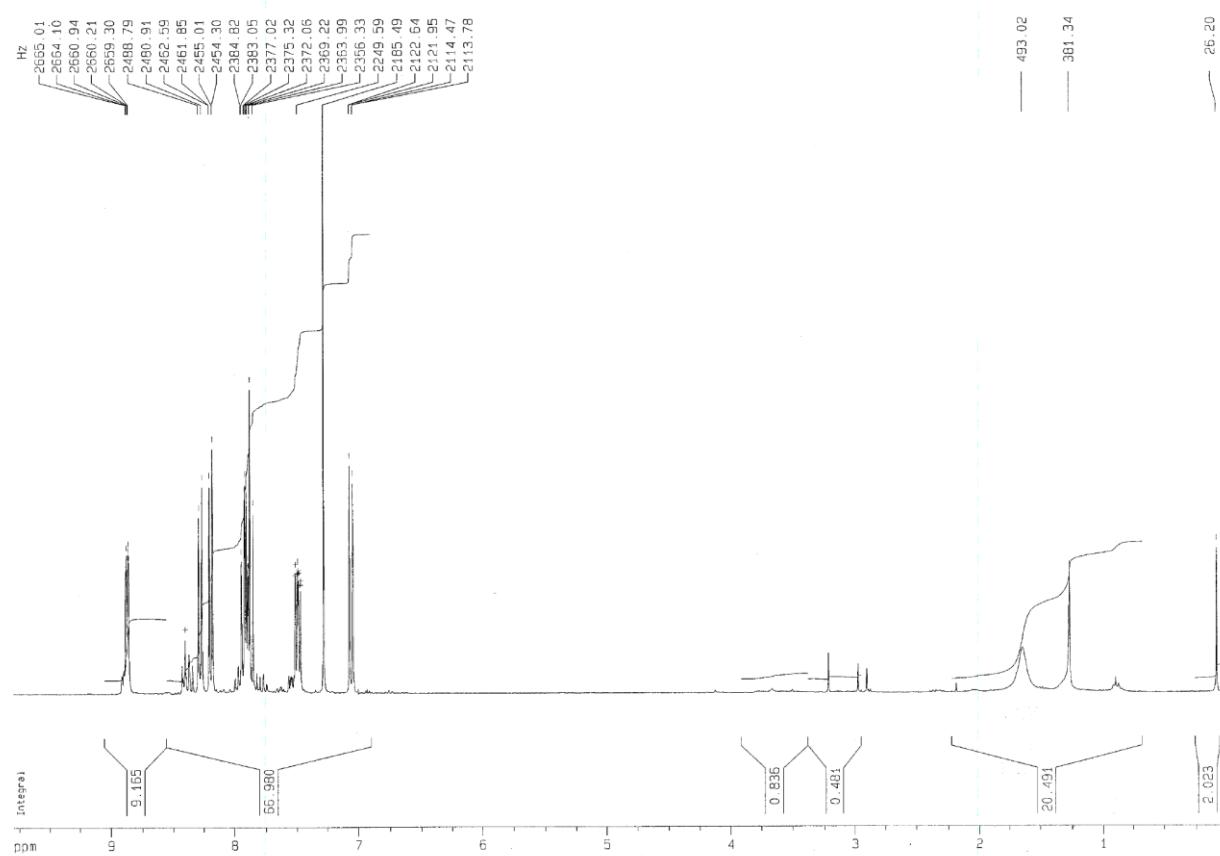
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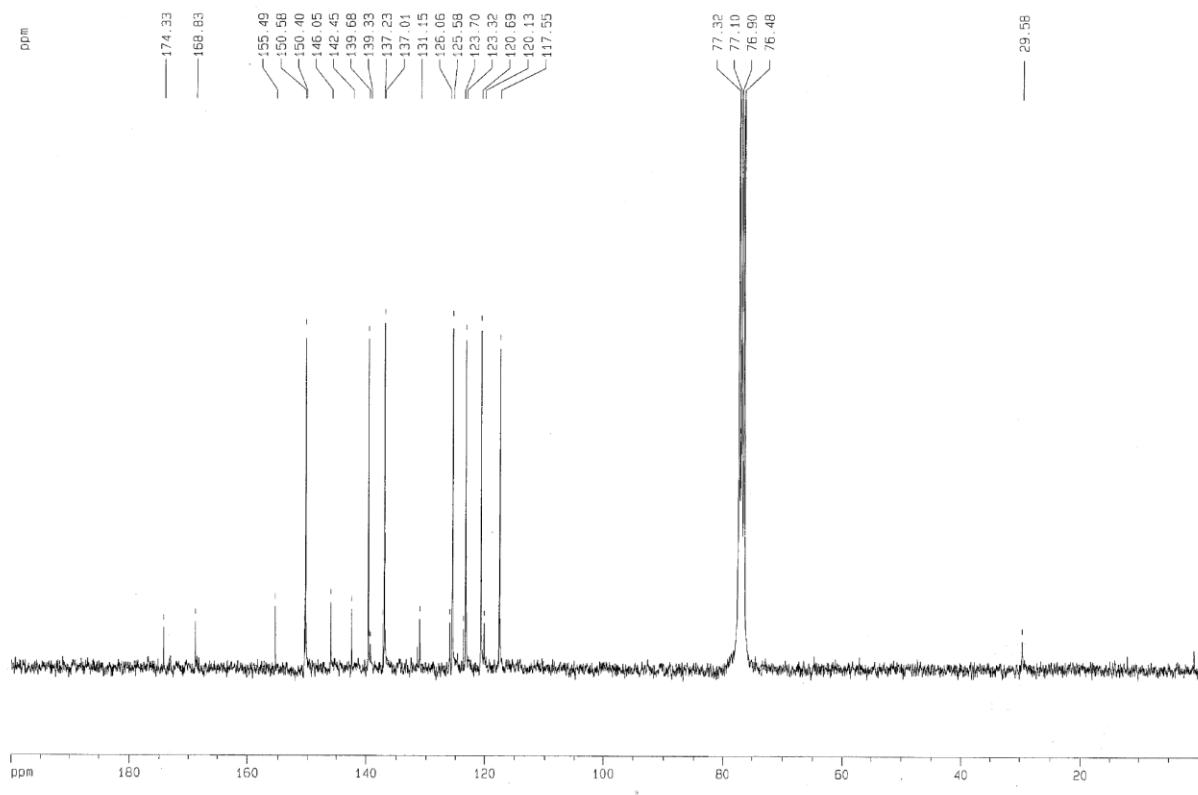
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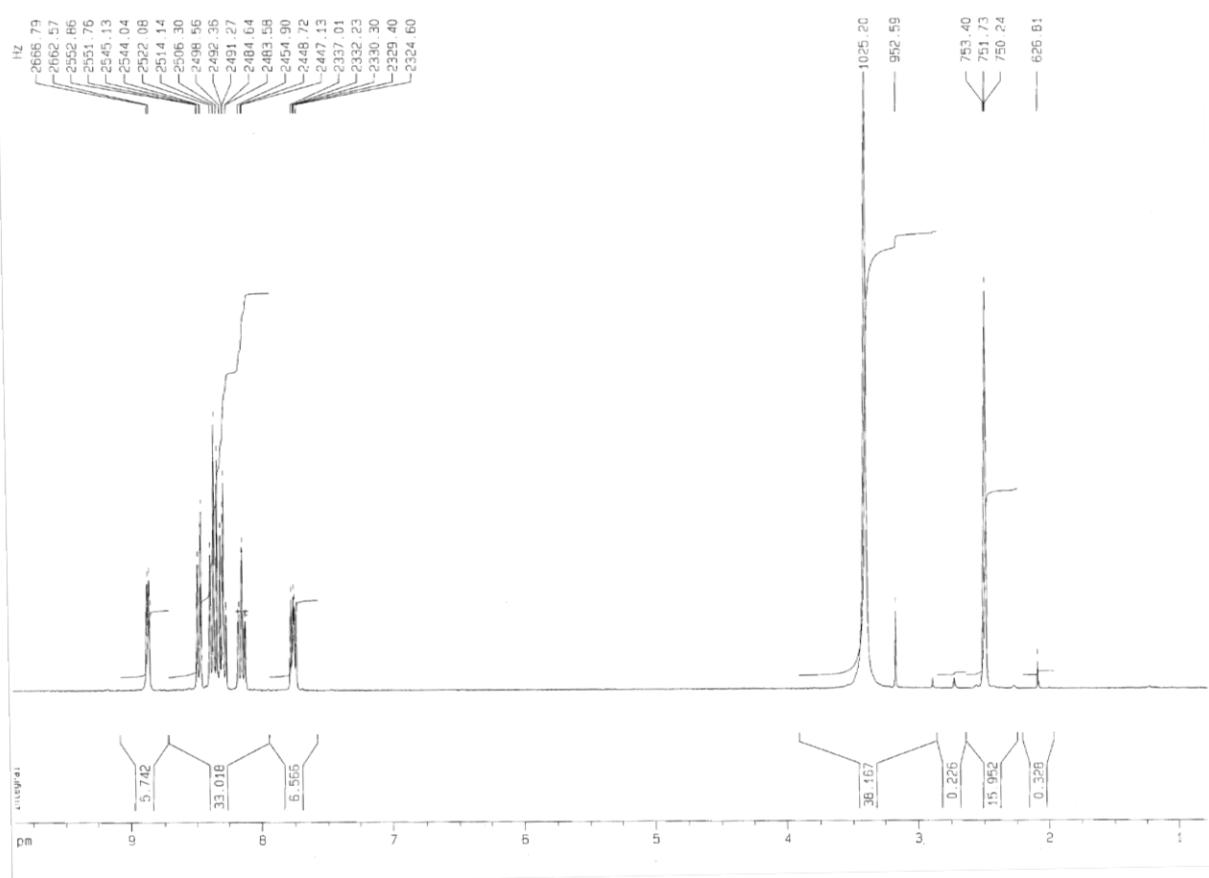
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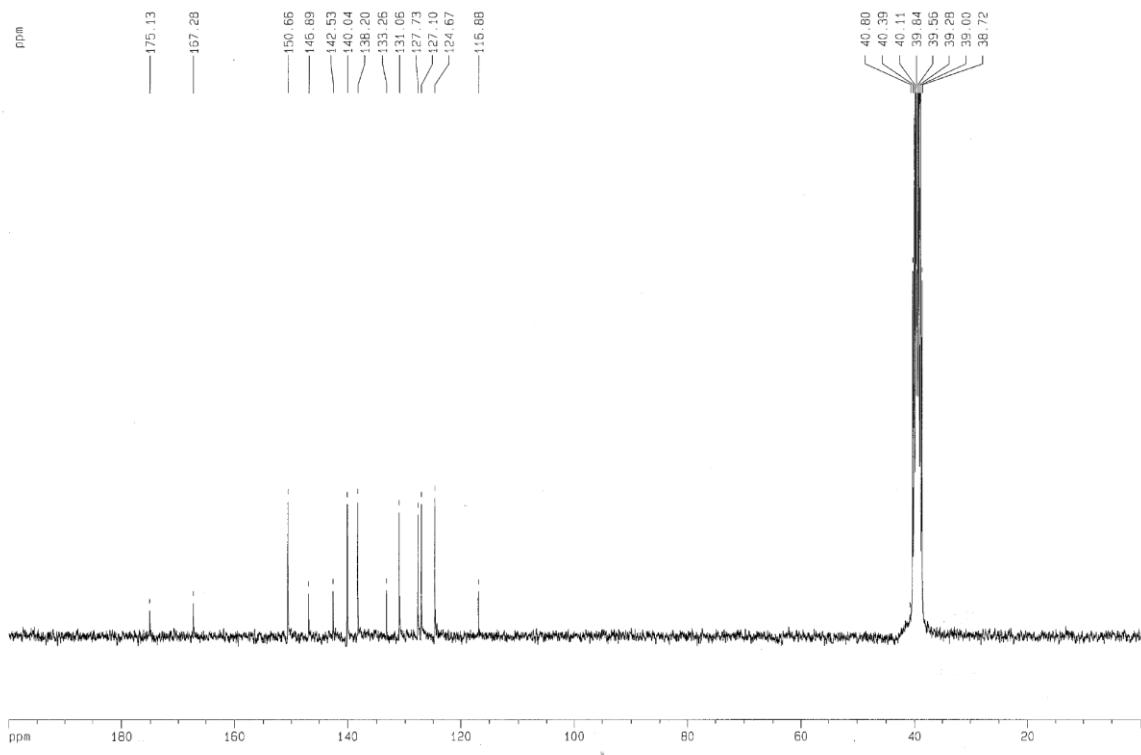
