Supplementary Material

2,4-Furfurylidene-D-sorbitol and its tetra-methyl ether: synthesis, conformational studies, and radical scavenging activity

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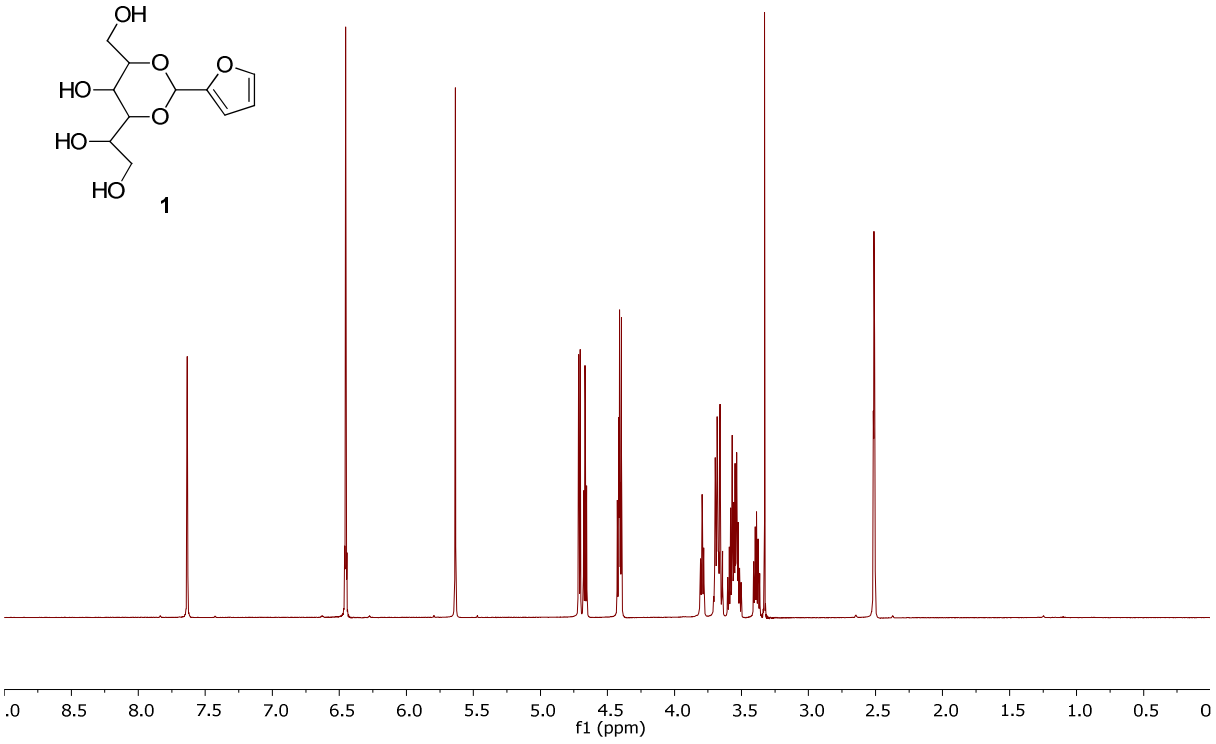
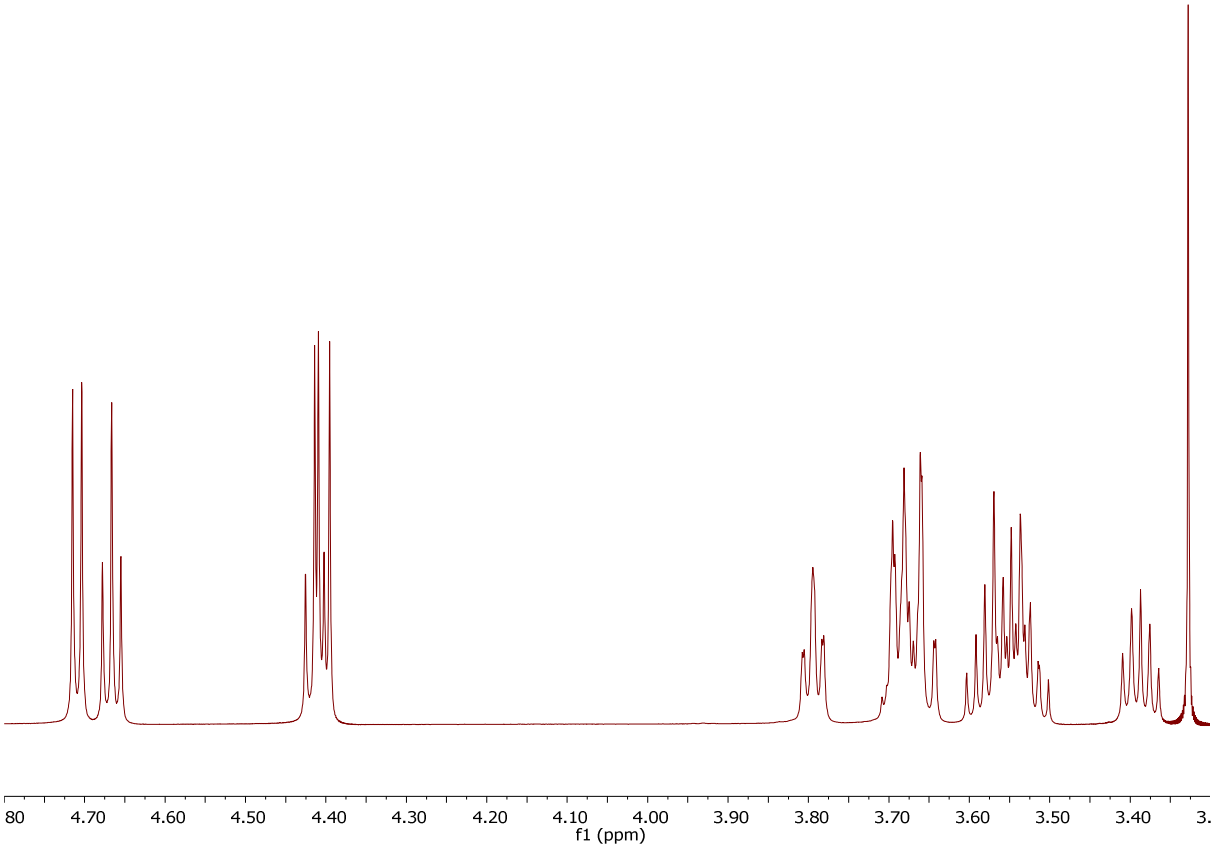
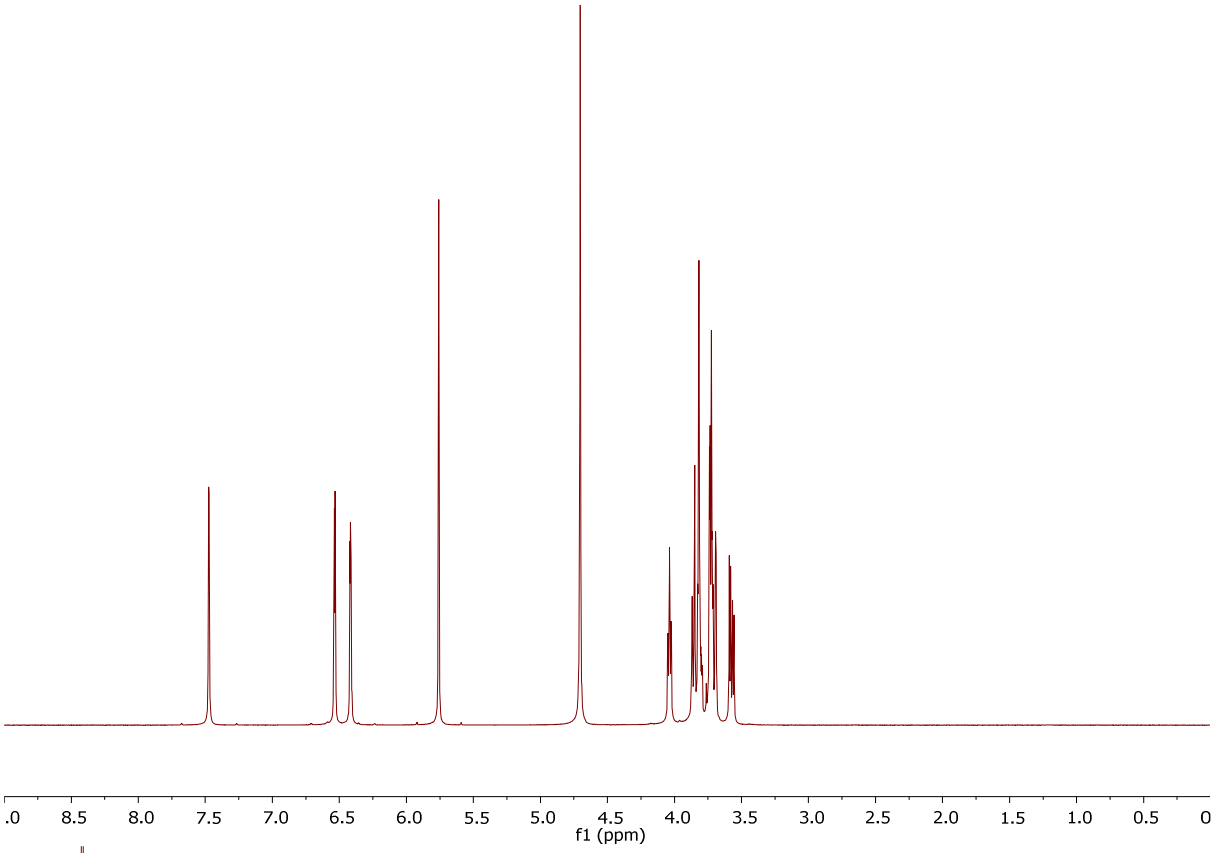
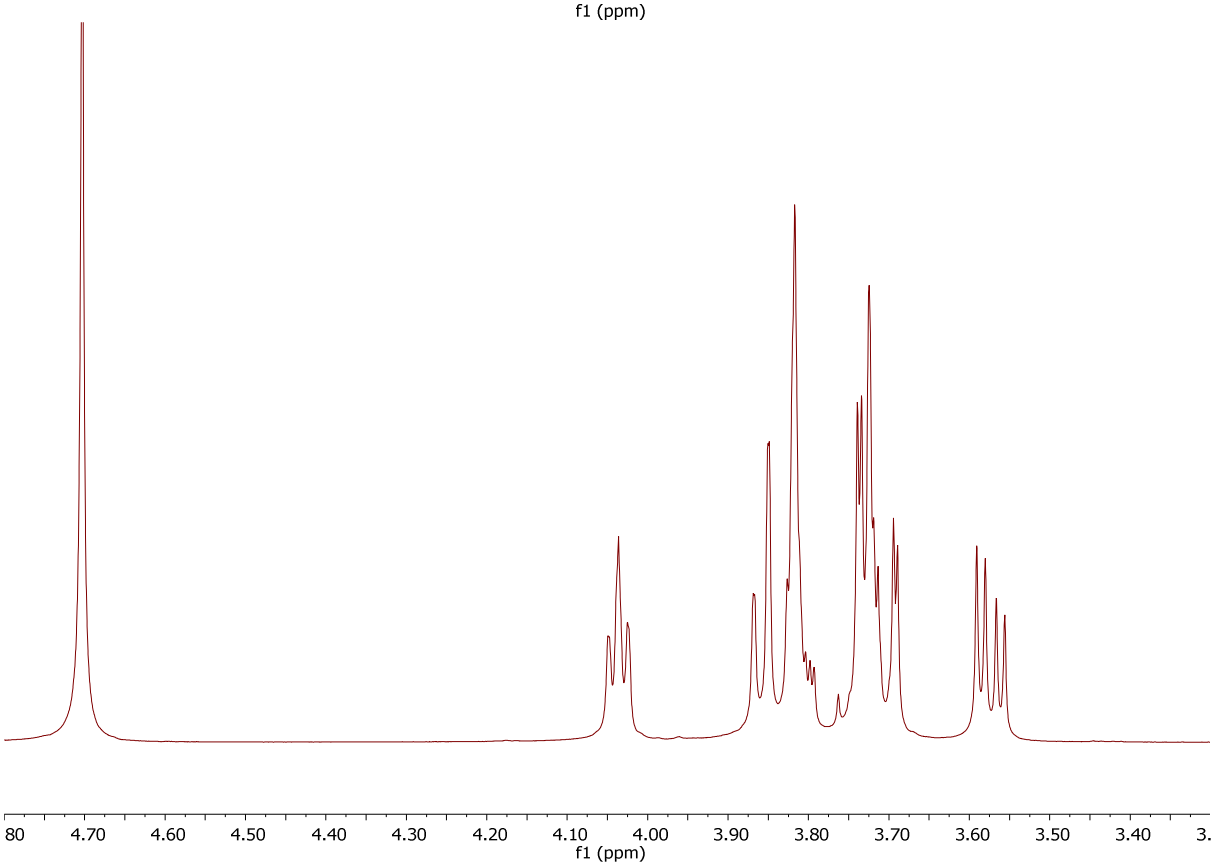
1a ^{1}H-NMR spectrum in DMSO-d_6



