

Electronic Supplementary Material (ESI) for New Journal of Chemistry
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2012

SUPPORTING INFORMATION

Efficient C-3 Reductive Alkylation of 4-Hydroxycoumarin by Dehydrogenative Oxidation of Benzylic Alcohols through Ruthenium Catalysis

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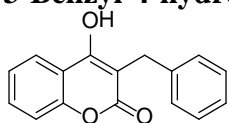
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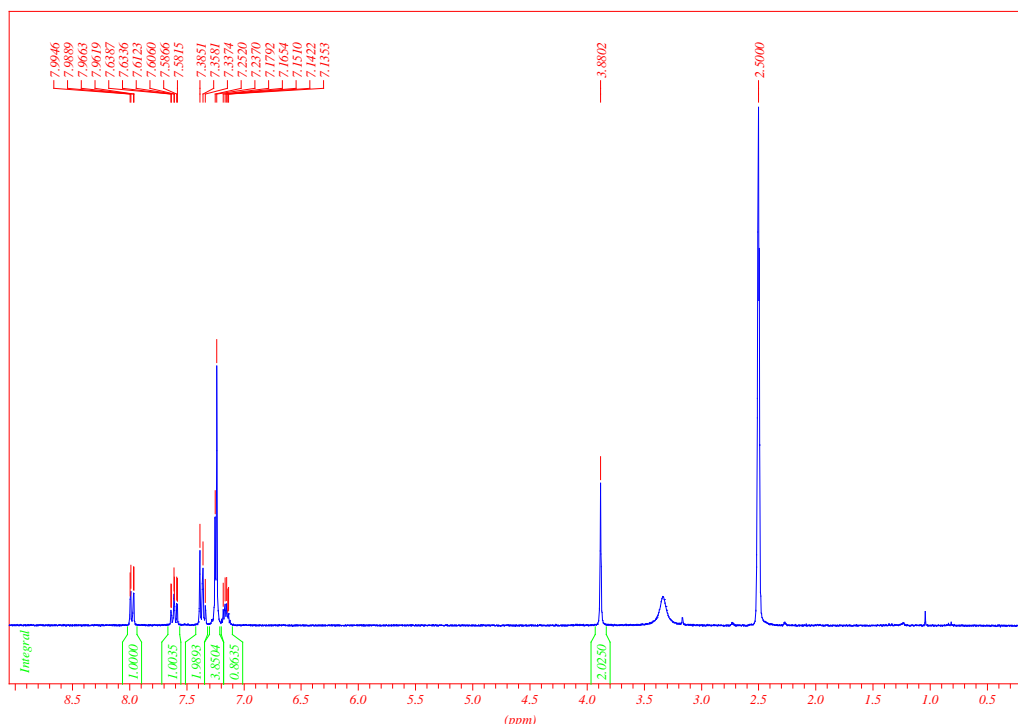
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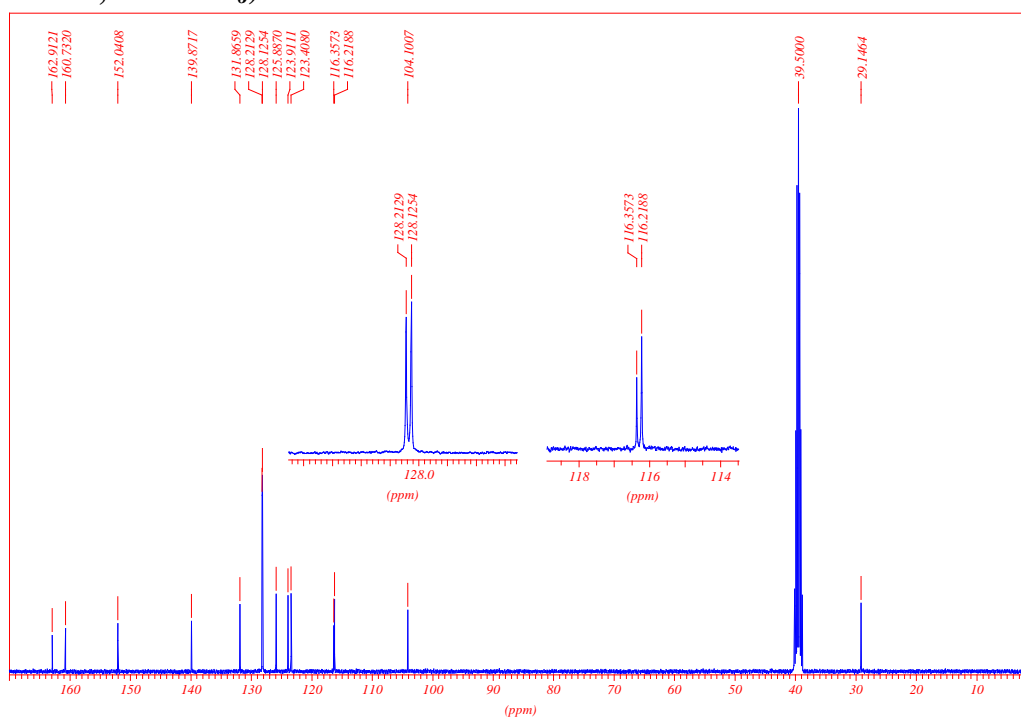
3-Benzyl-4-hydroxy-coumarin (1)



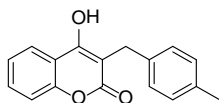
NMR ¹H (300MHz, DMSO-d₆)



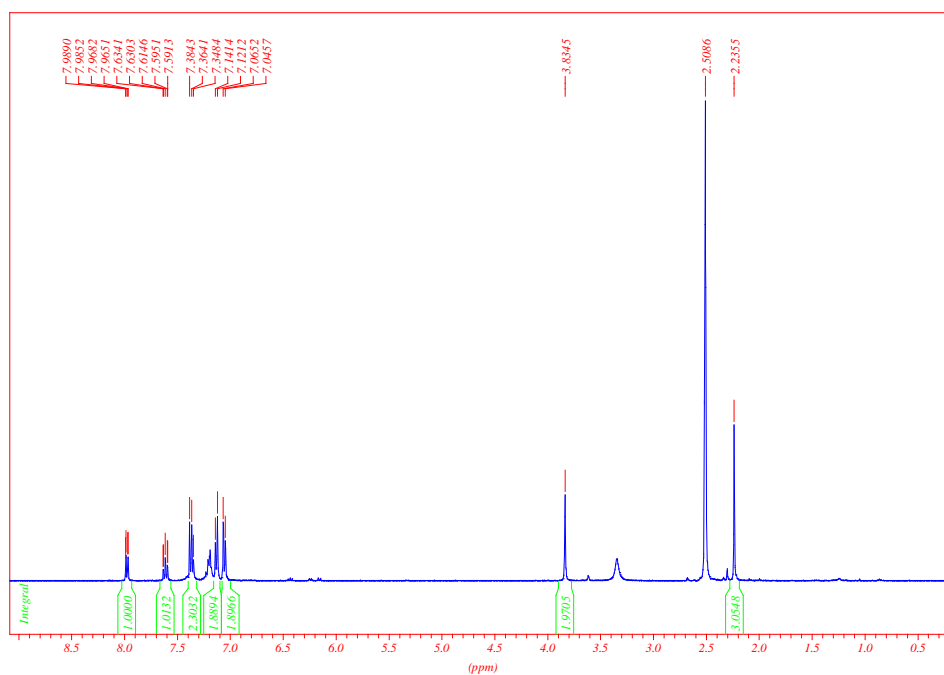
NMR ¹³C (75MHz, DMSO-d₆)



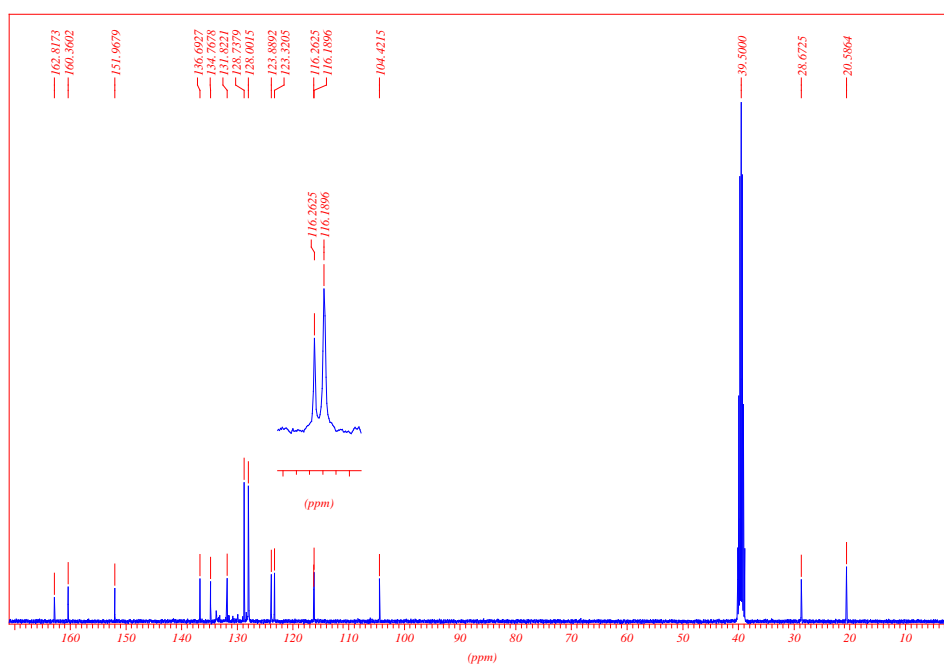
4-Hydroxy-3-(4-methyl-benzyl)-coumarin (2)



