SUPPORTING INFORMATION

Discovery of novel, potent, brain-permeable and orally efficacious positive allosteric modulator of alpha 7 nicotinic acetylcholine receptor [4-(5-(4-chlorophenyl)-4-methyl-2-propionylthiophen-3-yl)benzenesulfonamide], structure activity relationship and preclinical characterization

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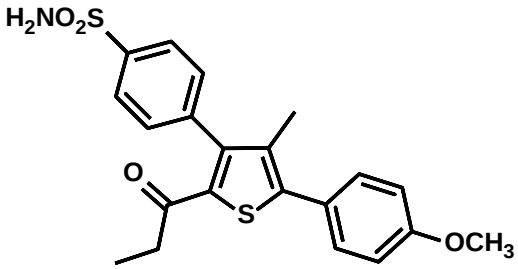
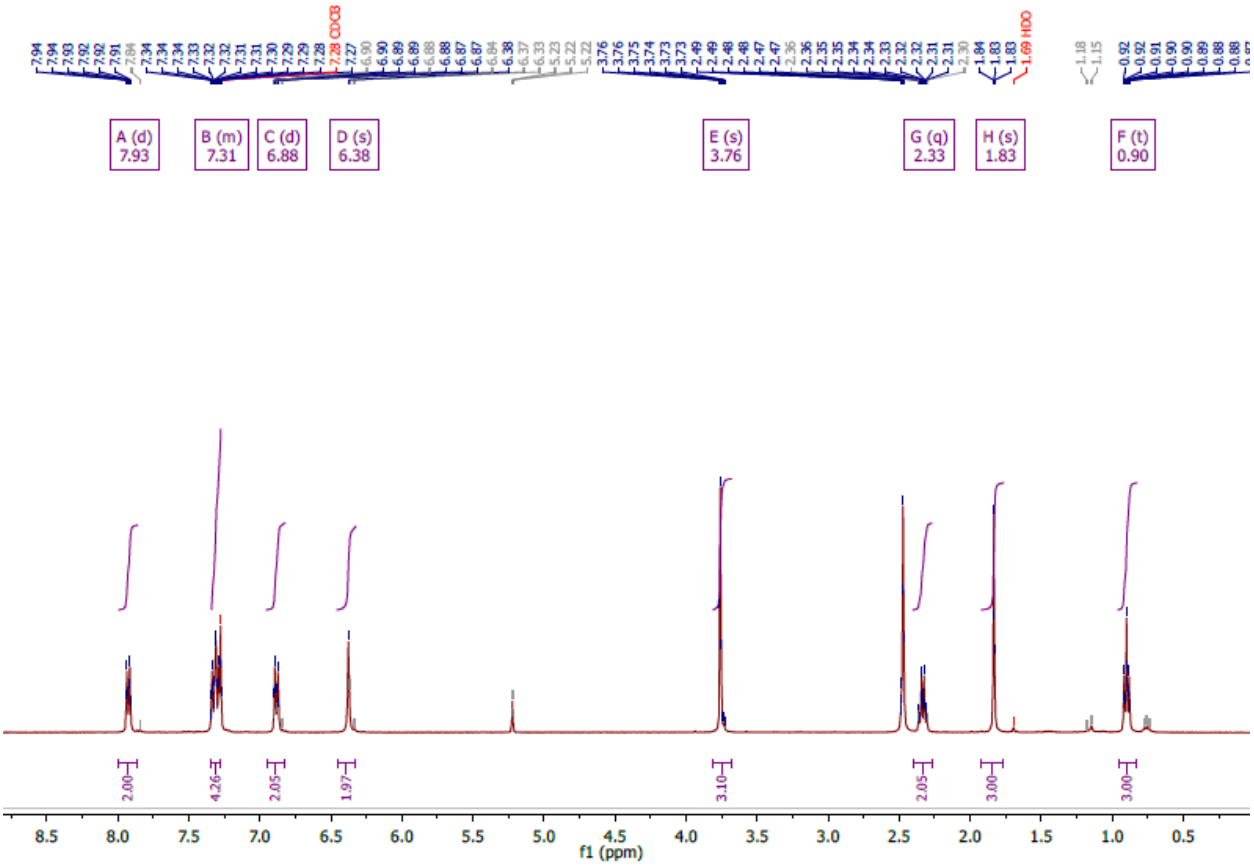
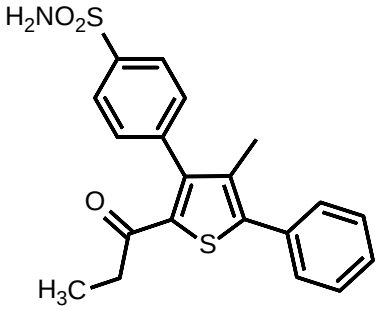
^{1}H NMR spectra of compounds 23-40.....S2 to S19