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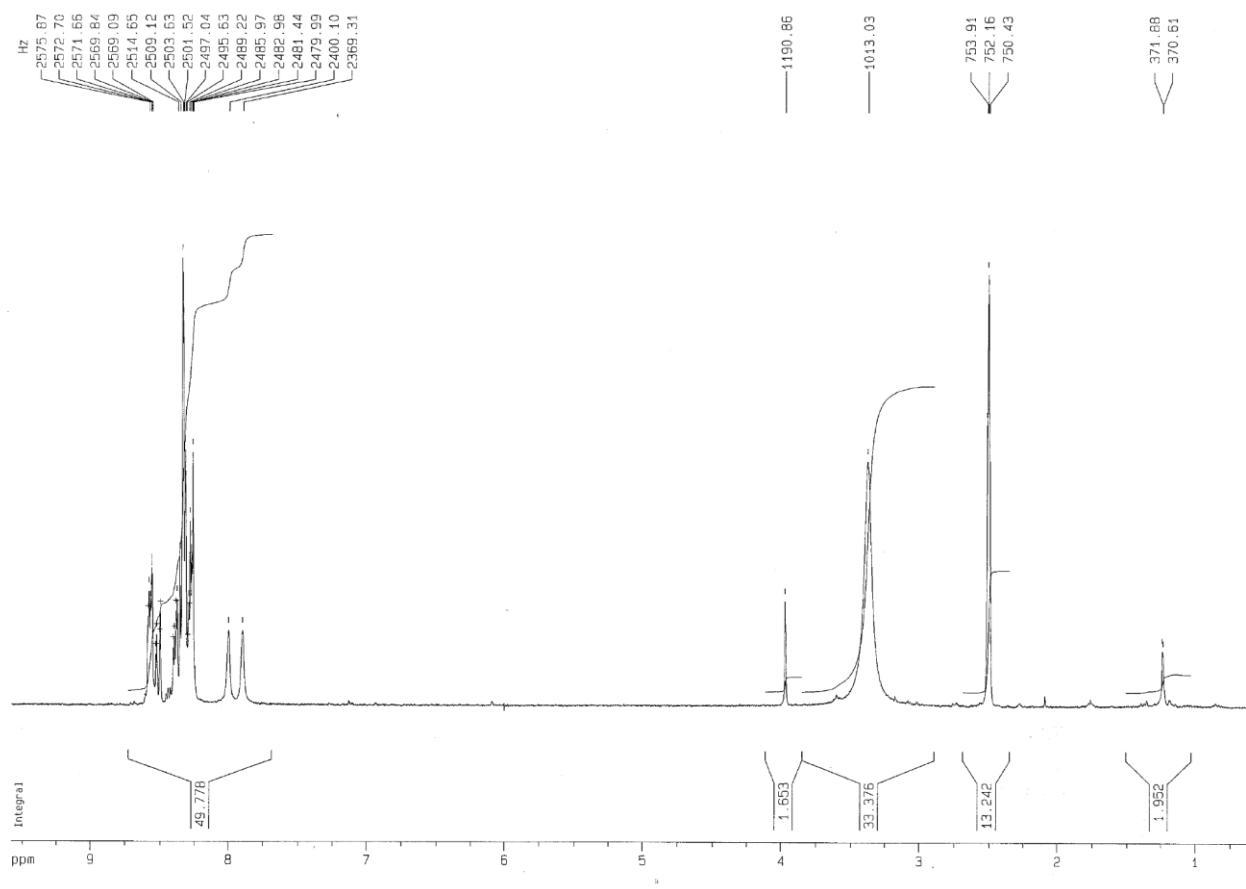
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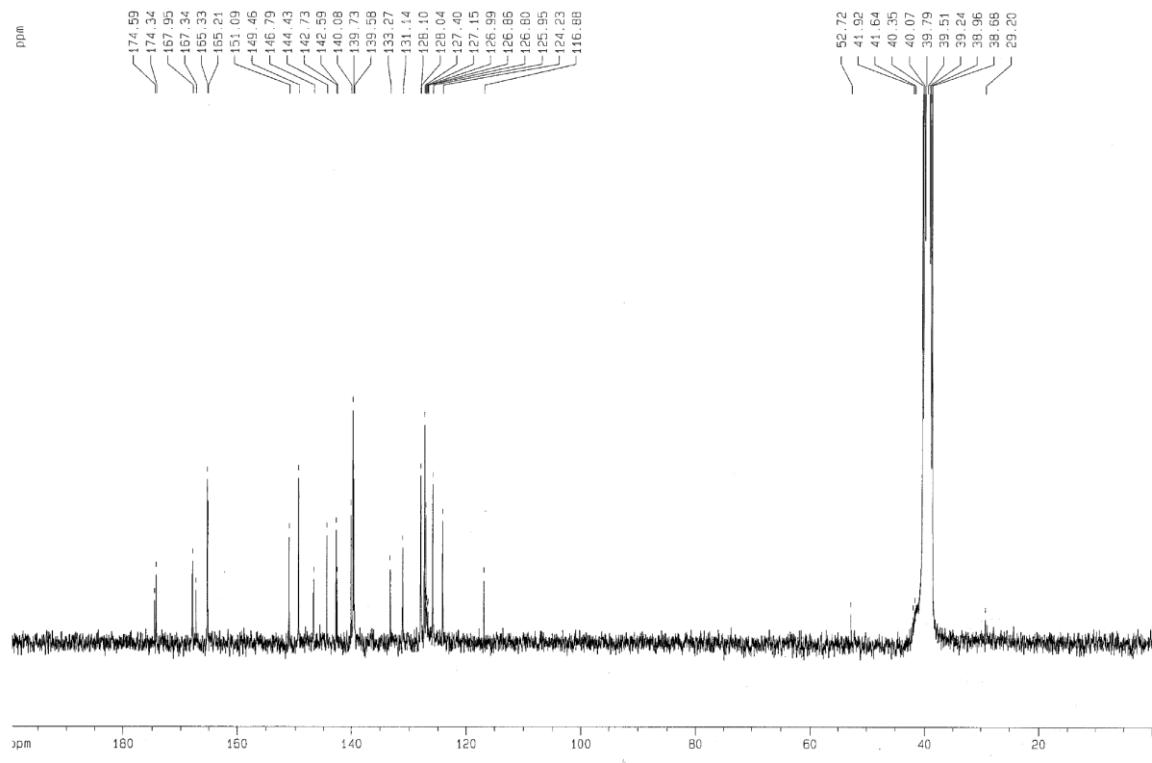
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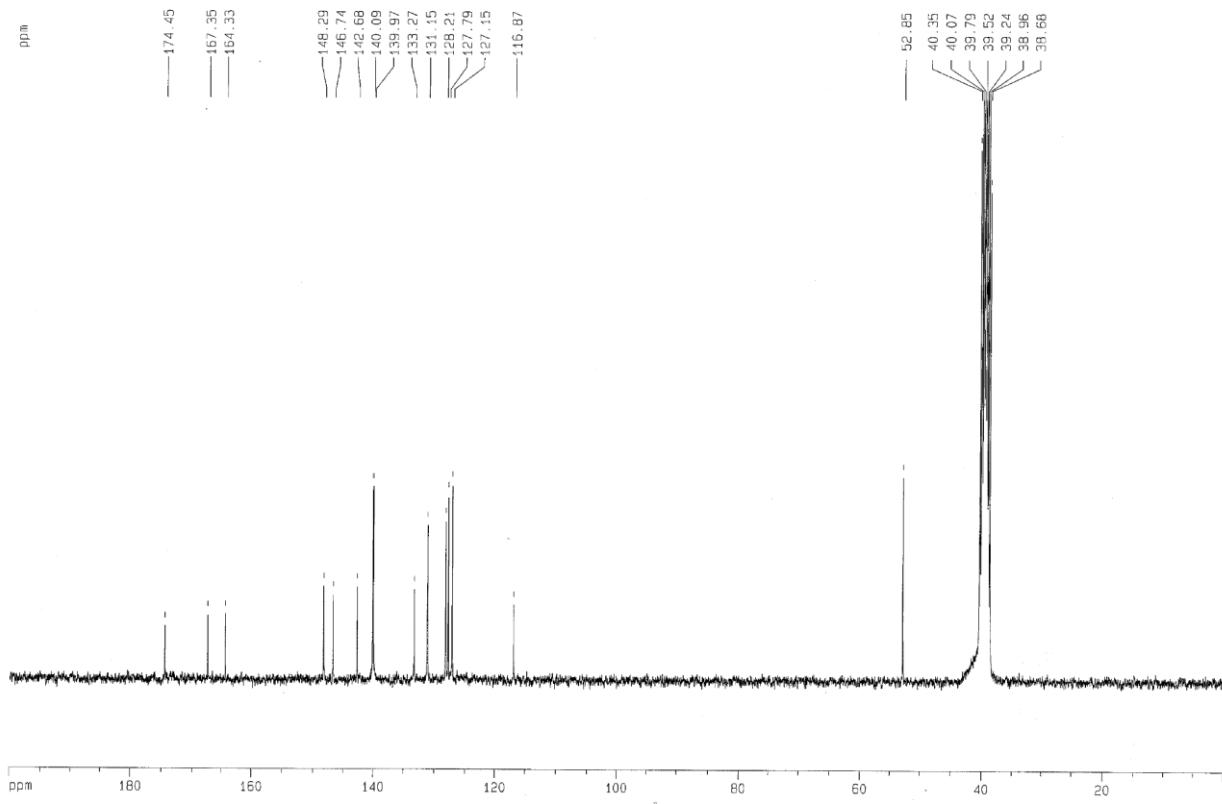
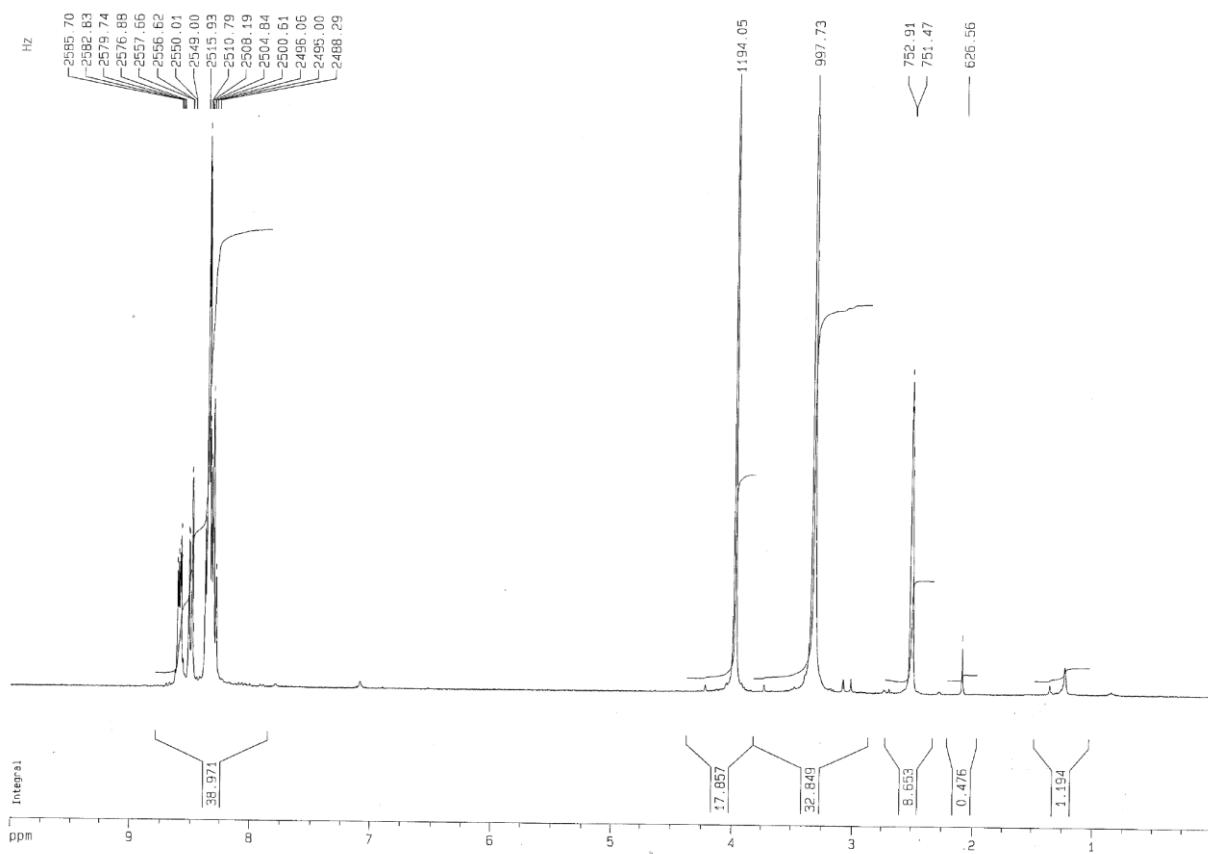