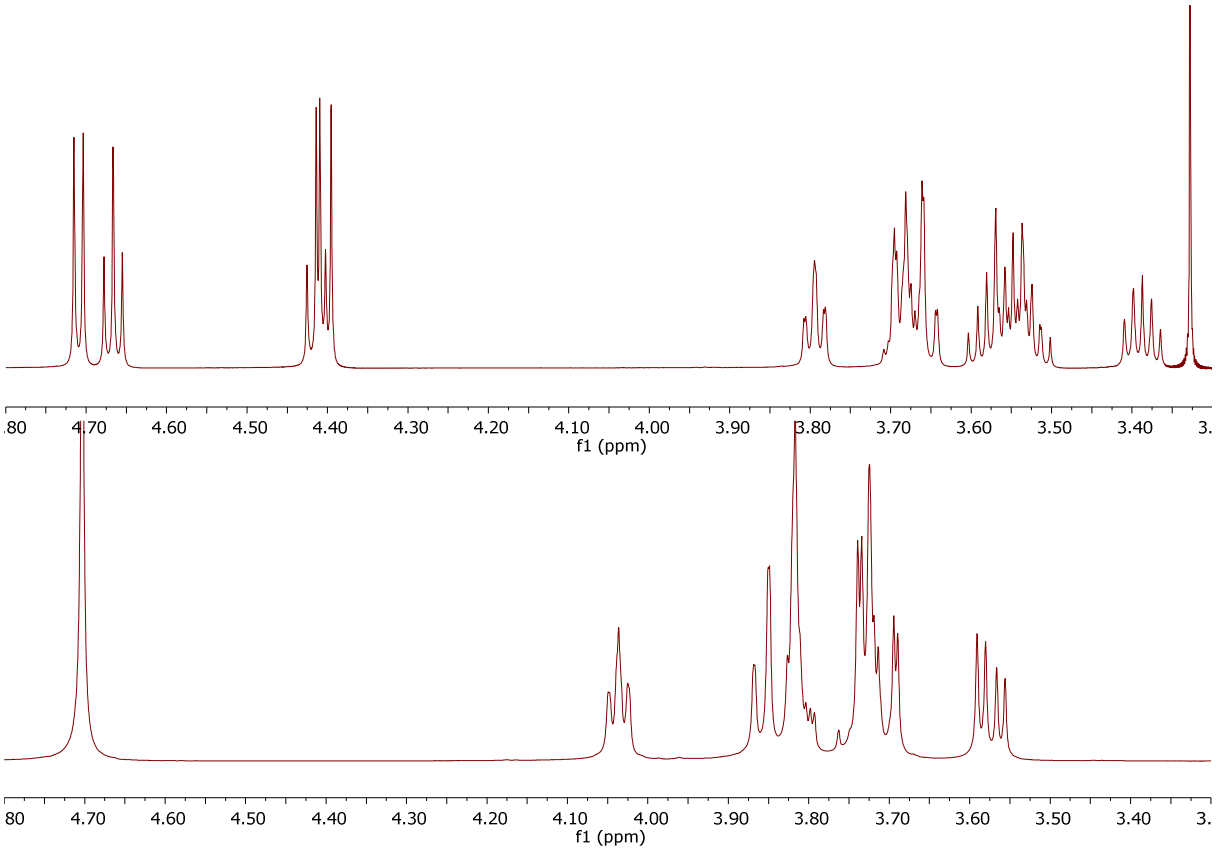


1b ^{1}H-NMR spectrum in D_2O

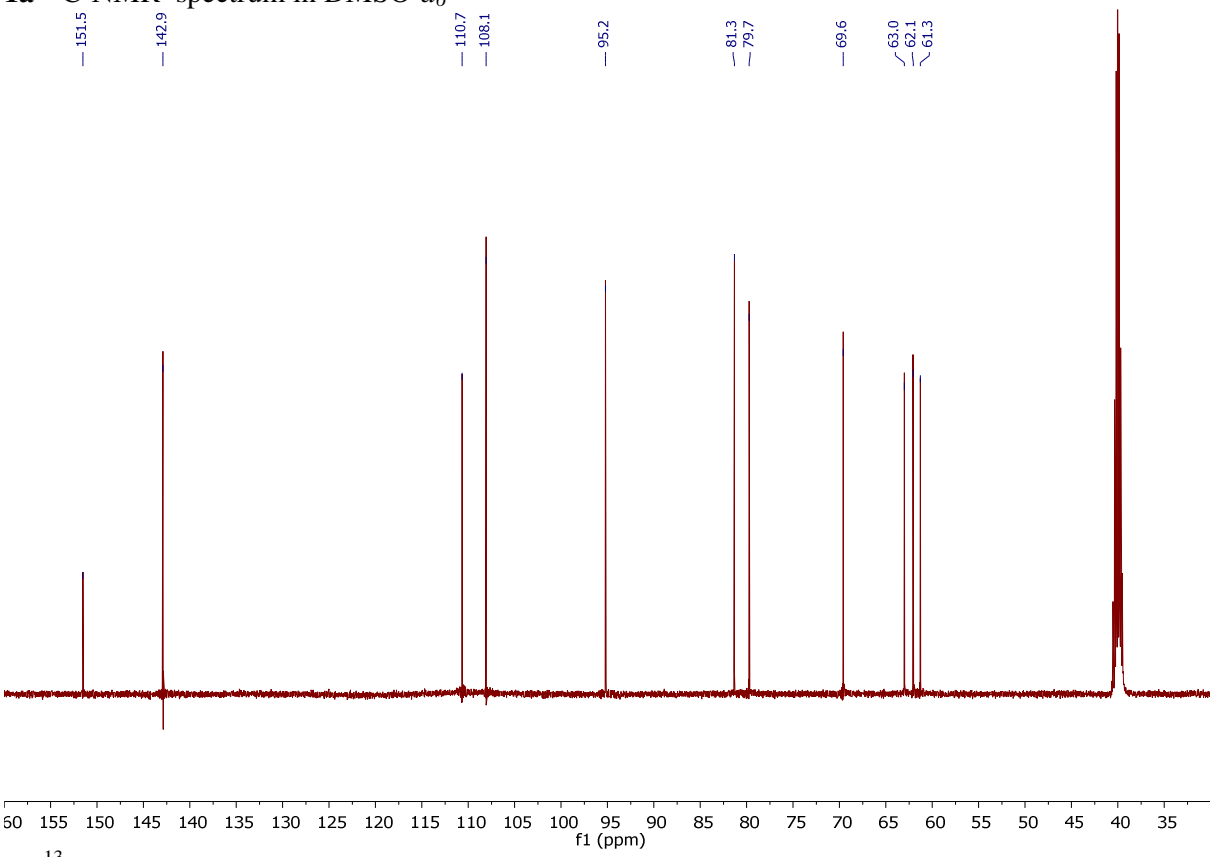




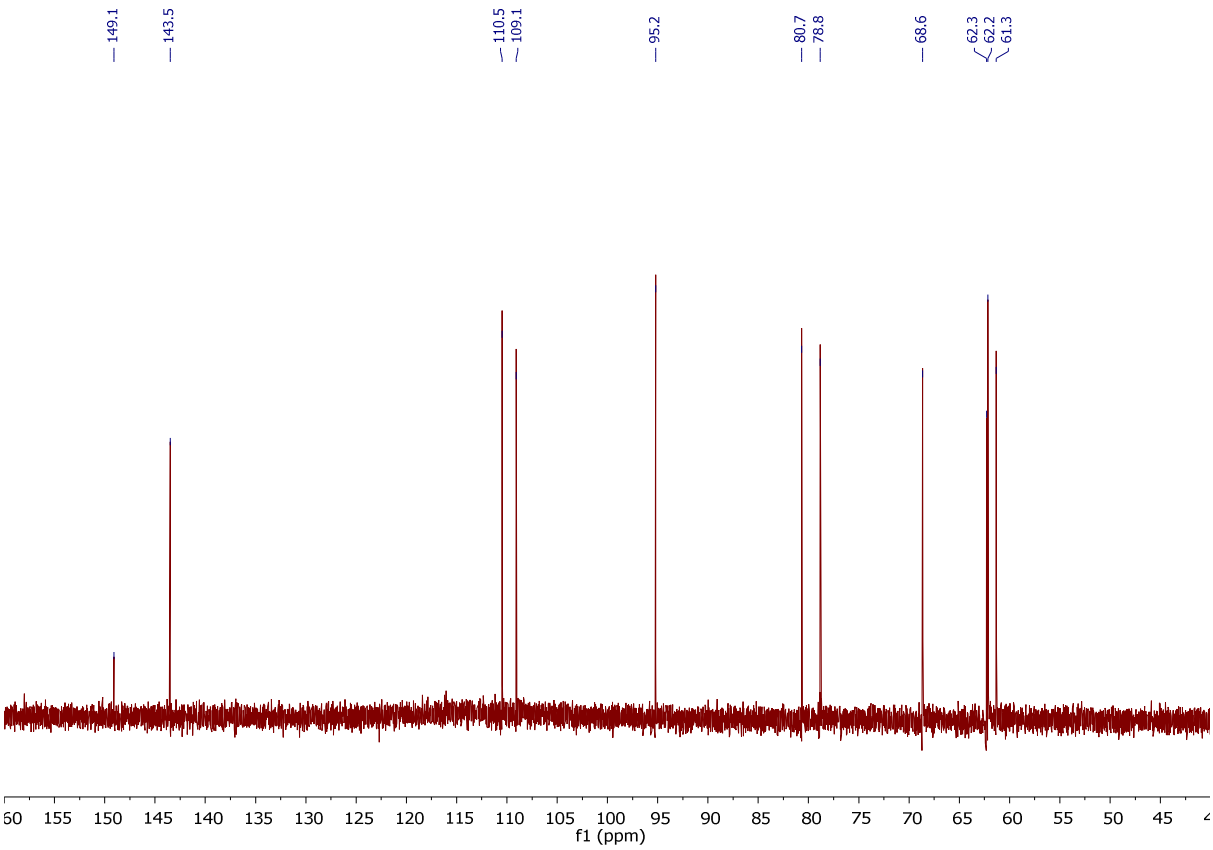
1 ^{1}H-NMR spectra in DMSO-d_6 (TOP) and in D_2O (DOWN)