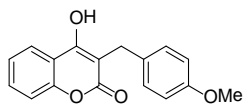
NMR ¹H (400MHz, DMSO-d₆)



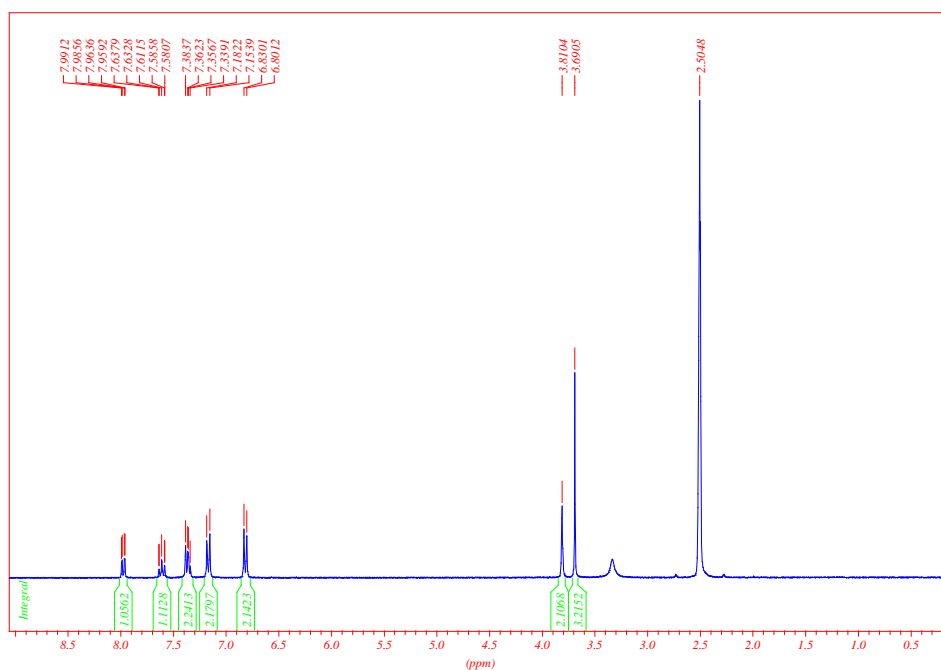
NMR ¹³C (100MHz, DMSO-d₆)



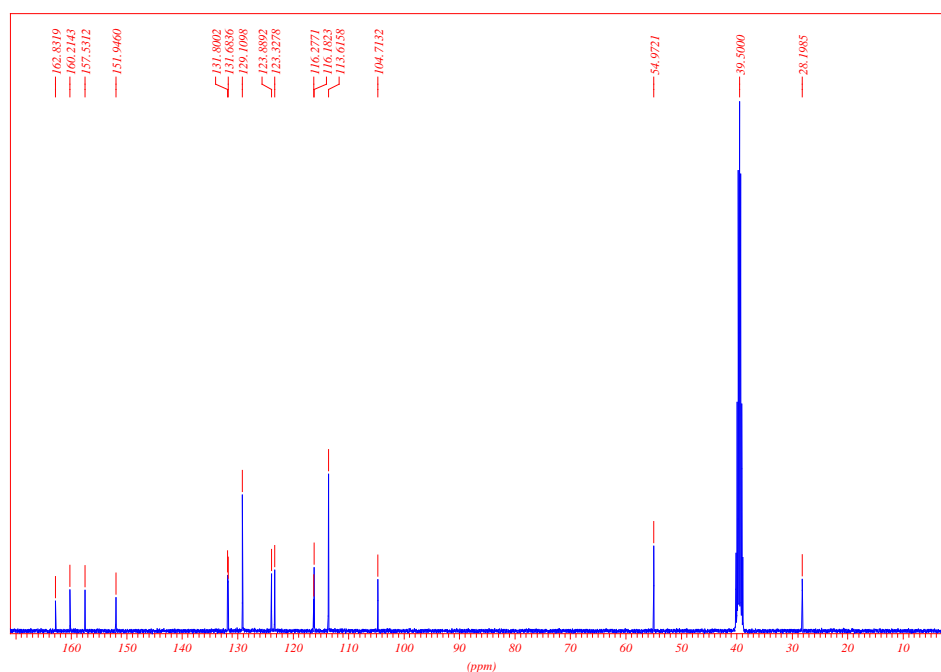
4-Hydroxy-3-(4-methoxy-benzyl)-coumarin (3)



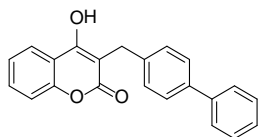
NMR ¹H (400MHz, DMSO-d₆)



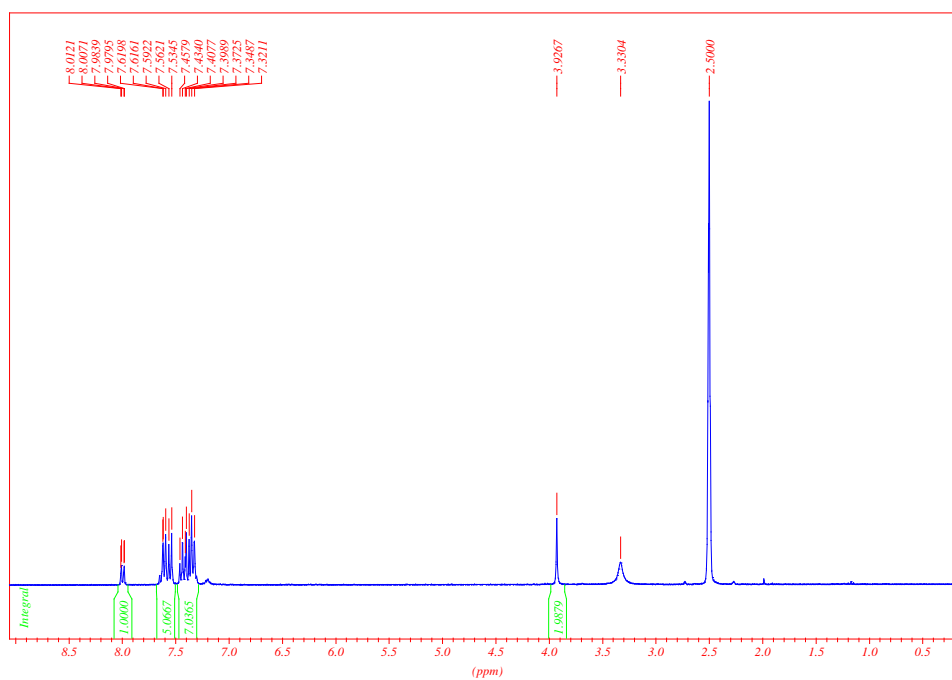
NMR ¹³C (100MHz, DMSO-d₆)



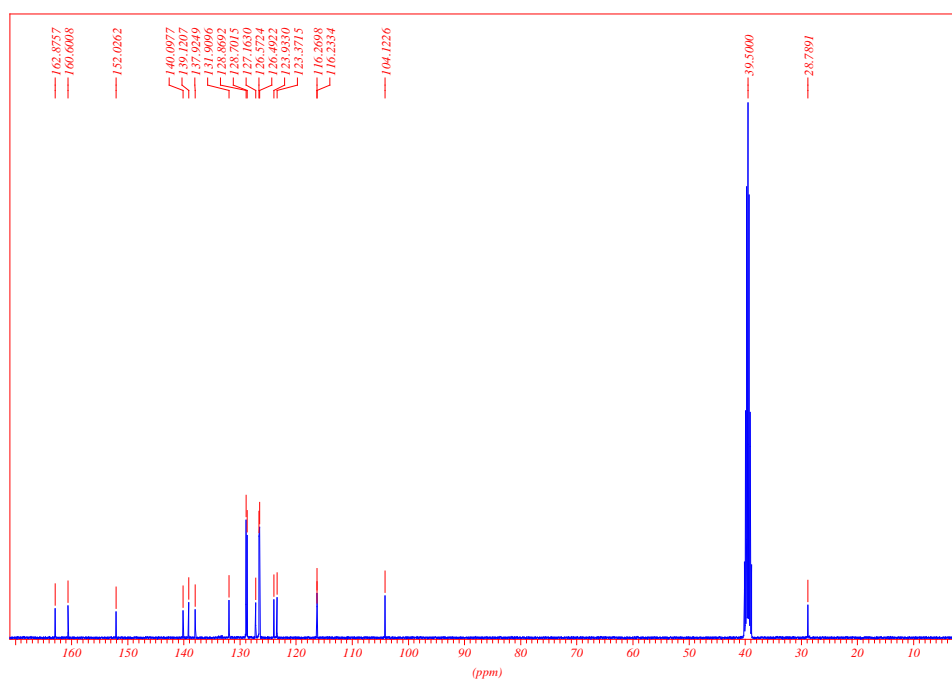
3-([1,1'-Biphenyl]-4-ylmethyl)-4-hydroxycoumarin (4)