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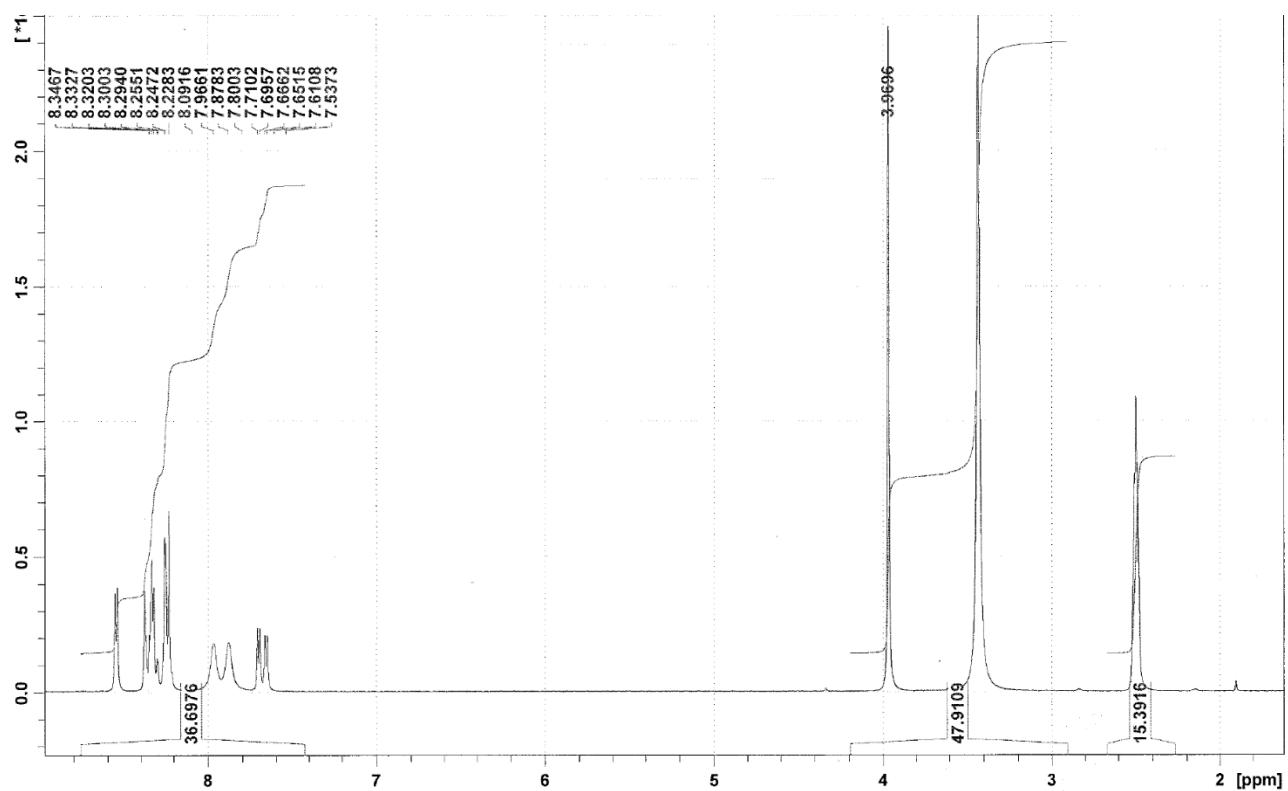
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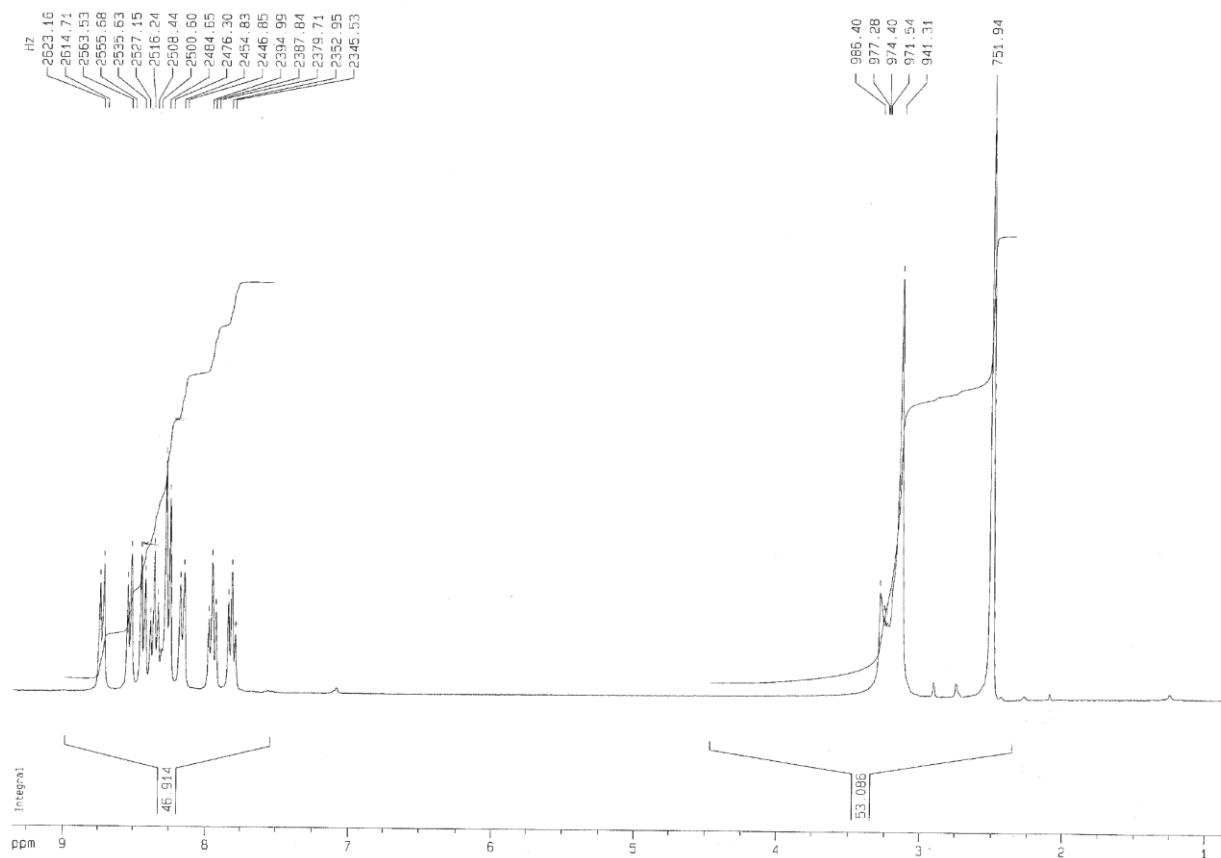
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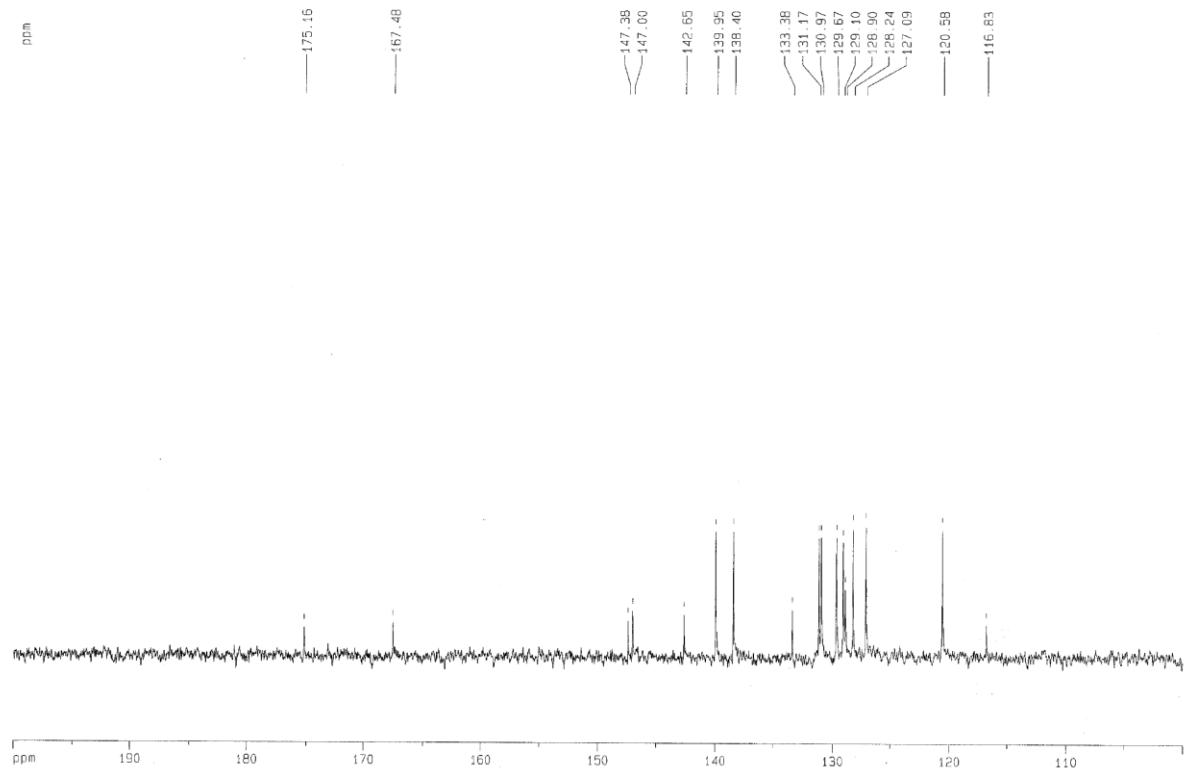
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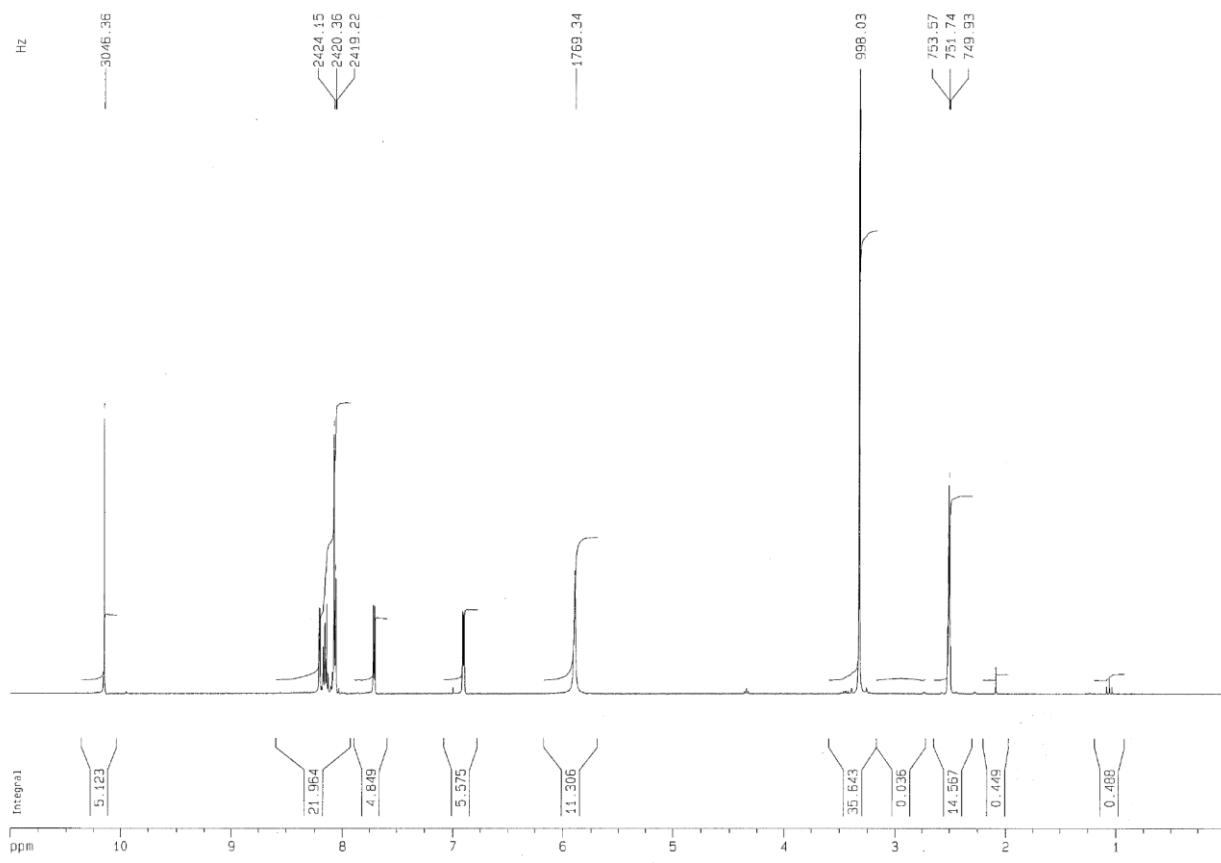