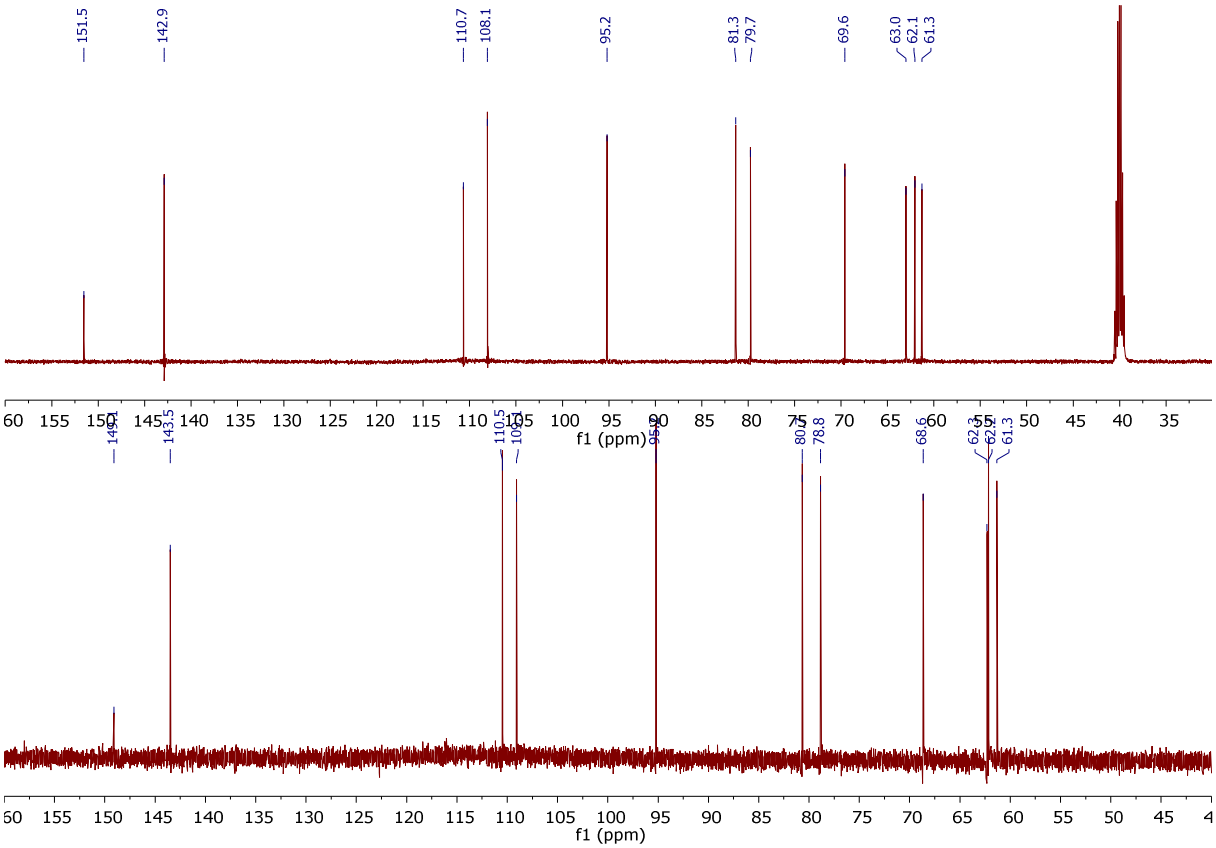
1a ^{13}C-NMR spectrum in DMSO-d_6



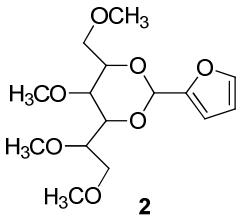
1b ^{13}C-NMR spectrum in D_2O



1 ^{13}C-NMR spectra in DMSO-d_6 (TOP) and in D_2O (DOWN)