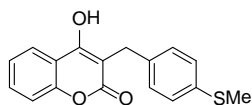
NMR ¹H (400MHz, DMSO-d₆)



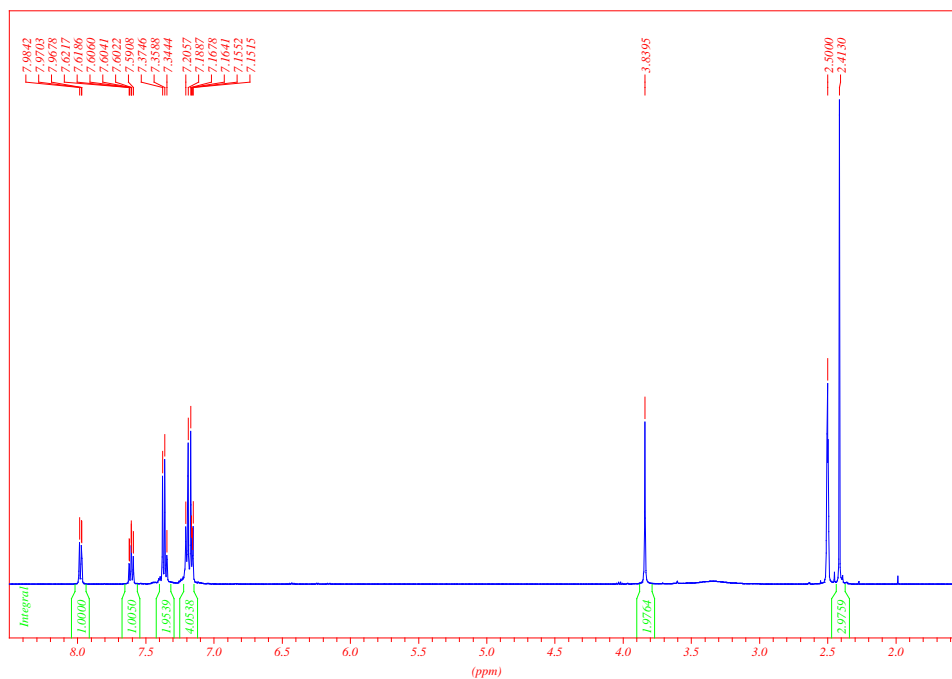
NMR ¹³C (100MHz, DMSO-d₆)



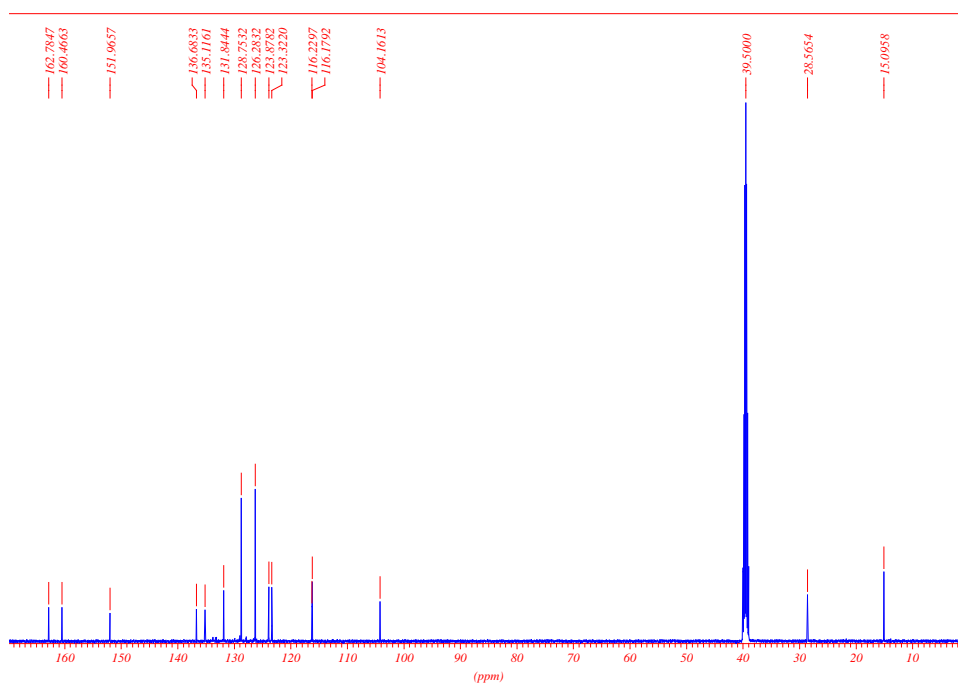
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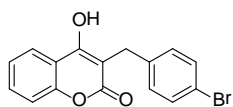
NMR ^1H (300MHz, DMSO- d_6)



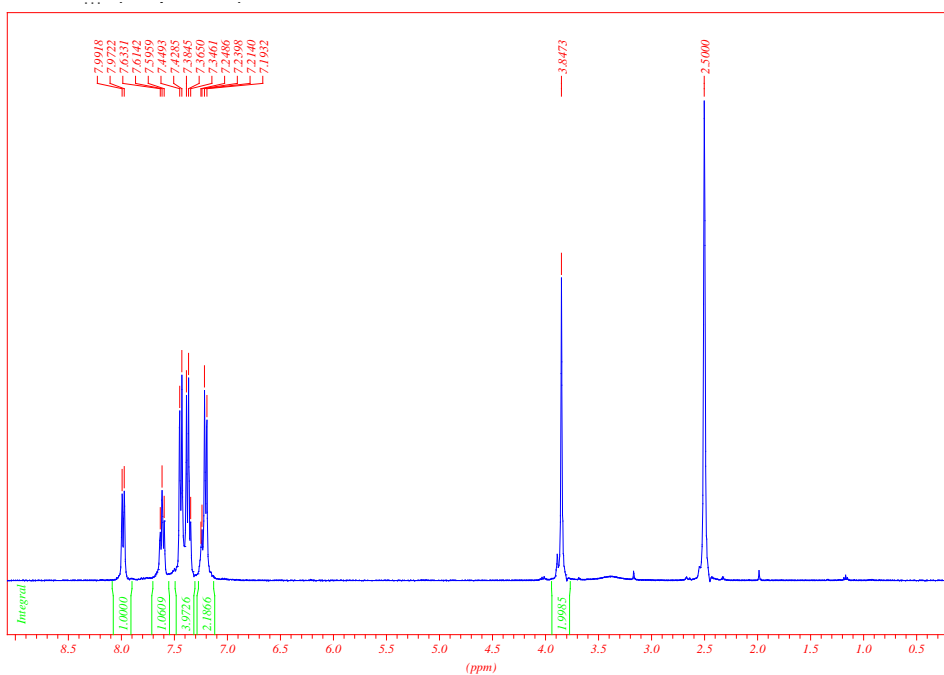
NMR ^{13}C (75MHz, DMSO- d_6)



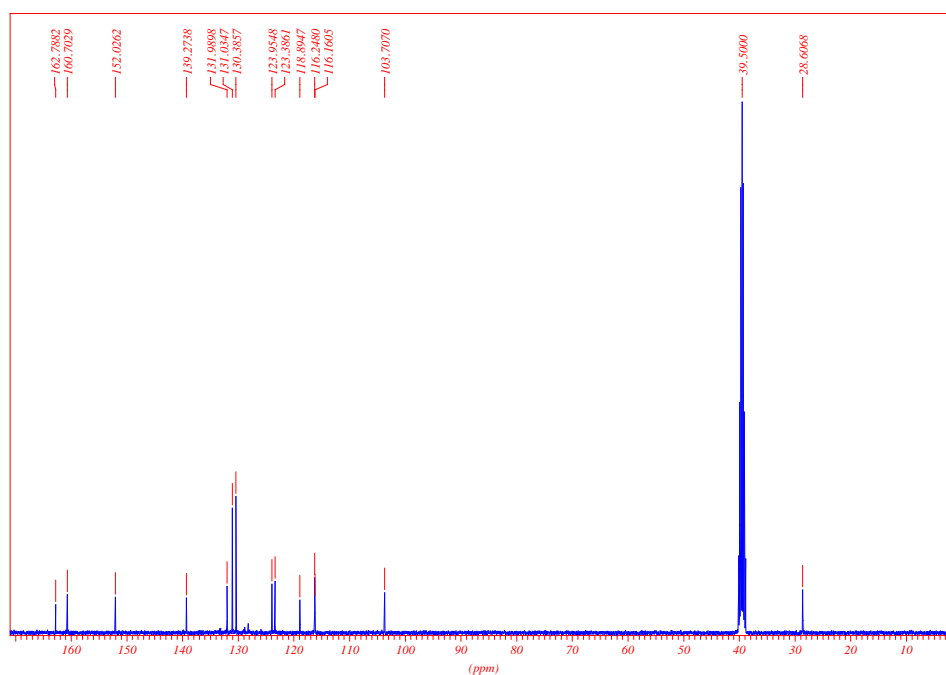
3-(4-Bromo-benzyl)-4-hydroxycoumarin (6)