<sup>1</sup>H-NMR – DMSO d6: Fragment 26



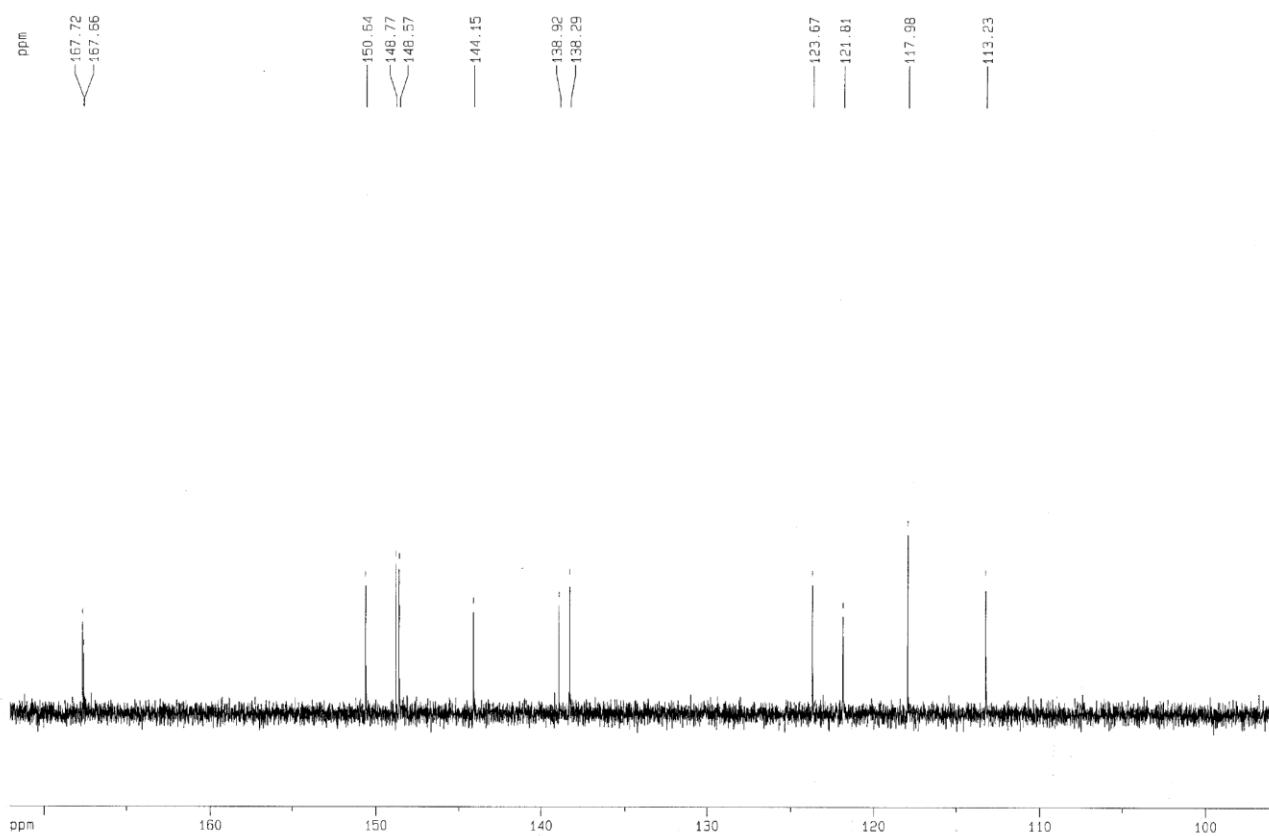
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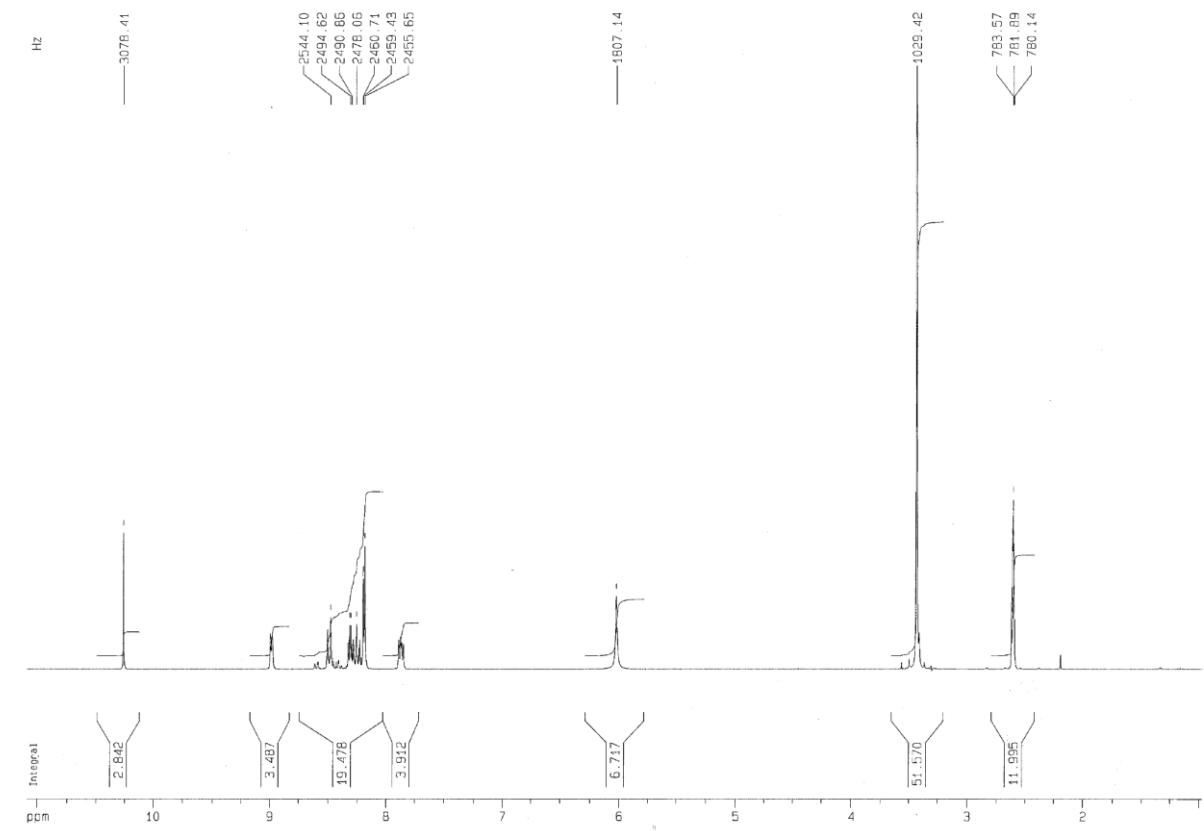
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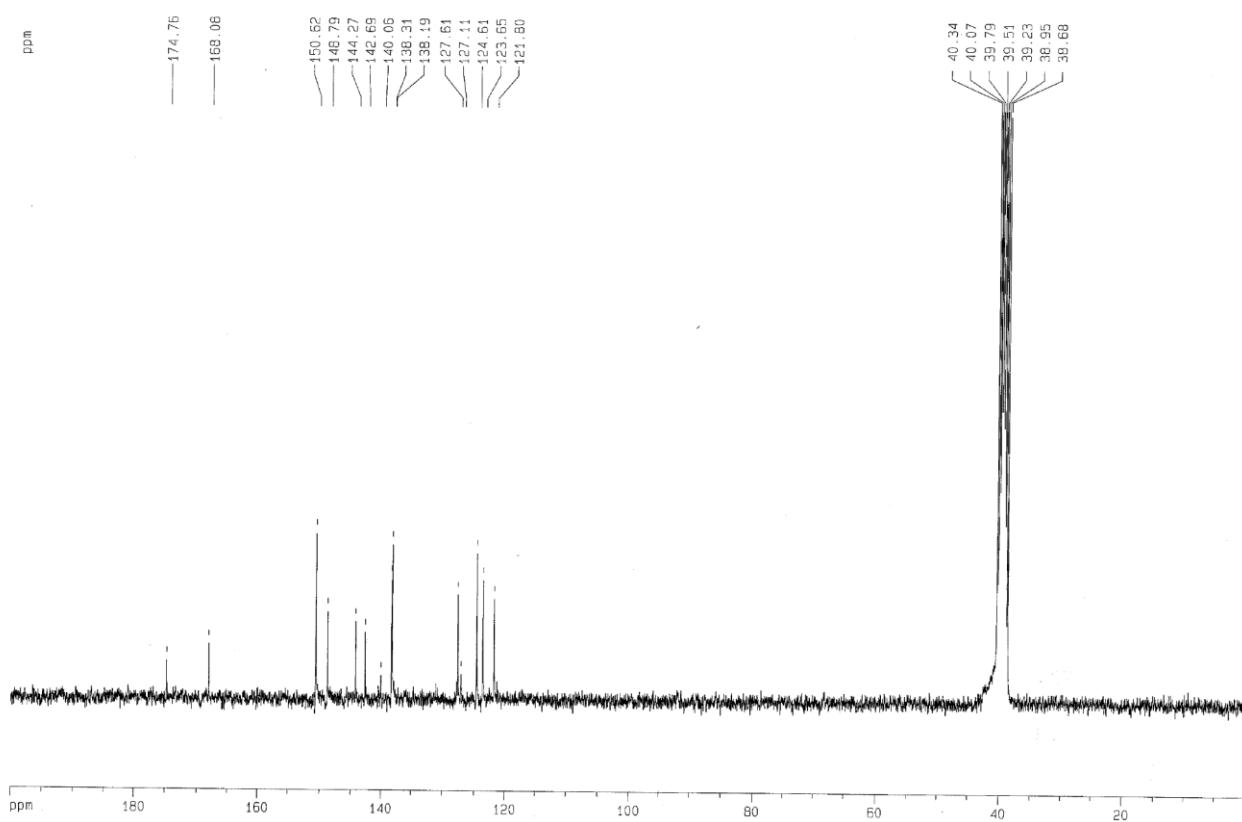
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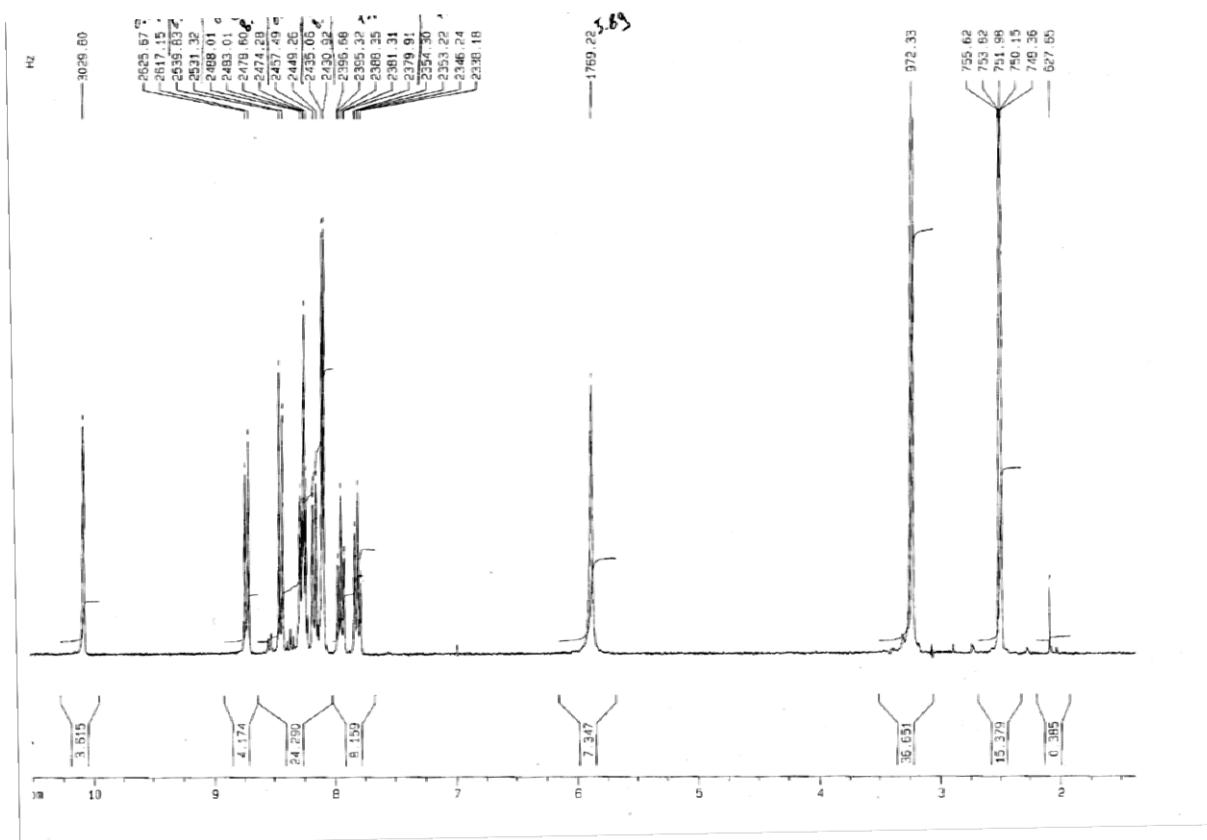