2a ^{1}H-NMR spectrum in DMSO-d_6



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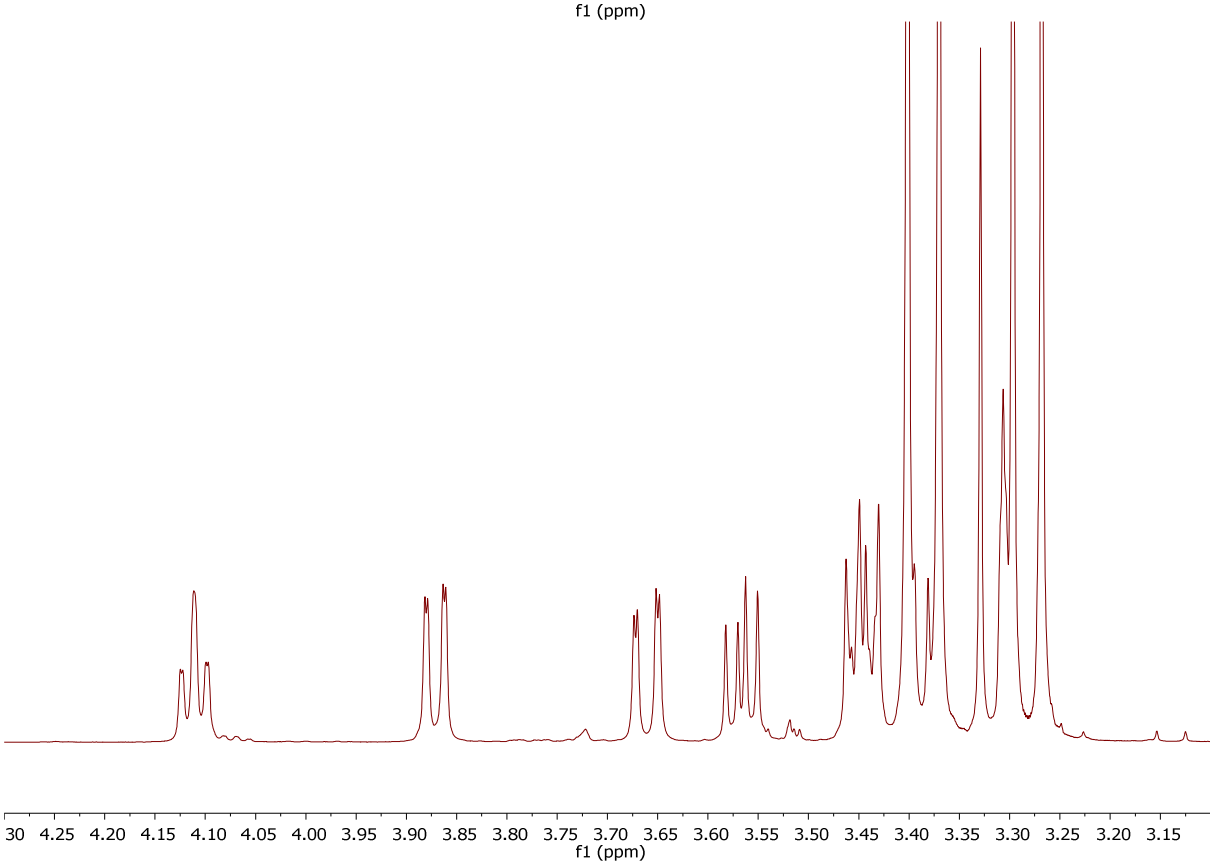