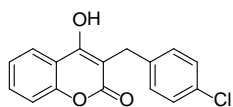
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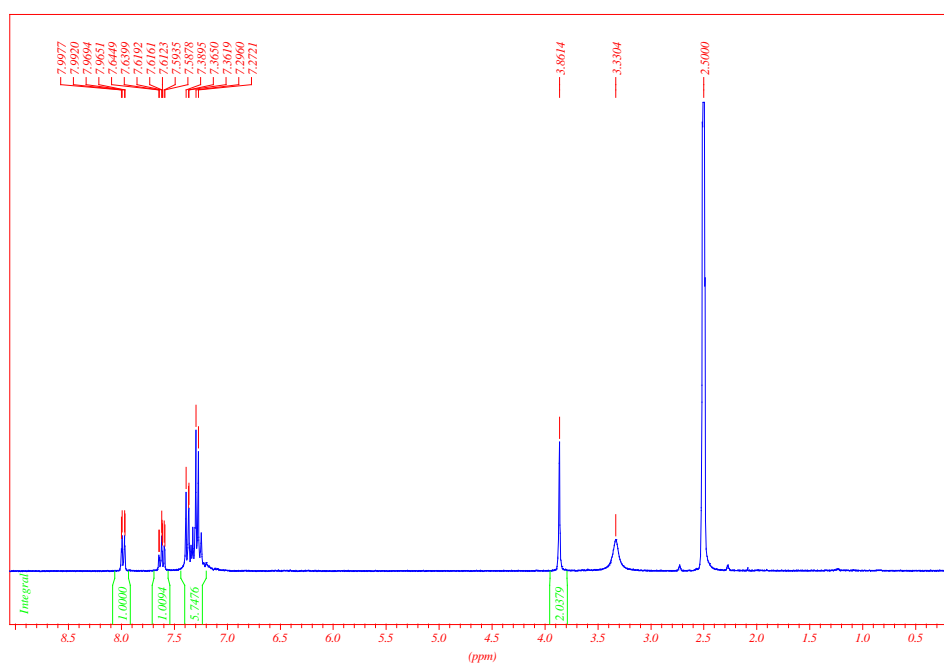
NMR ^{13}C (75MHz, DMSO- d_6)



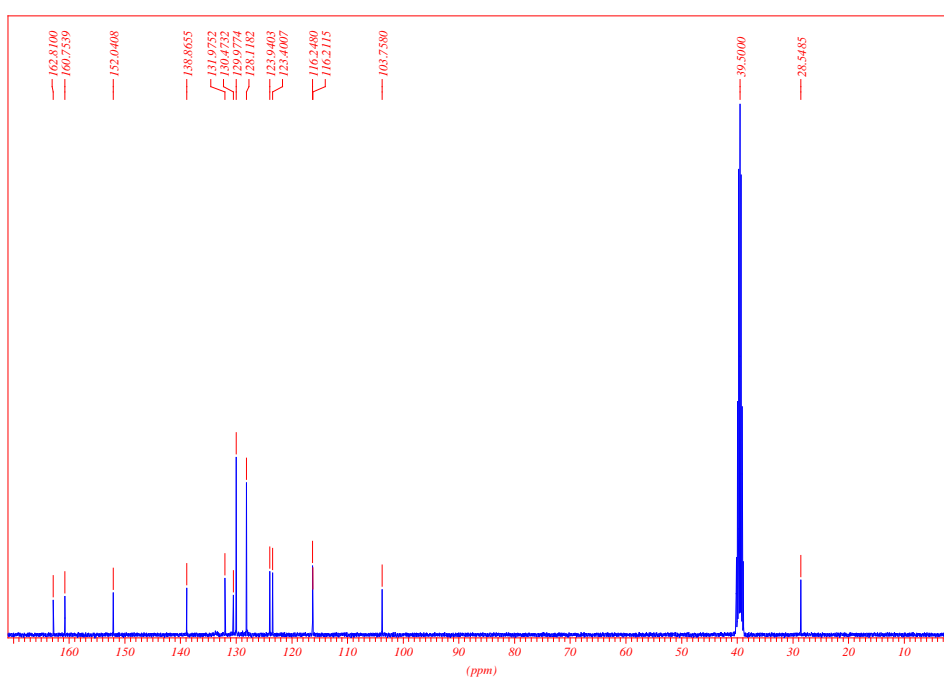
3-(4-Chloro-benzyl)-4-hydroxycoumarin (7)



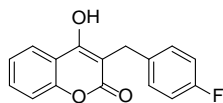
NMR ¹H (400MHz, DMSO-d₆)



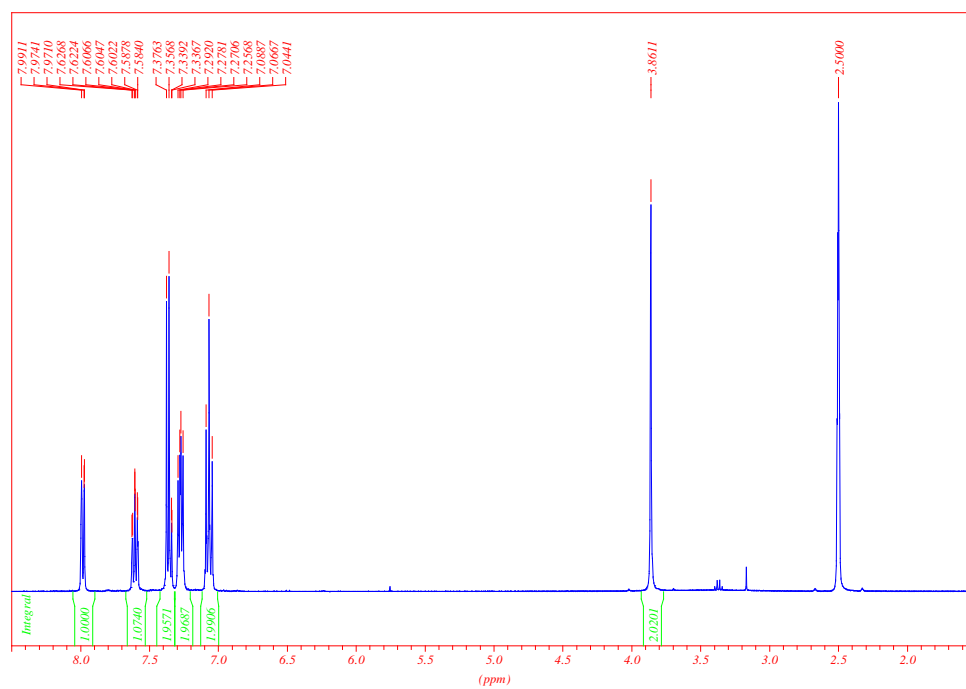
NMR ¹³C (100MHz, DMSO-d₆)