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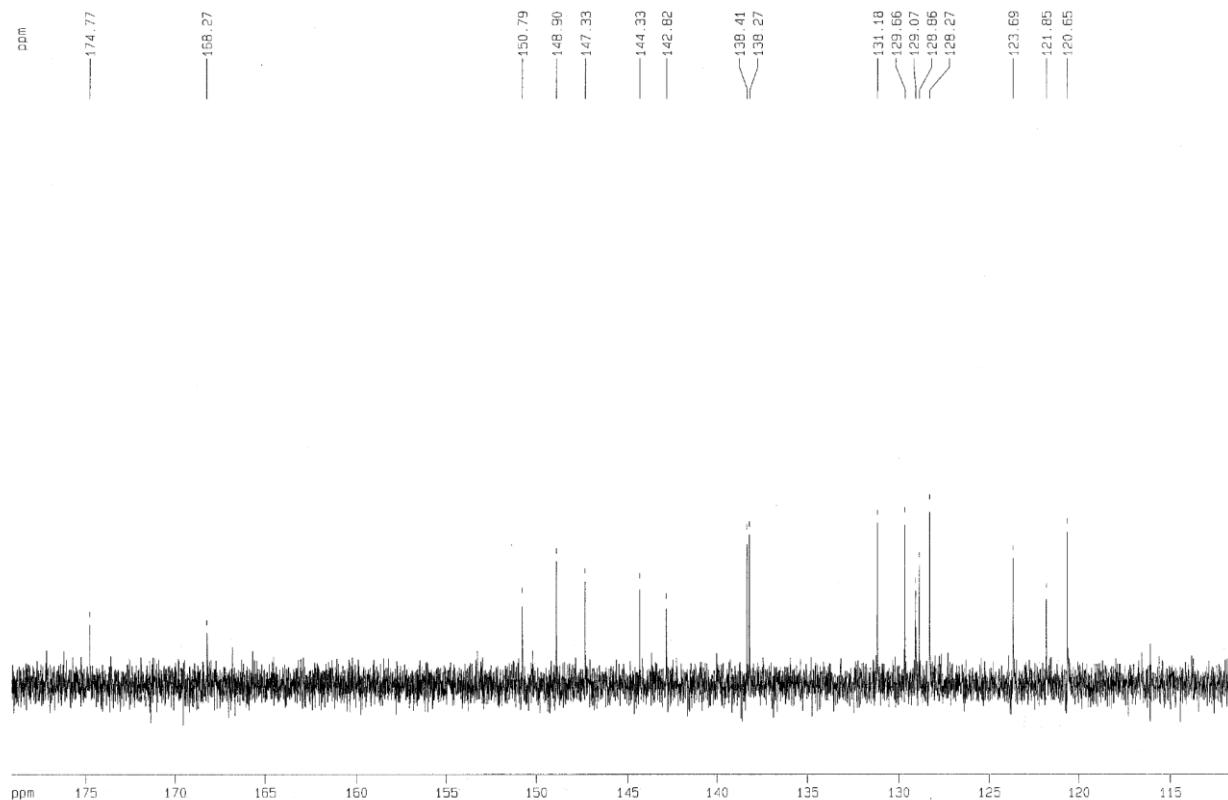
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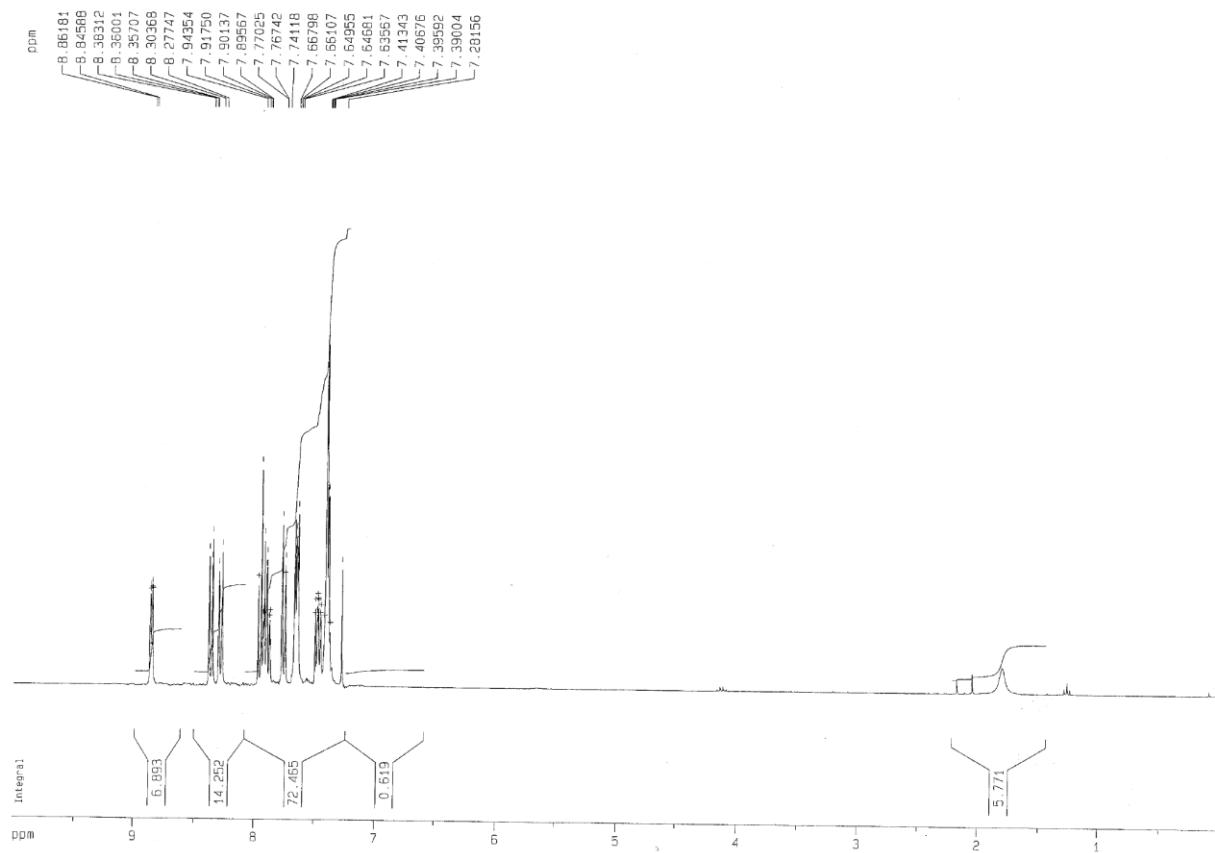
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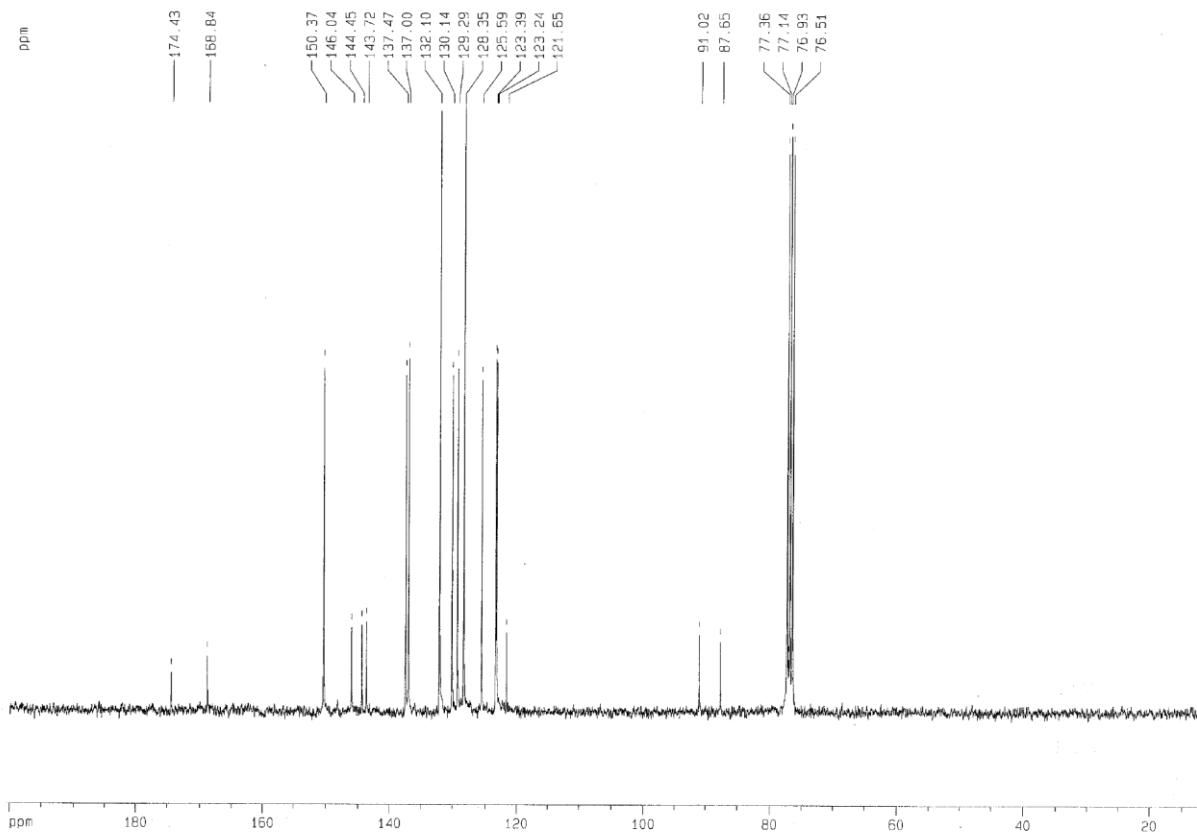