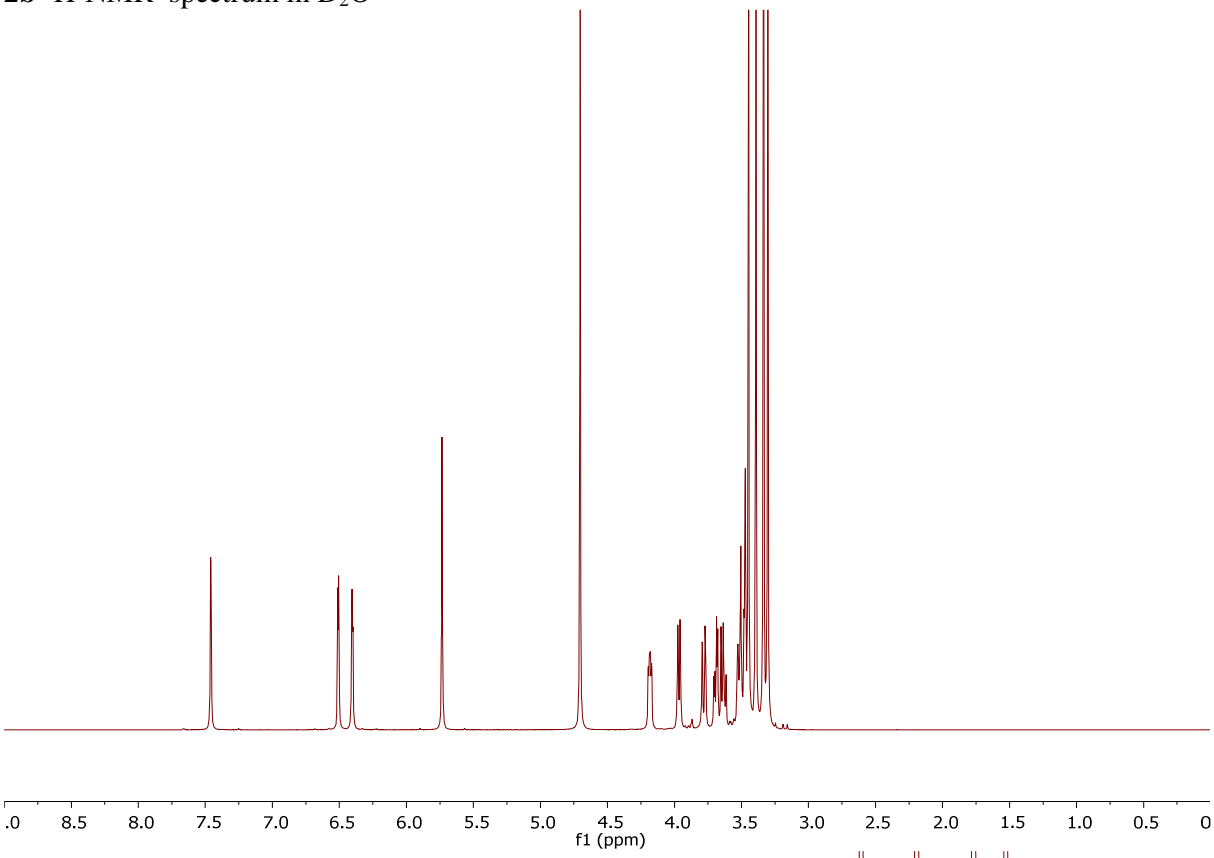
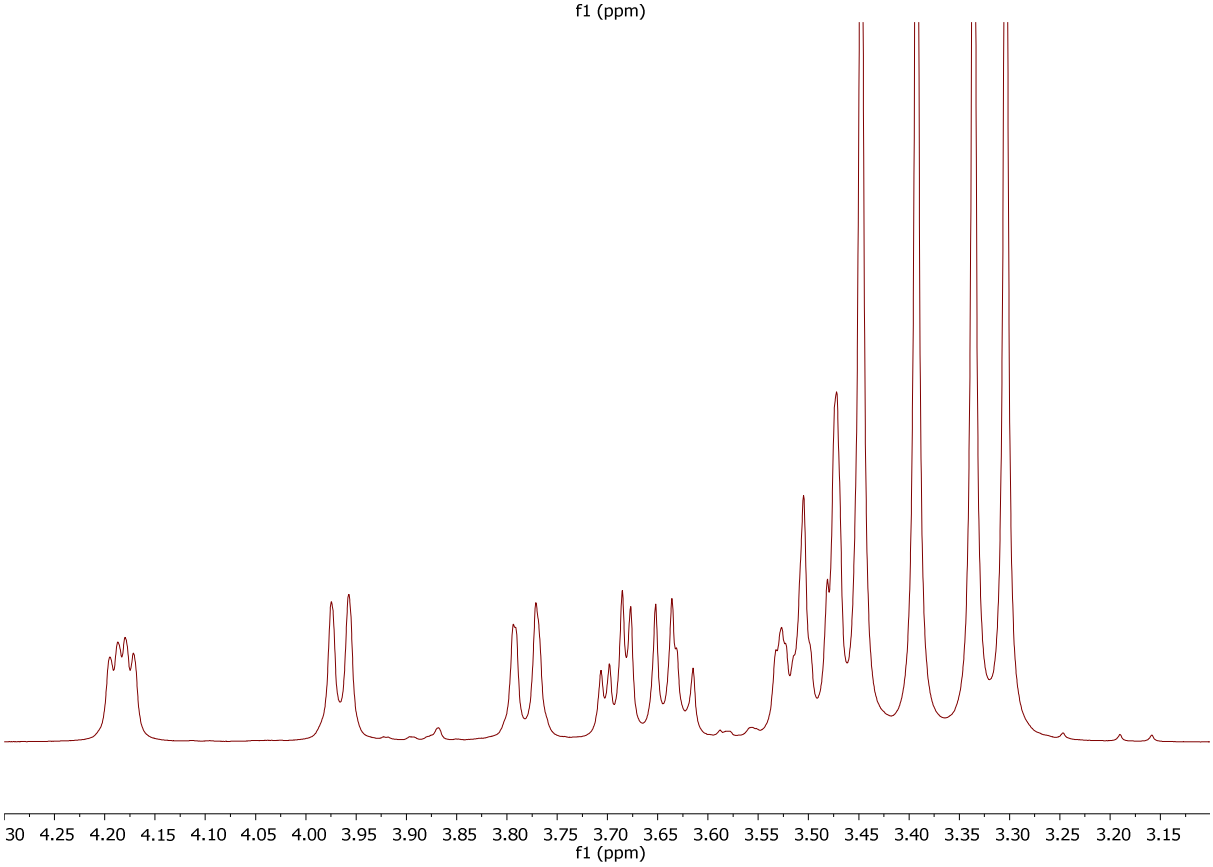
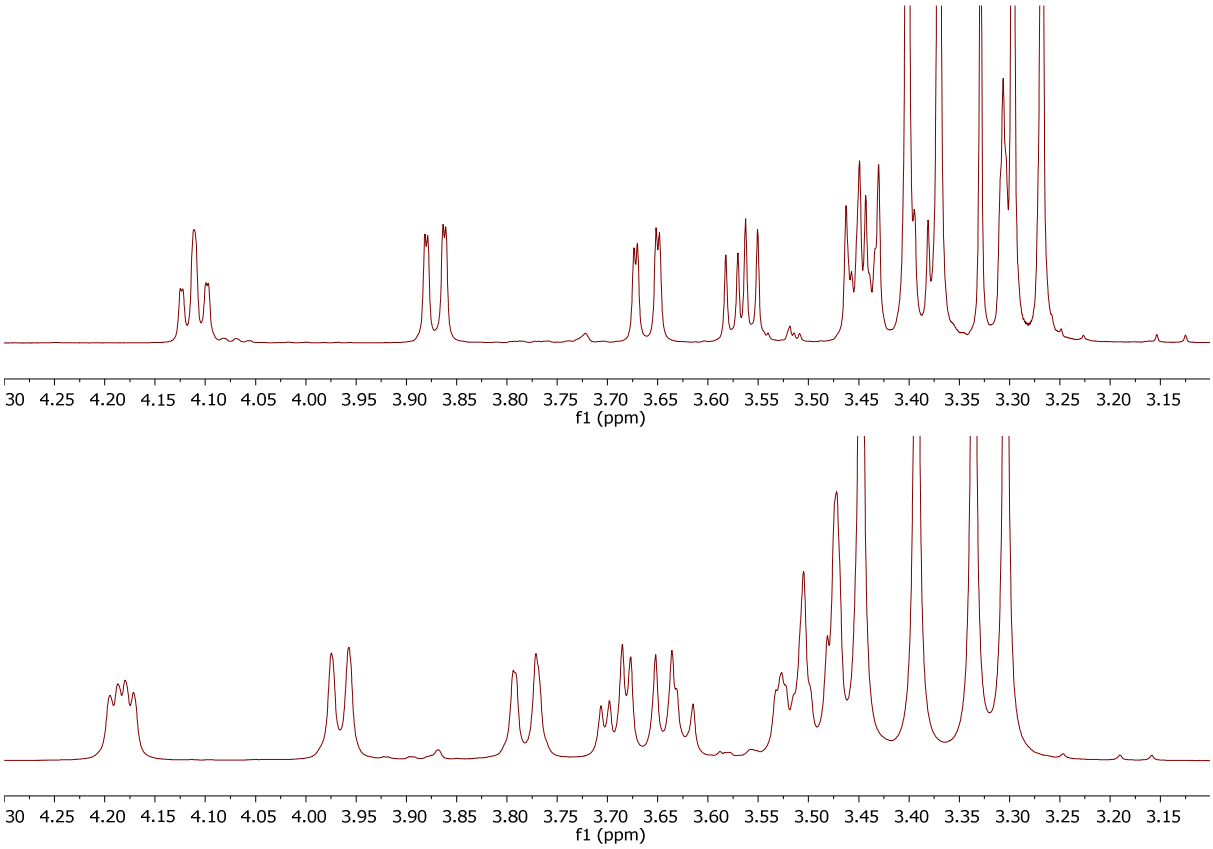