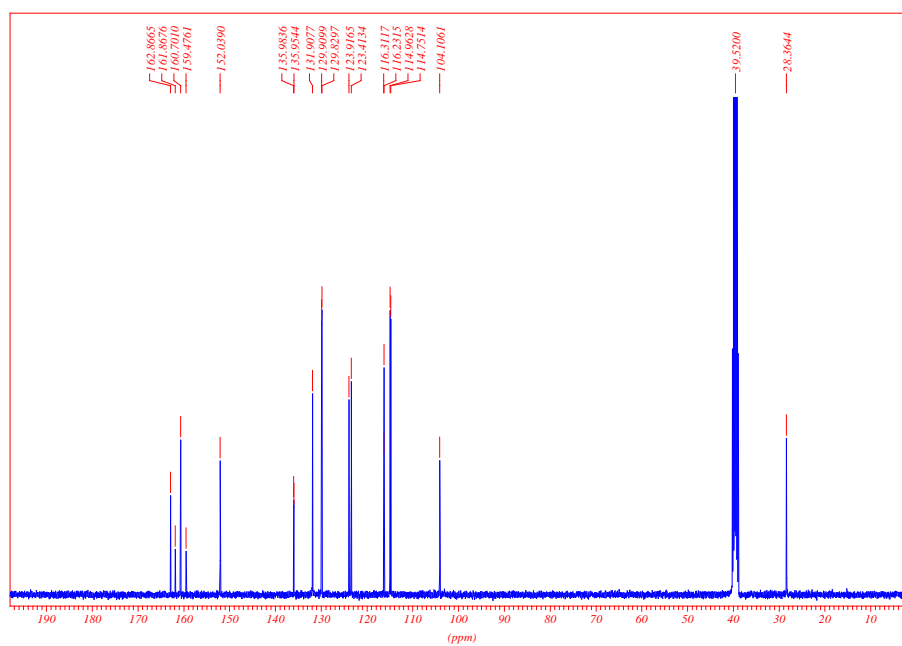
3-(4-Fluorobenzyl)-4-hydroxycoumarin (8)



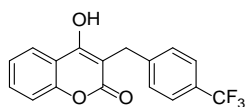
NMR ¹H (400MHz, DMSO-*d*₆)



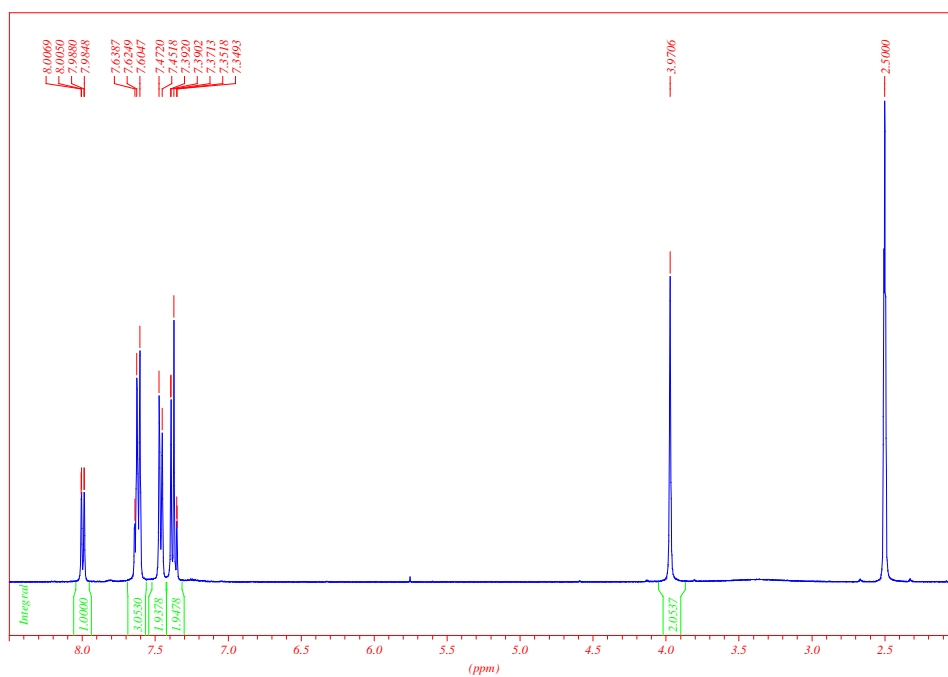
NMR ¹³C (100MHz, DMSO-*d*₆)



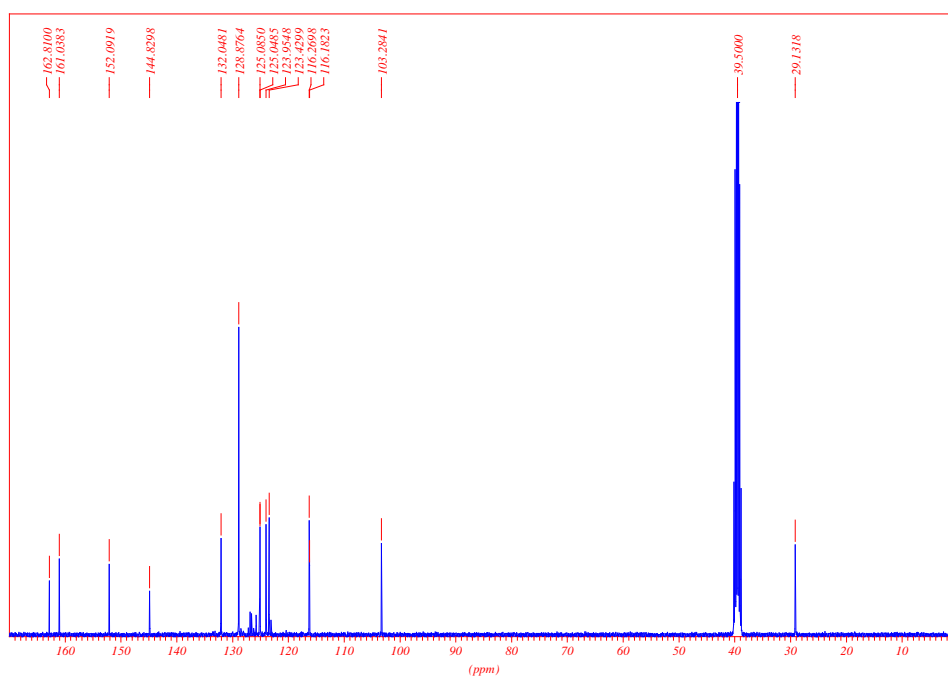
3-(4-Trifluoromethylbenzyl)-4-hydroxy-coumarin (9)



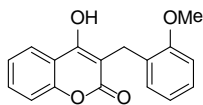
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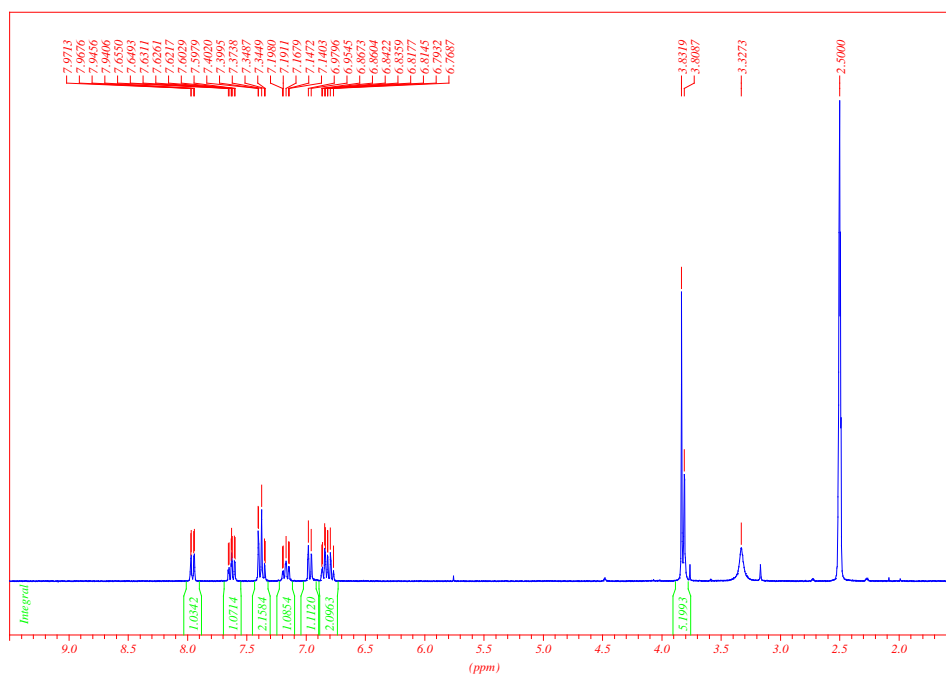
NMR ^{13}C (100MHz, DMSO- d_6)