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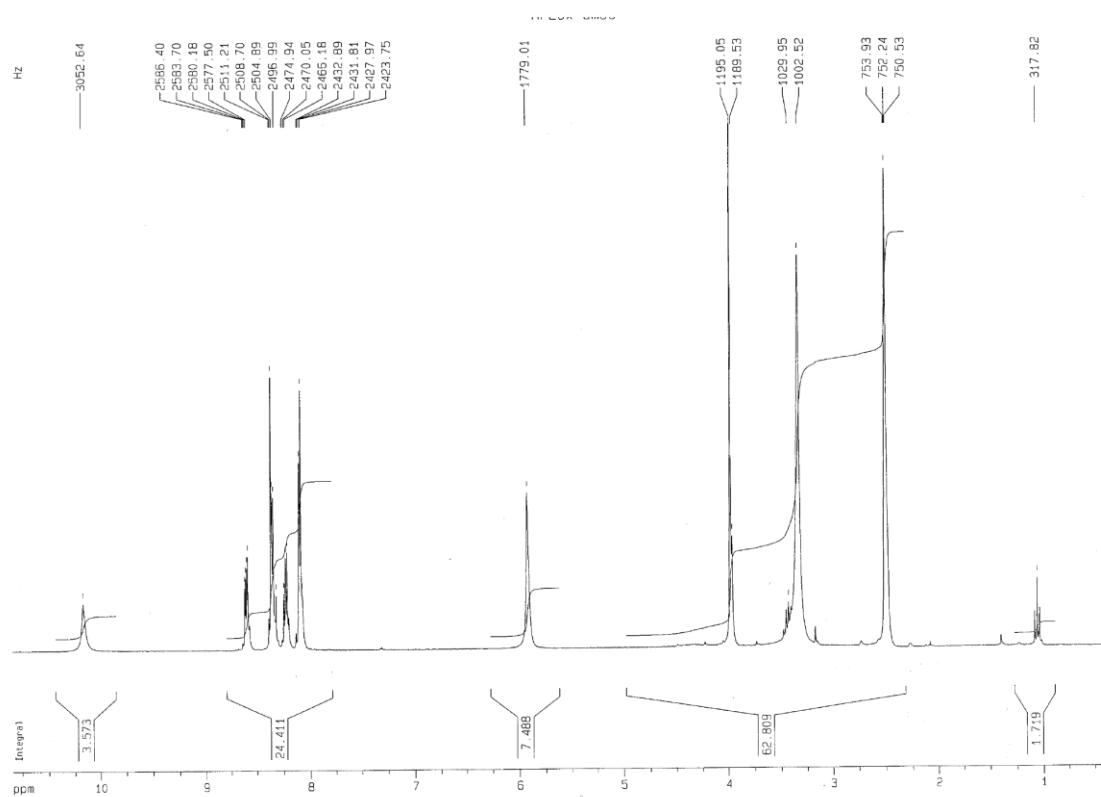
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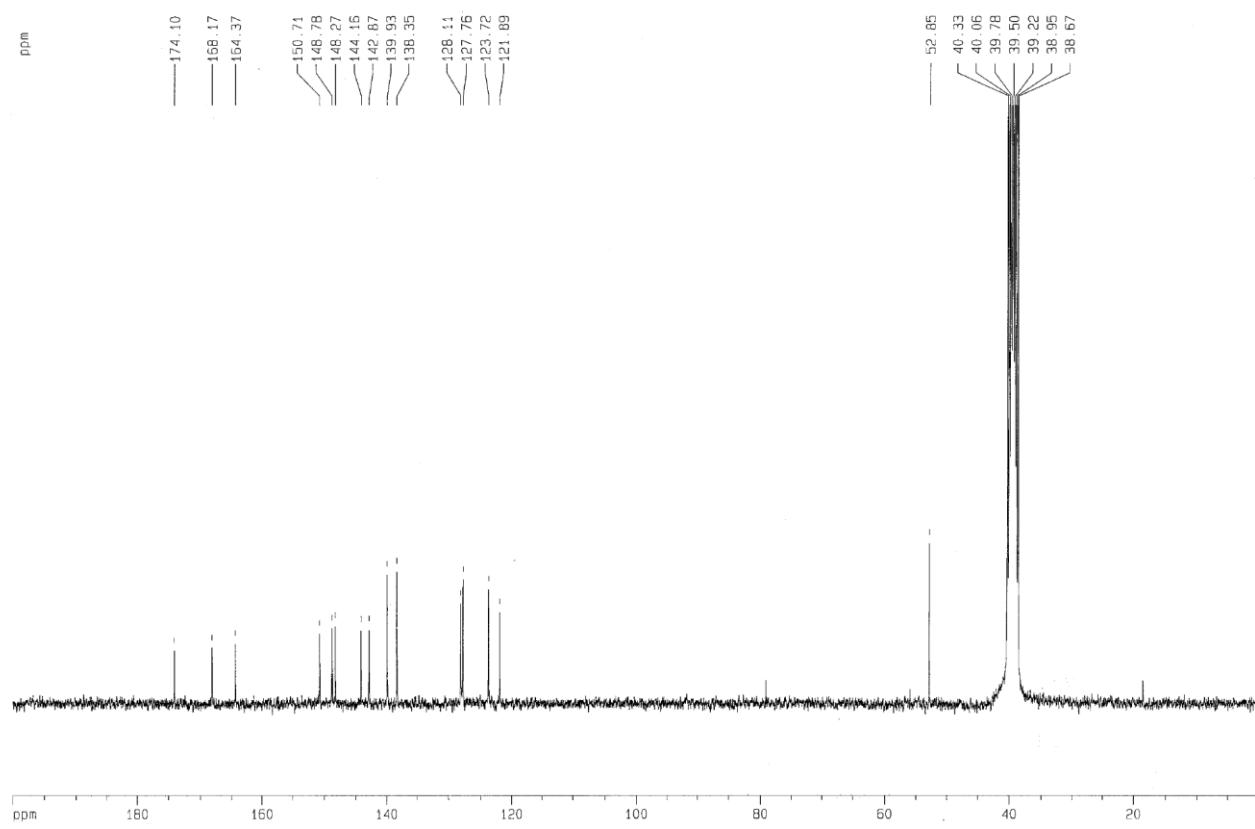
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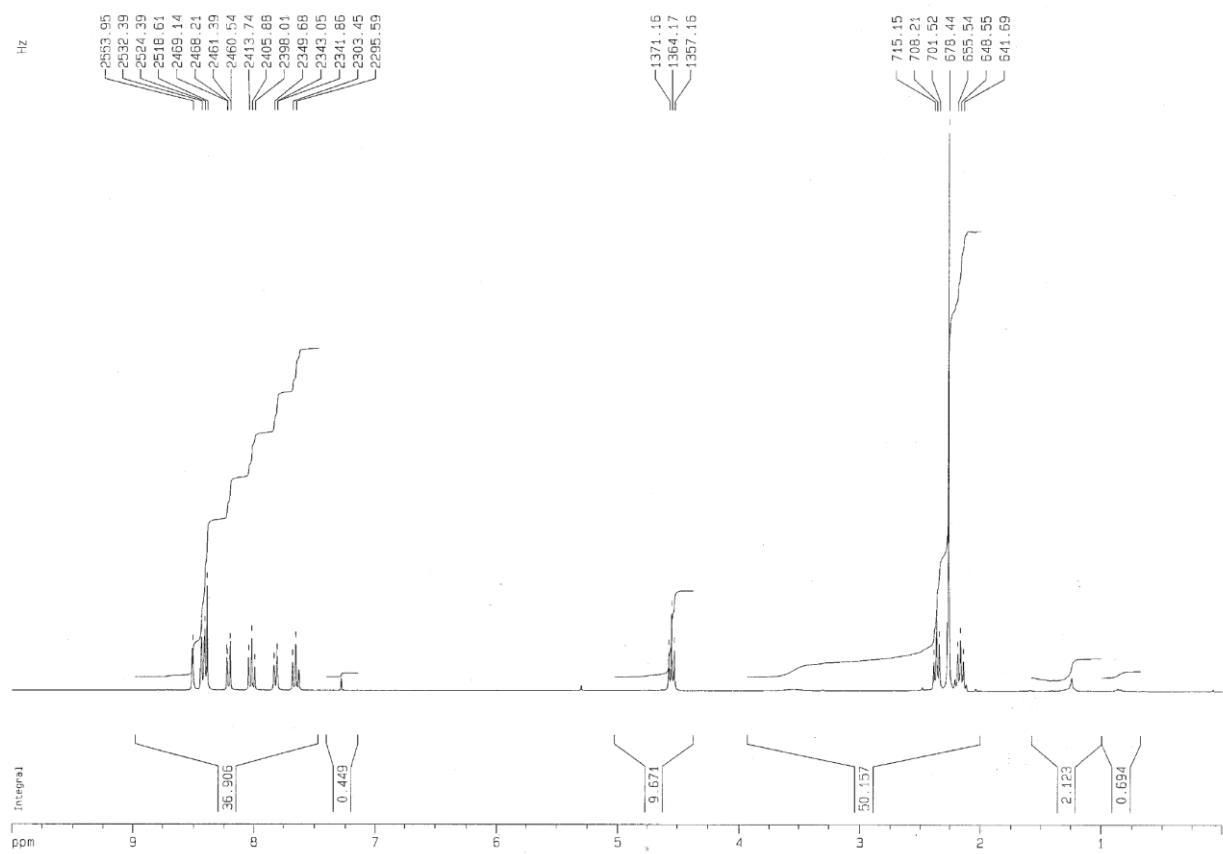
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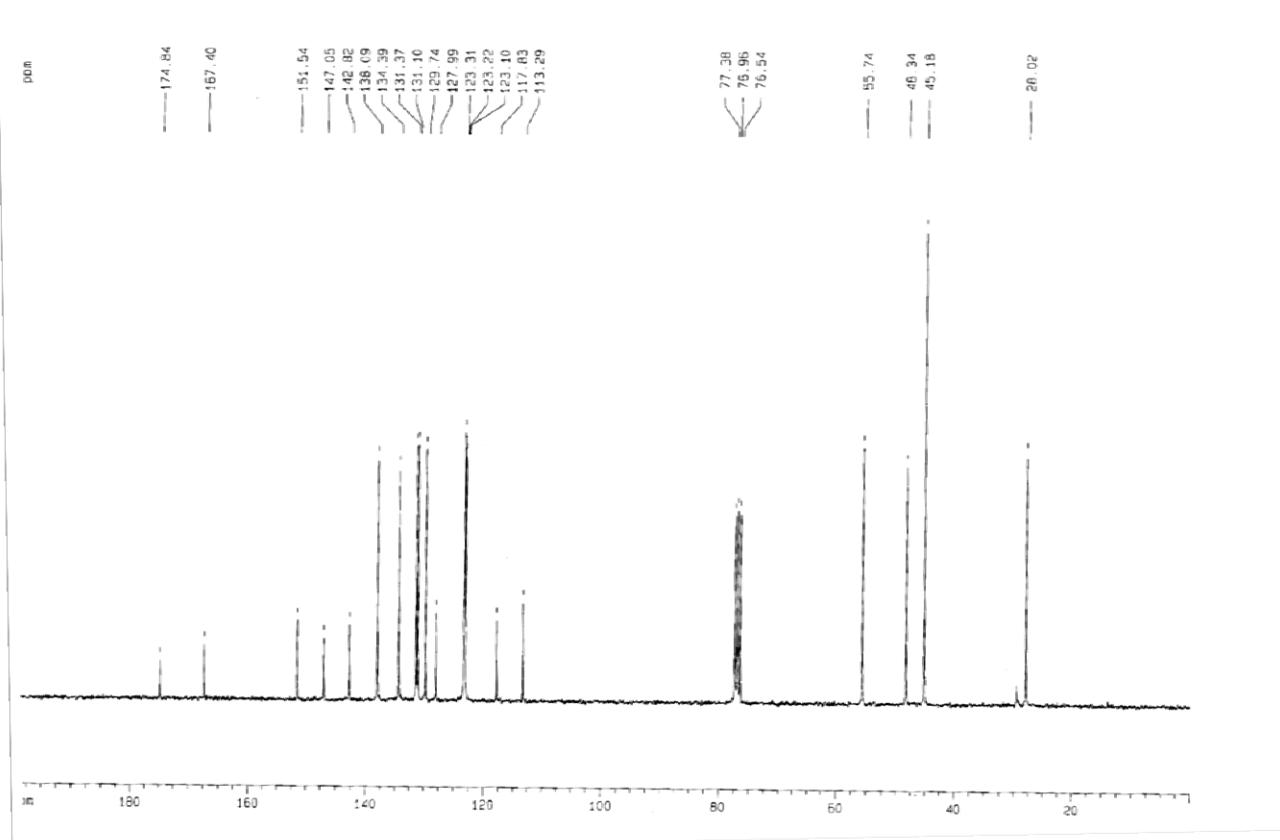