2b ^{1}H-NMR spectrum in D_2O

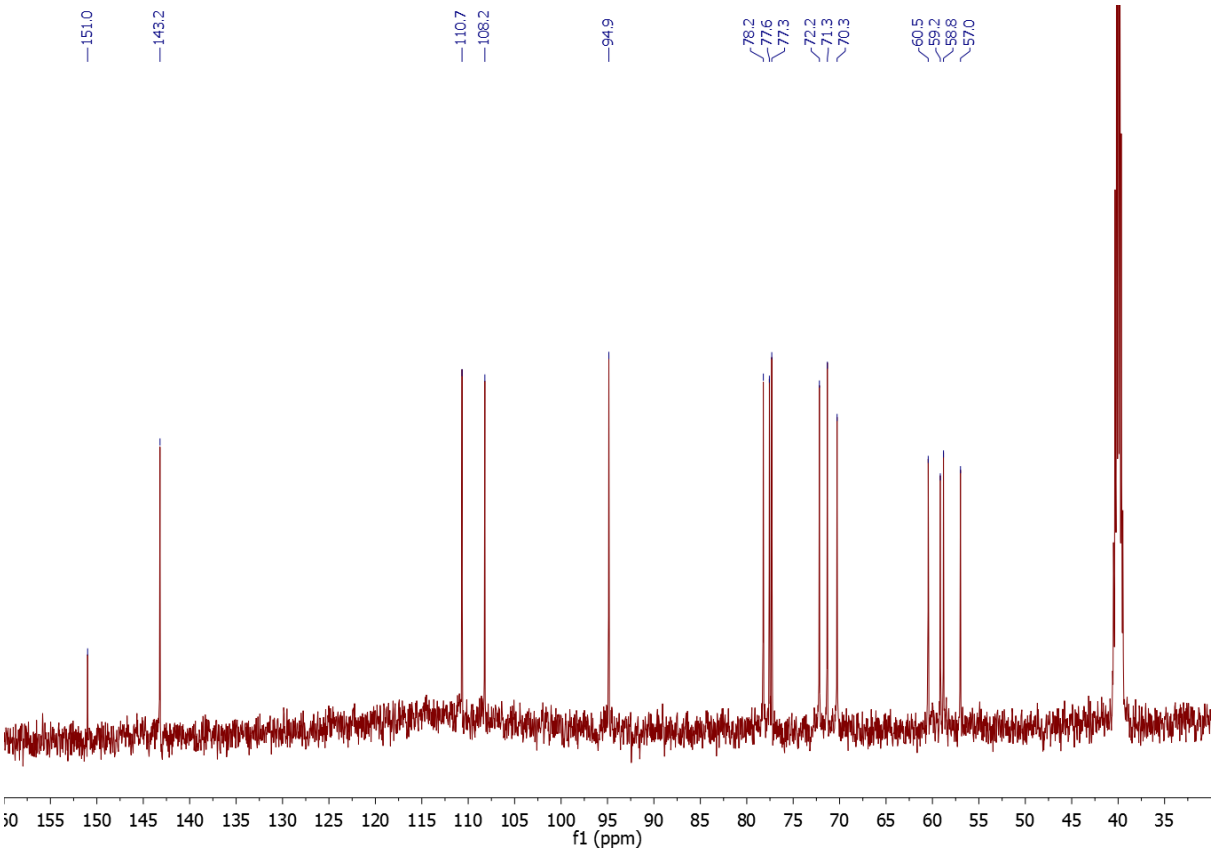




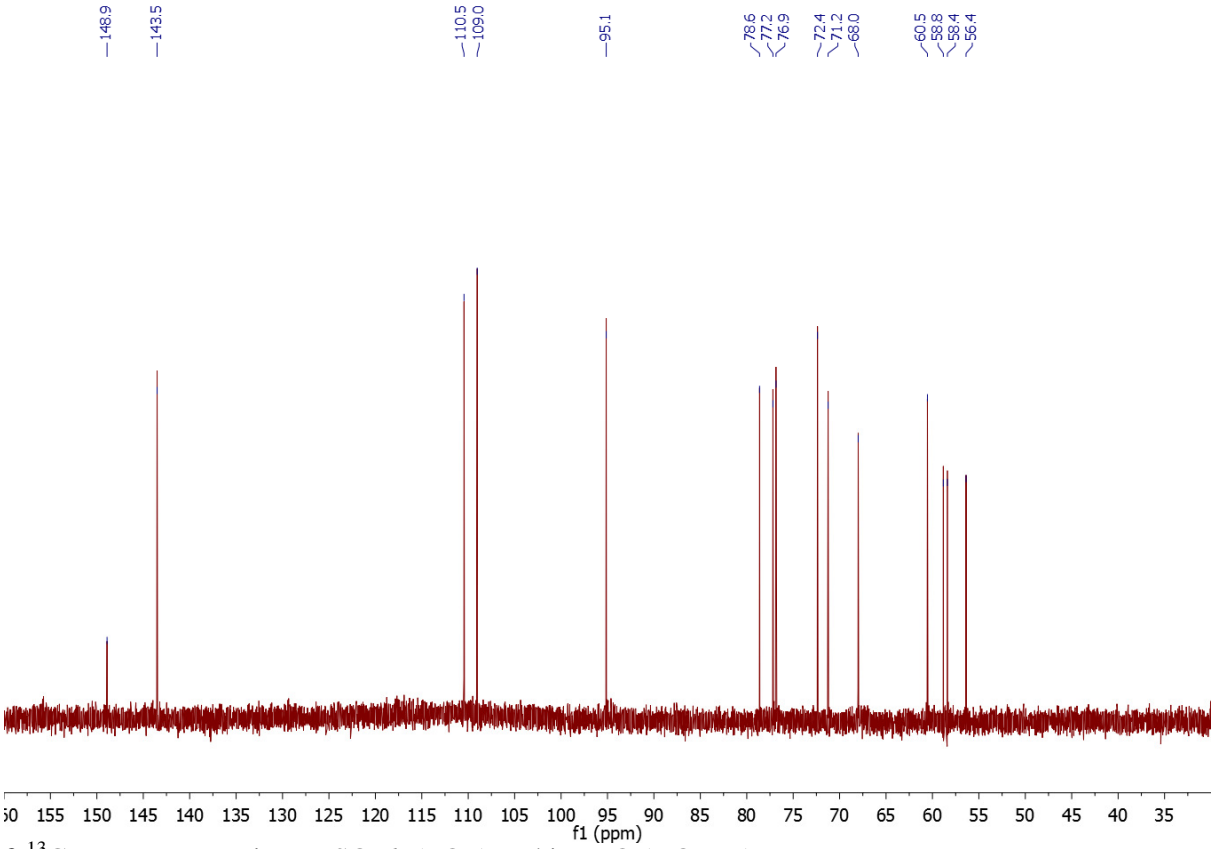
2 ^{1}H-NMR spectra in DMSO-d_6 (TOP) and in D_2O (DOWN)