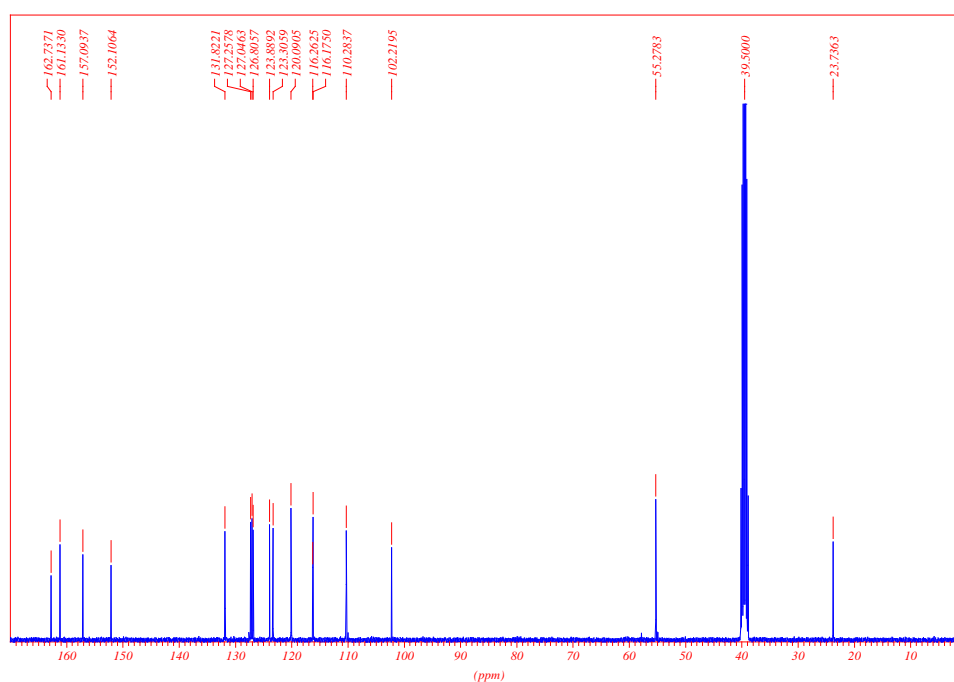
4-Hydroxy- 3-(2-methoxy-benzyl)-coumarin (10)



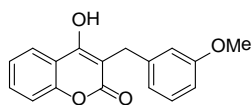
NMR ¹H (400MHz, DMSO-d₆)



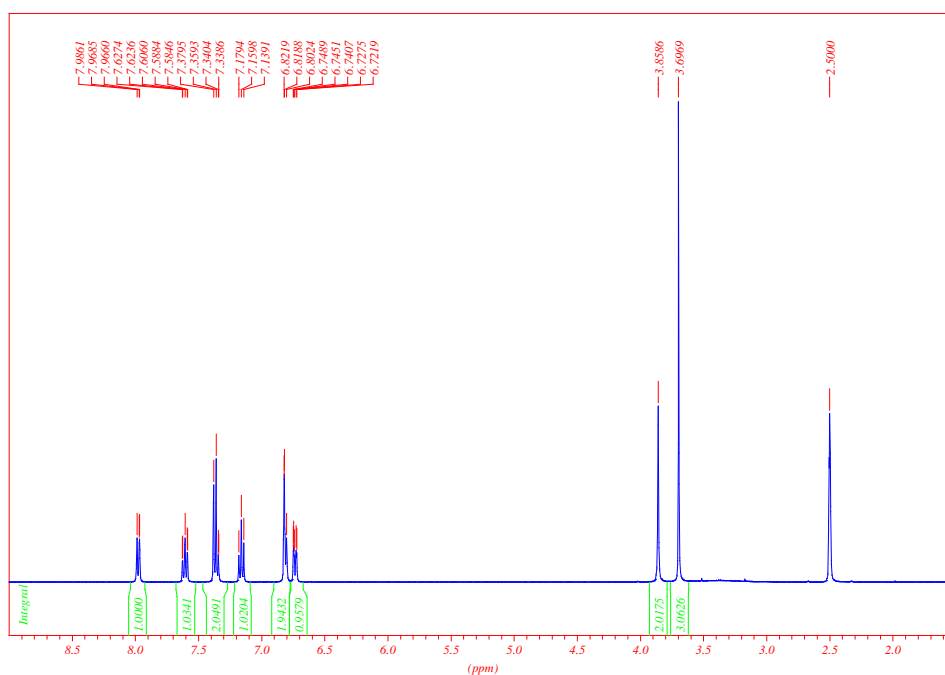
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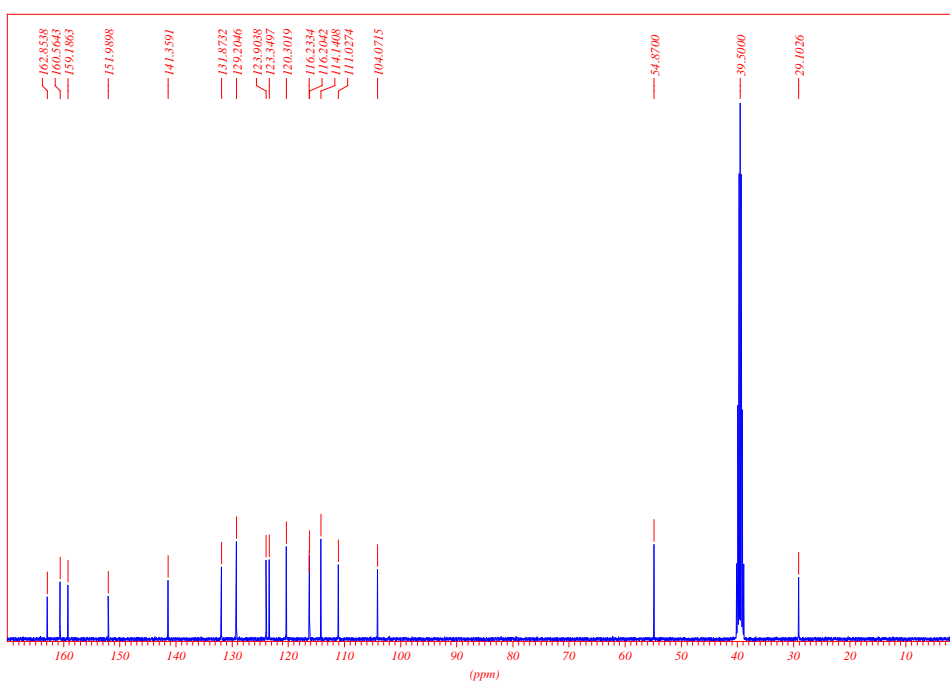
4-Hydroxy- 3-(3-methoxy-benzyl)-coumarin (11)



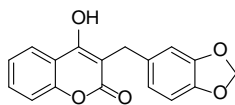
NMR ¹H (400MHz, DMSO-*d*₆)



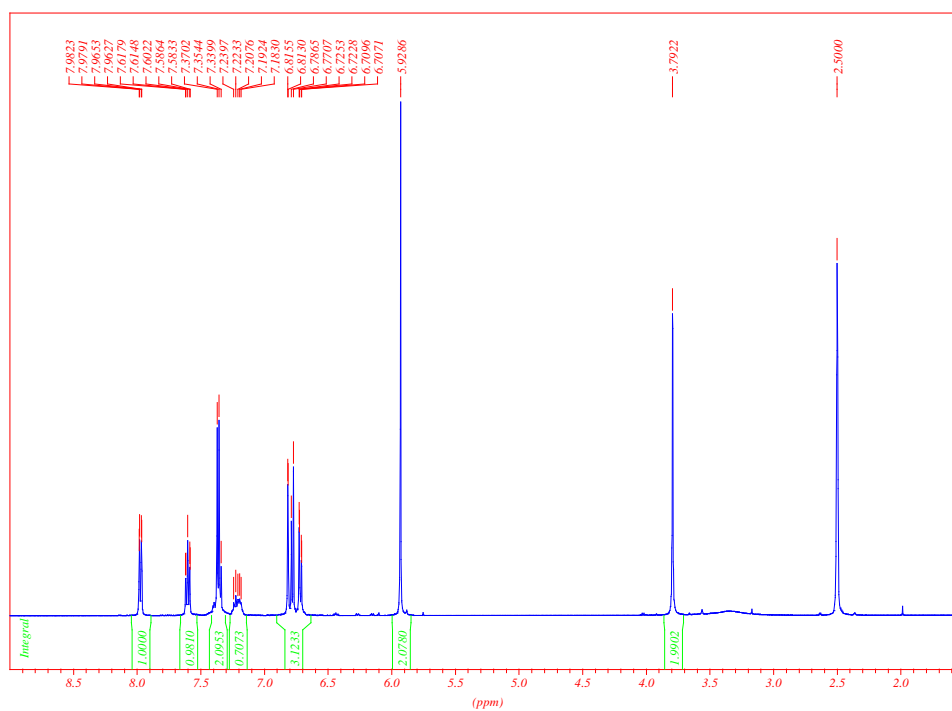
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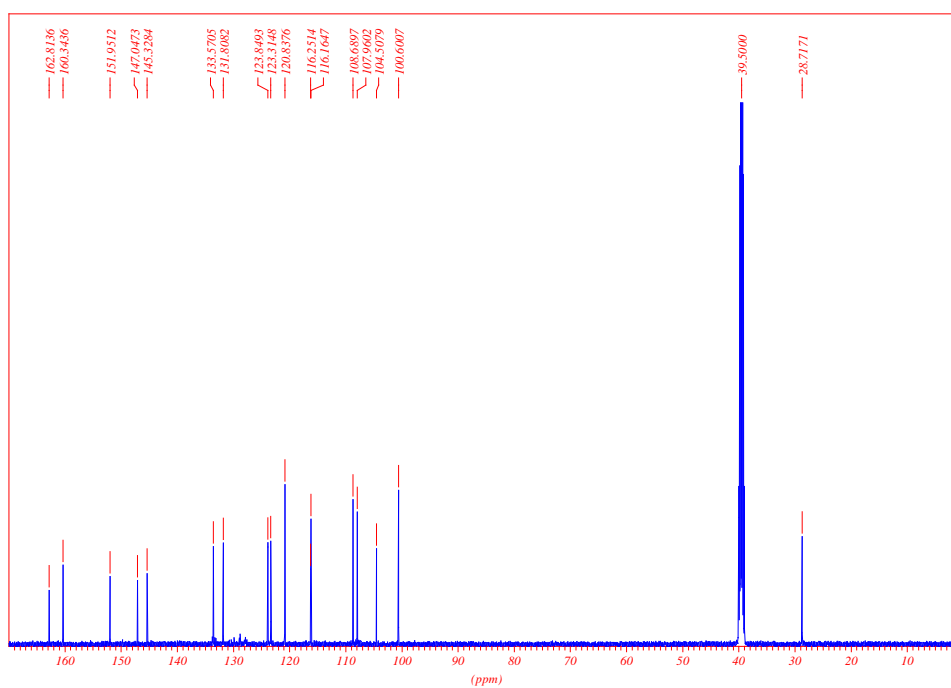
4-Hydroxy-3-(3,4-methylenedioxybenzyl)-coumarin (12)