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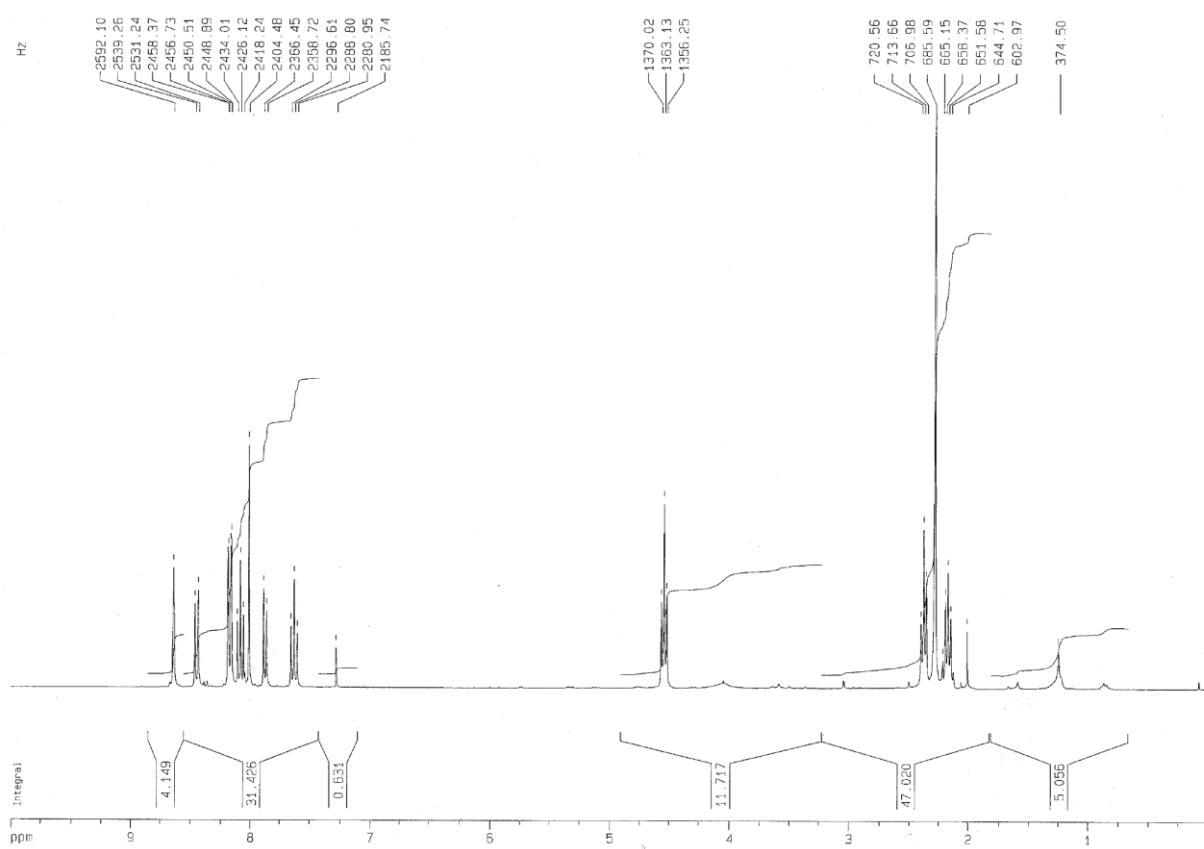
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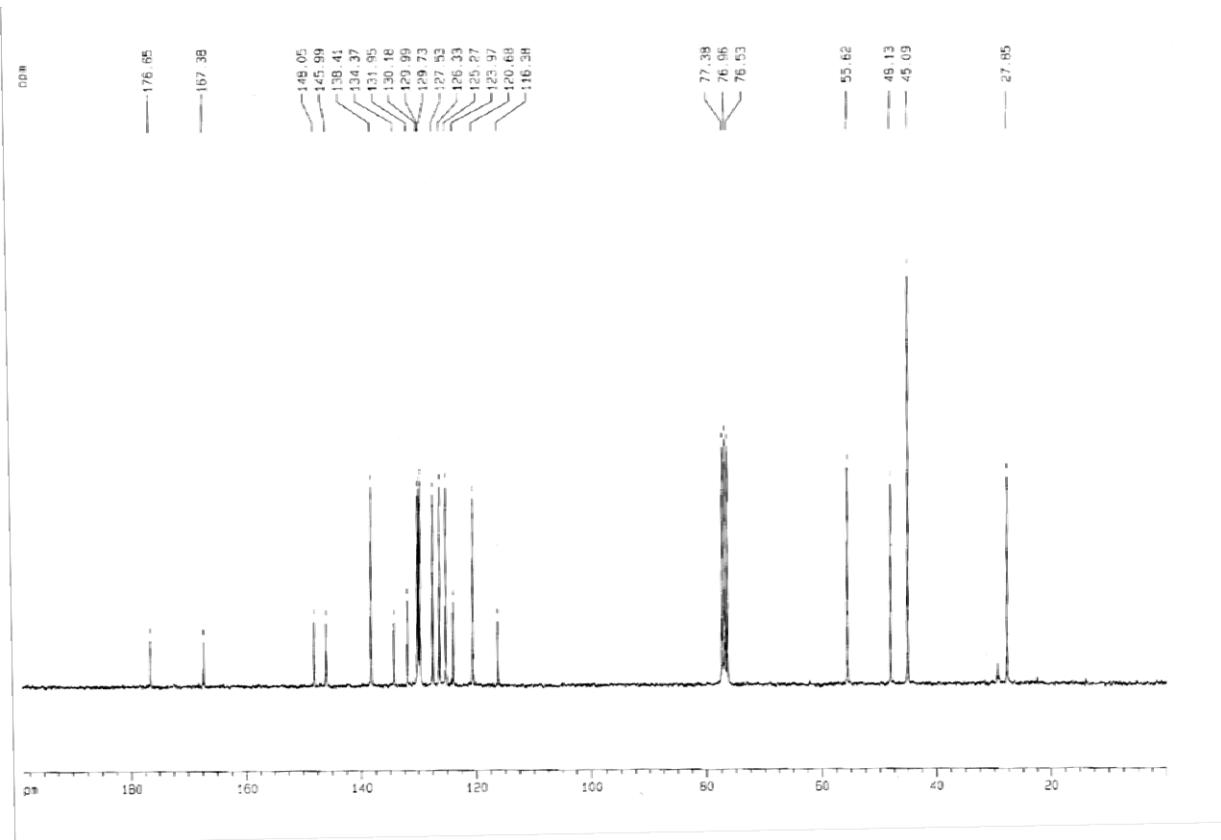
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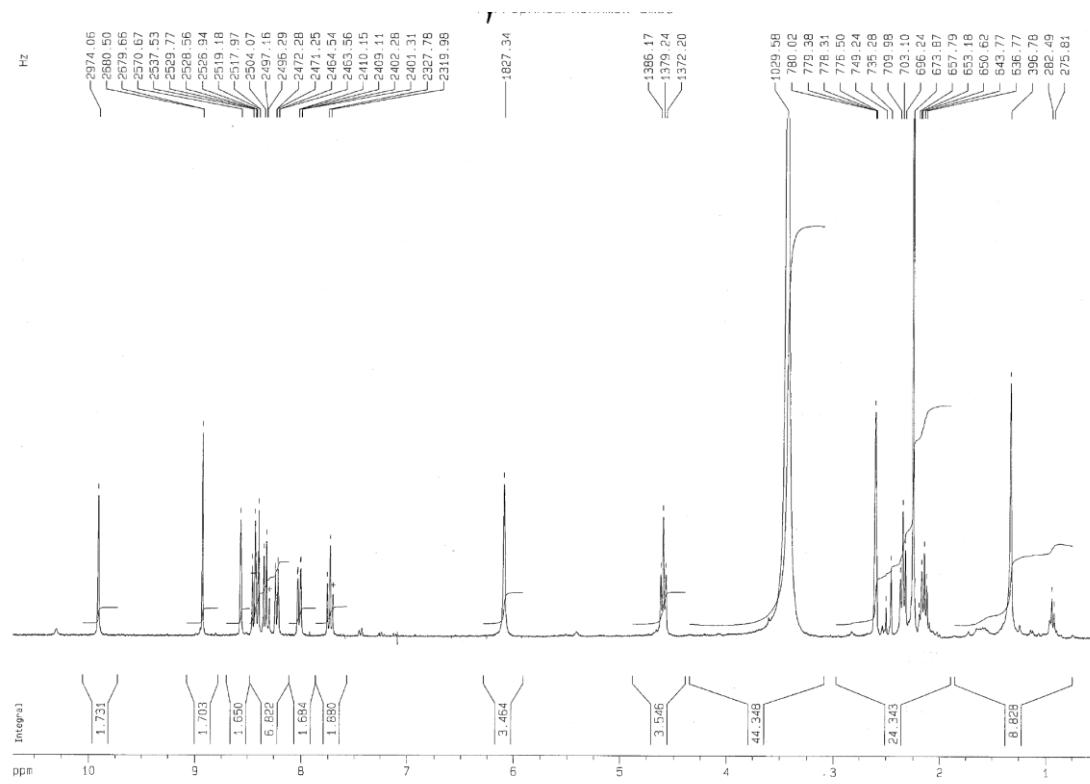