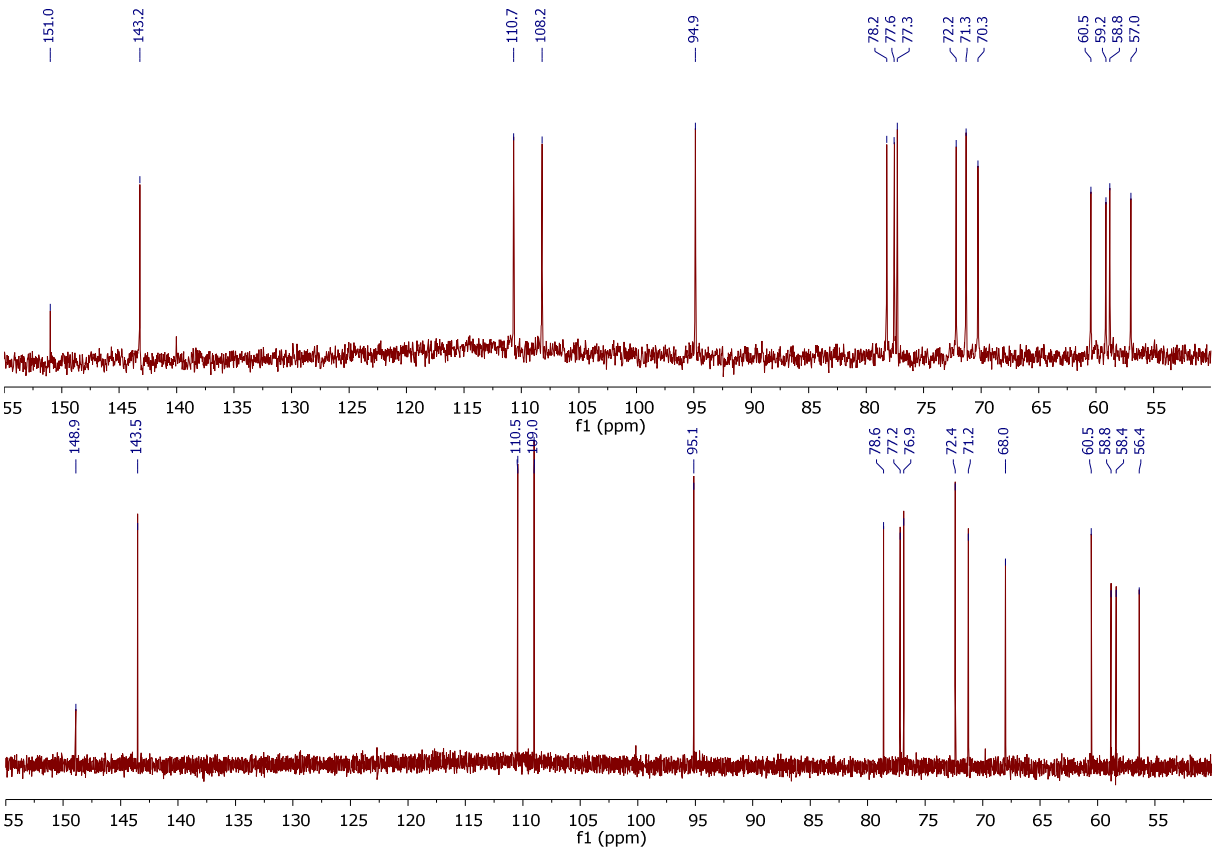
2a ^{13}C-NMR spectrum in DMSO-d_6



2b ^{13}C-NMR spectrum in D_2O



2 ^{13}C-NMR spectra in DMSO-d_6 (TOP) and in D_2O (DOWN)



2-Deoxyribose degradation assay

The method relies on the reaction of *in situ* generated hydroxyl radicals with 2-DR that leads to the formation of malondialdehyde (MDA) and other carbonyl reacting species generally referred to as MDA-like products. These compounds react with thiobarbituric acid (TBA) affording a pink chromophore that can be evaluated spectrophotometrically at 532 nm (Figure).

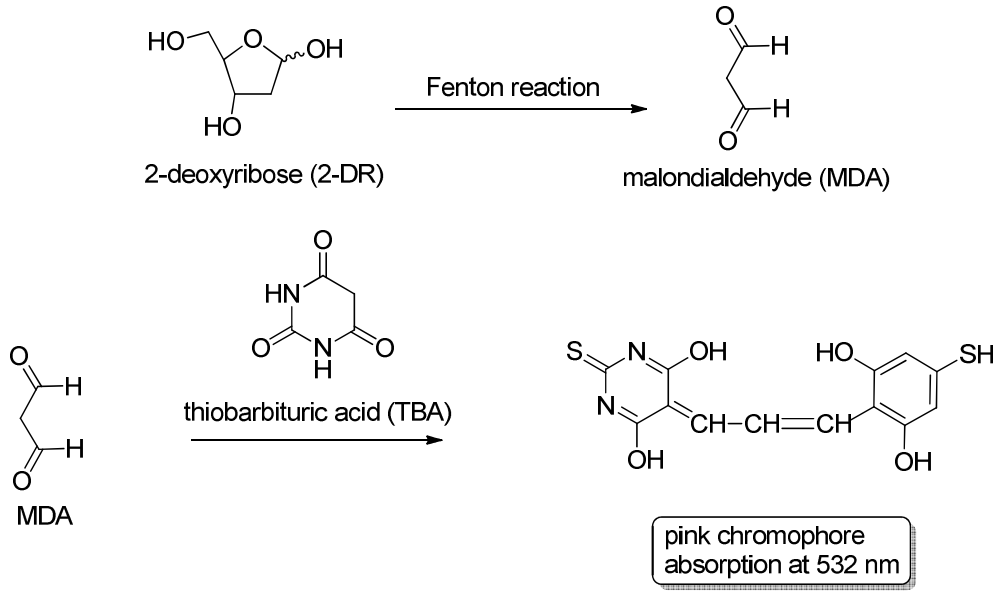


Figure. Scheme of the 2-deoxyribose (2-DR) degradation assay