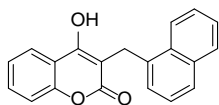
NMR ¹H (300MHz, DMSO-d₆)



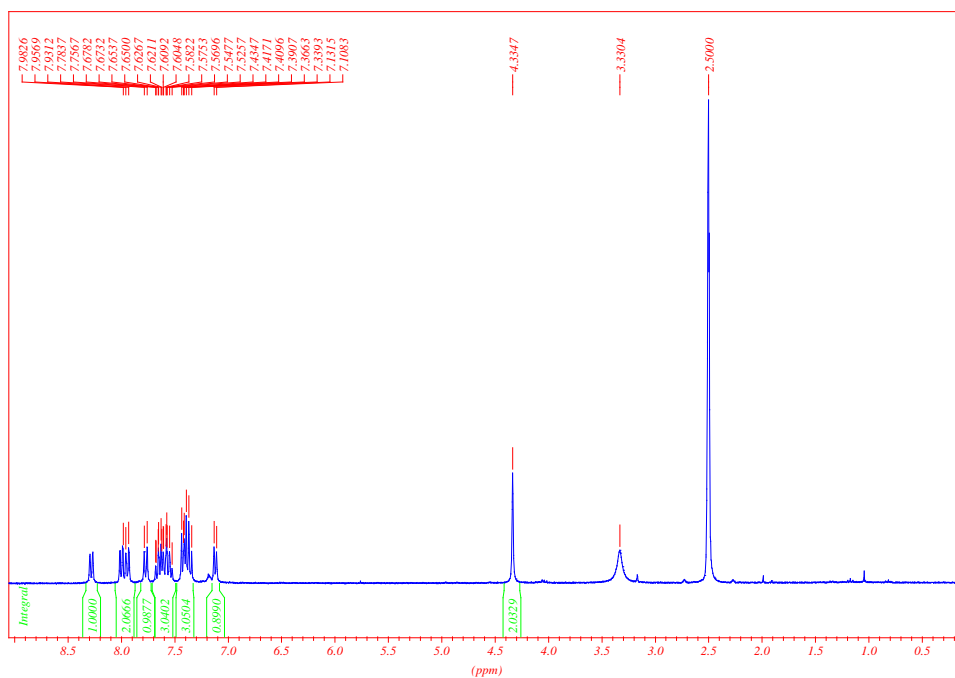
NMR ¹³C (75MHz, DMSO-d₆)



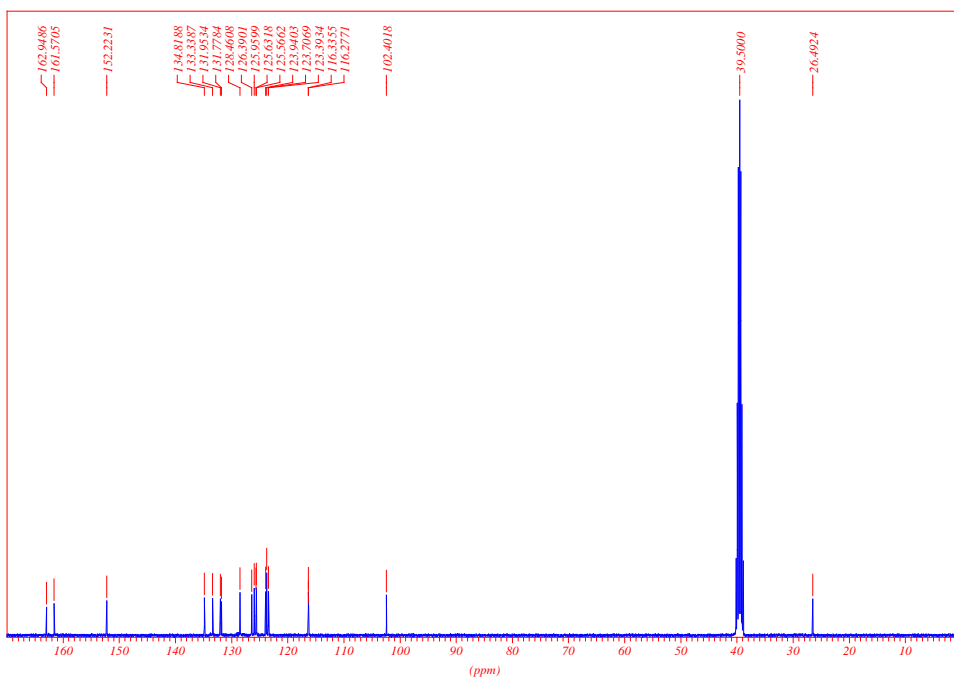
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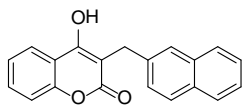
NMR ^1H (400MHz, DMSO- d_6)



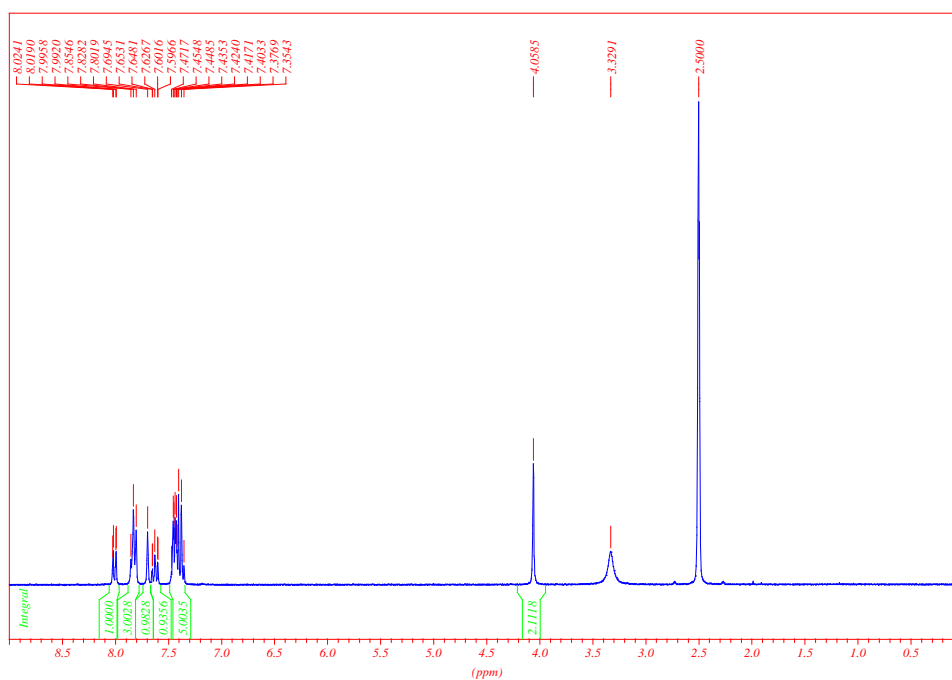
NMR ^{13}C (100MHz, DMSO- d_6)