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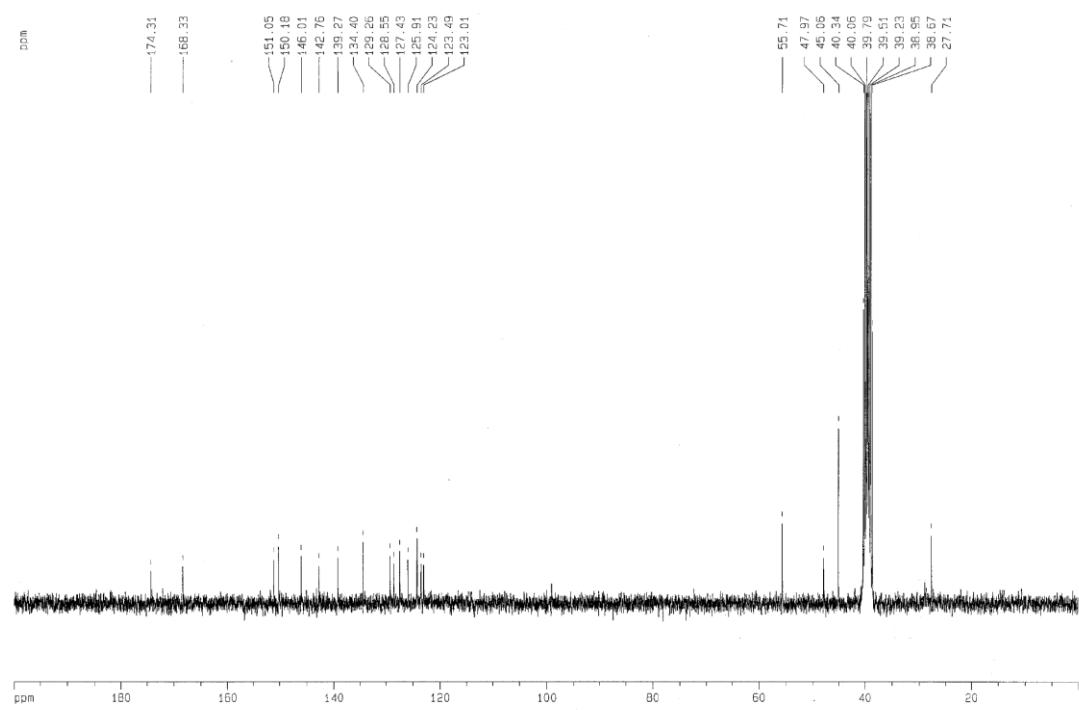
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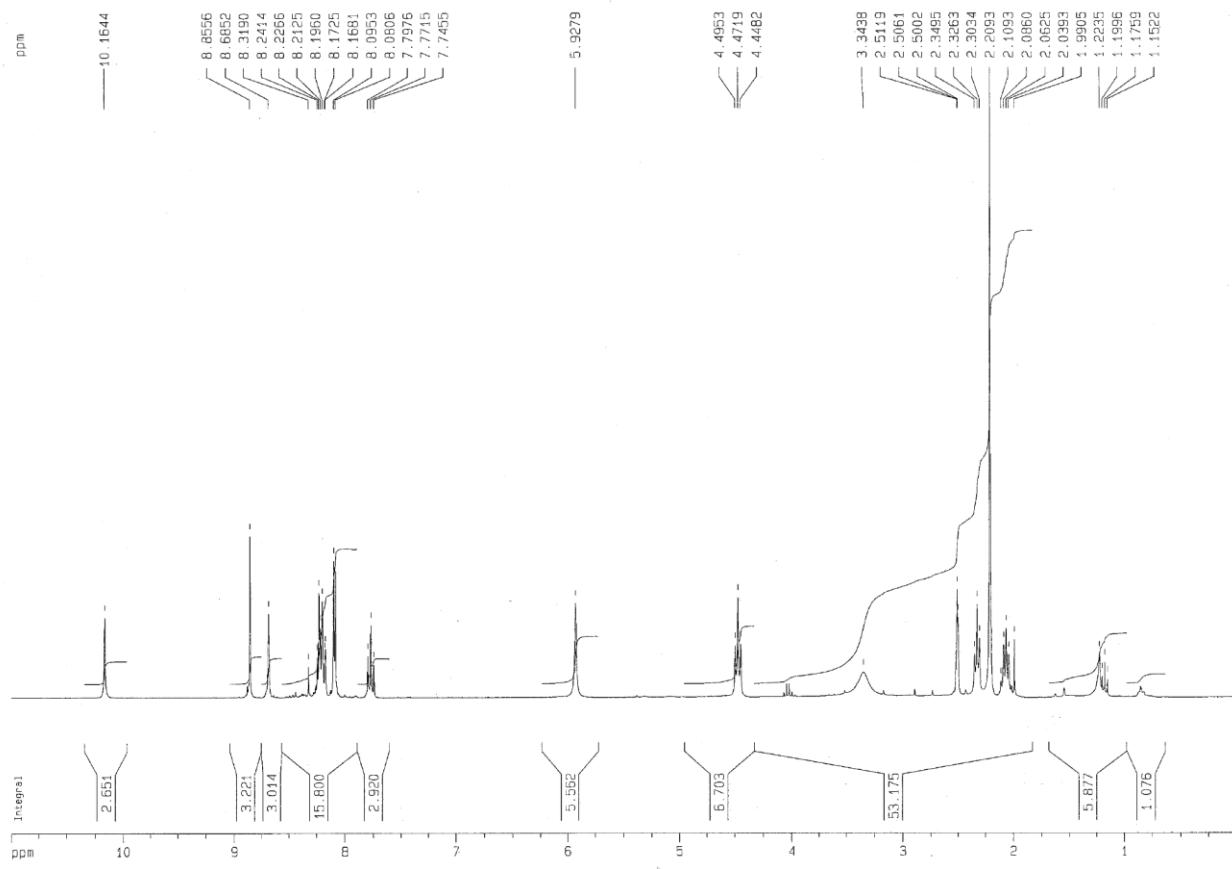
<sup>1</sup>H-NMR – DMSO d6: Fragment 35



<sup>13</sup>C-NMR – DMSO d6: Fragment **35**



<sup>1</sup>H-NMR – DMSO d6: Fragment **36**



<sup>13</sup>C-NMR – DMSO d6: Fragment **36**