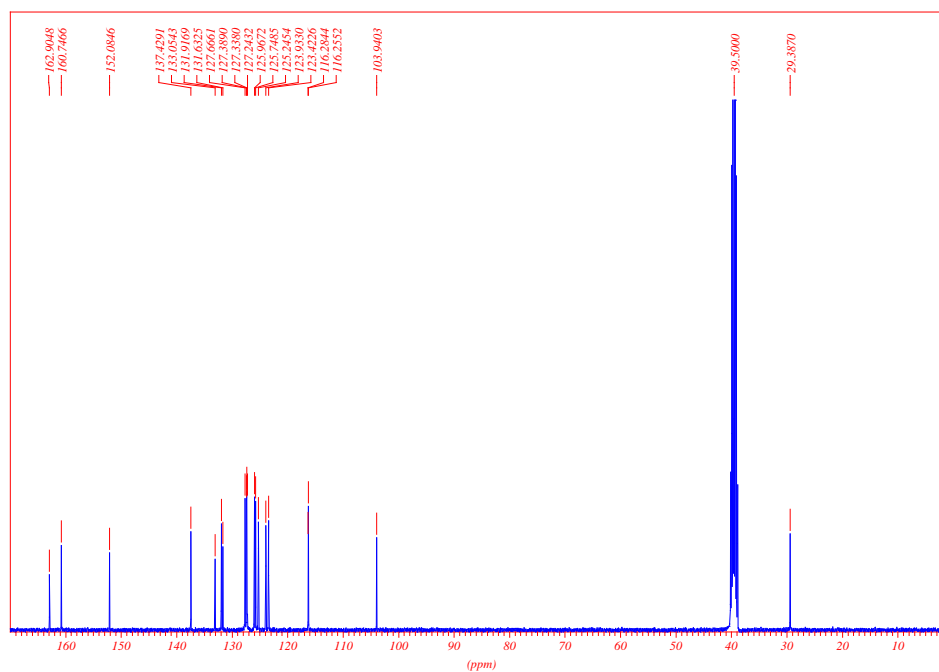
4-Hydroxy-3-(2-naphthalenylmethyl)-coumarin (14)



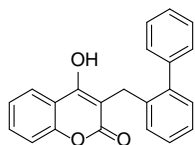
NMR ¹H (400MHz, DMSO-*d*₆)



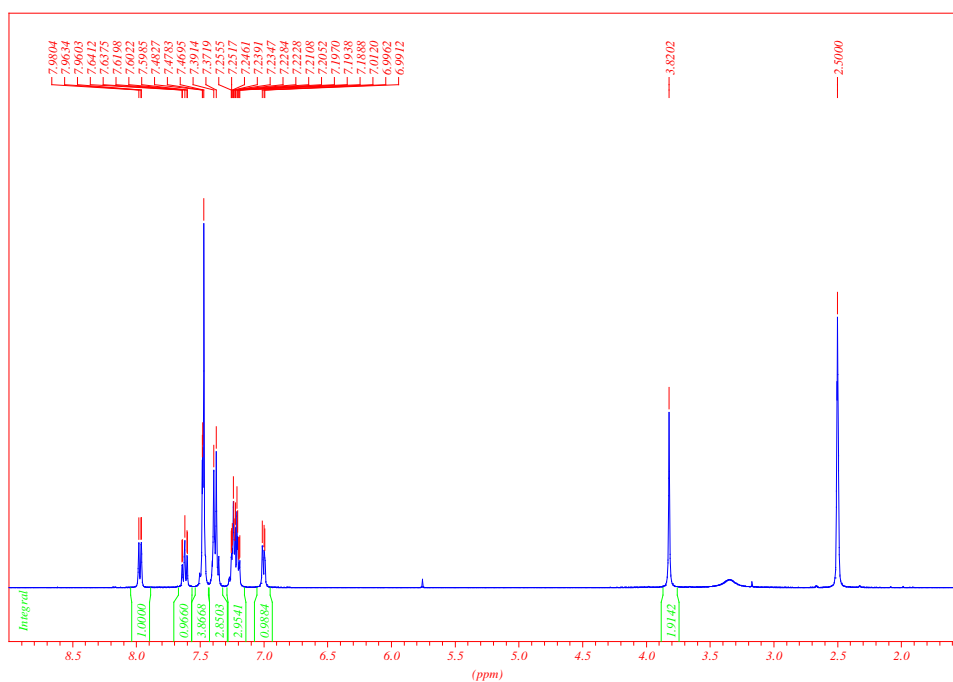
NMR ¹³C (100MHz, DMSO-*d*₆)



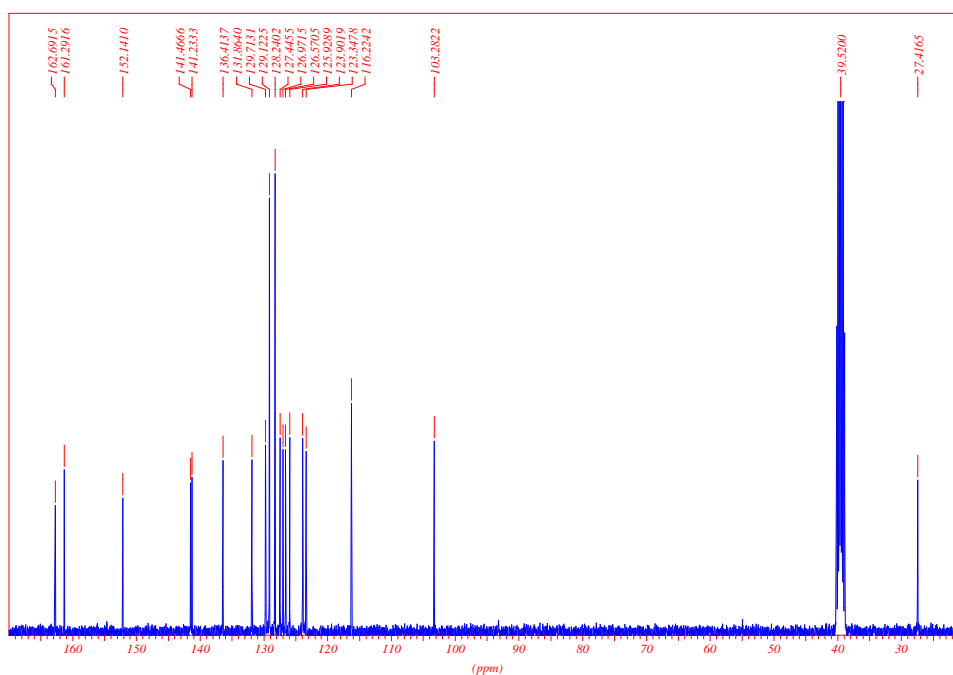
3-([1,1'-Biphenyl]-2-ylmethyl)-4-hydroxycoumarin (15)



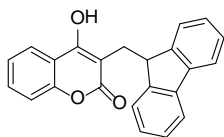
NMR ^1H (400MHz, DMSO- d_6)



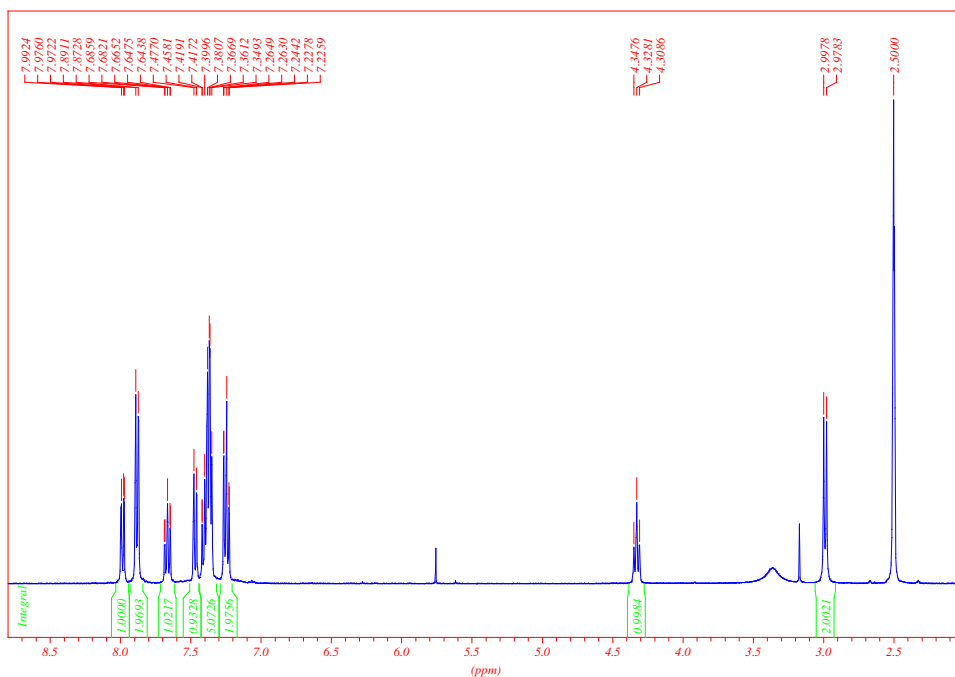
NMR ^{13}C (100MHz, DMSO- d_6)



3-(9-Fluorenylmethyl)-4-hydroxy-3coumarin (16)



NMR ^1H (400MHz, DMSO- d_6)



NMR ^{13}C (100MHz, DMSO- d_6)