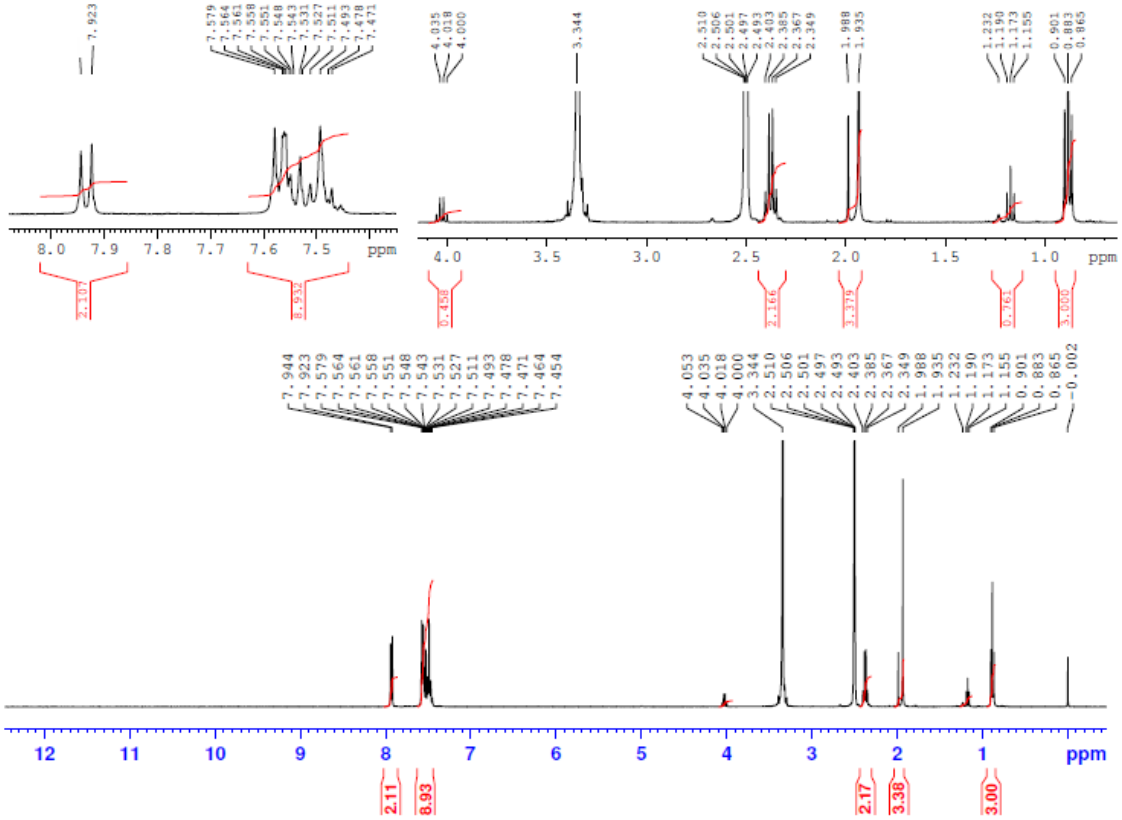
^{1}H NMR (DMSO-d$_6$, 400 MHz) for Compound 23:



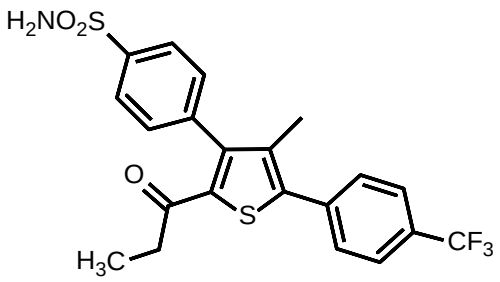


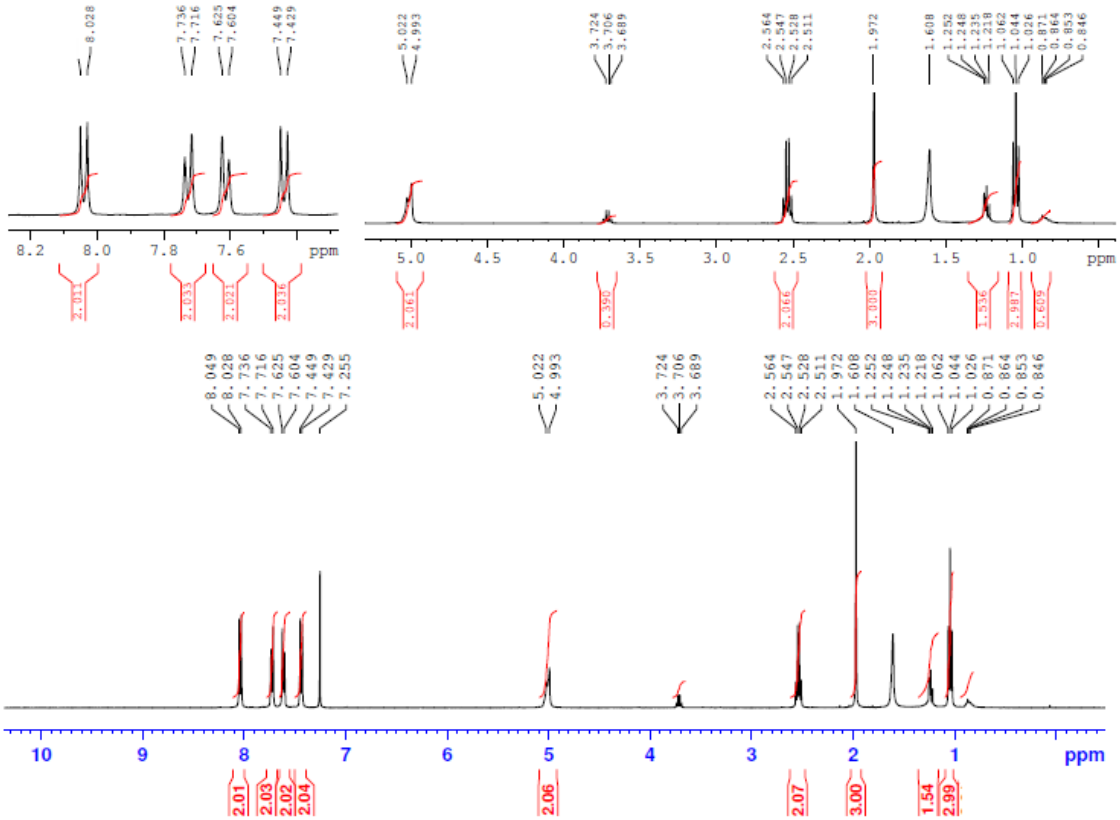
^{1}H NMR (DMSO-d$_6$, 400 MHz) for Compound 24:



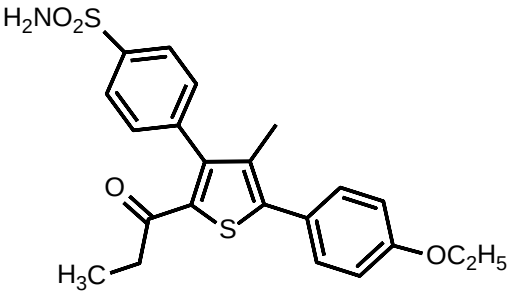


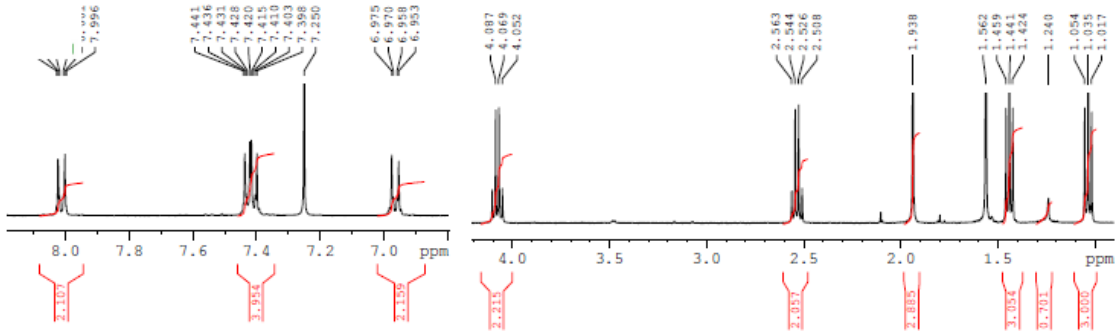
^{1}H NMR ($CDCl_3$, 400 MHz) for Compound 25:

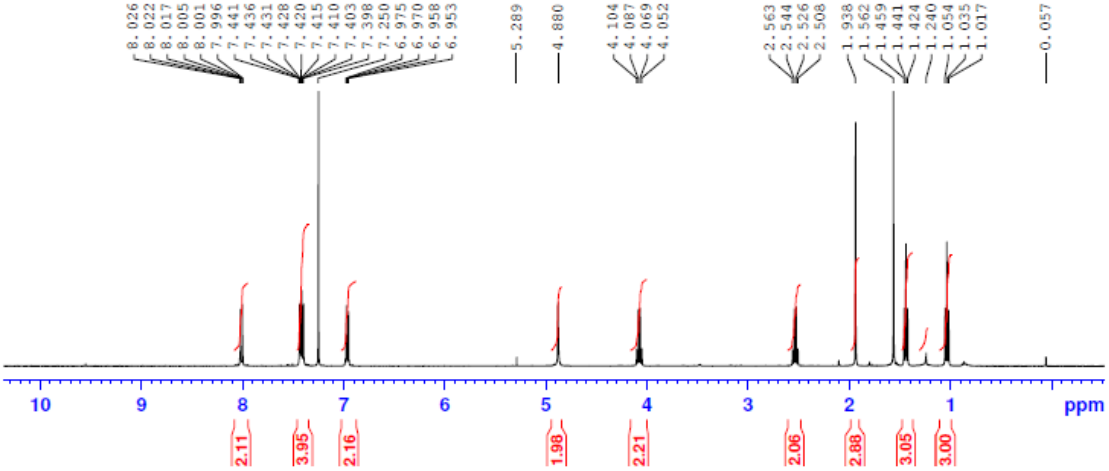




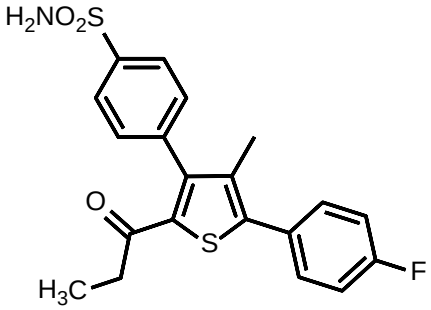
^{1}H NMR ($CDCl_3$, 400 MHz) for Compound 26:

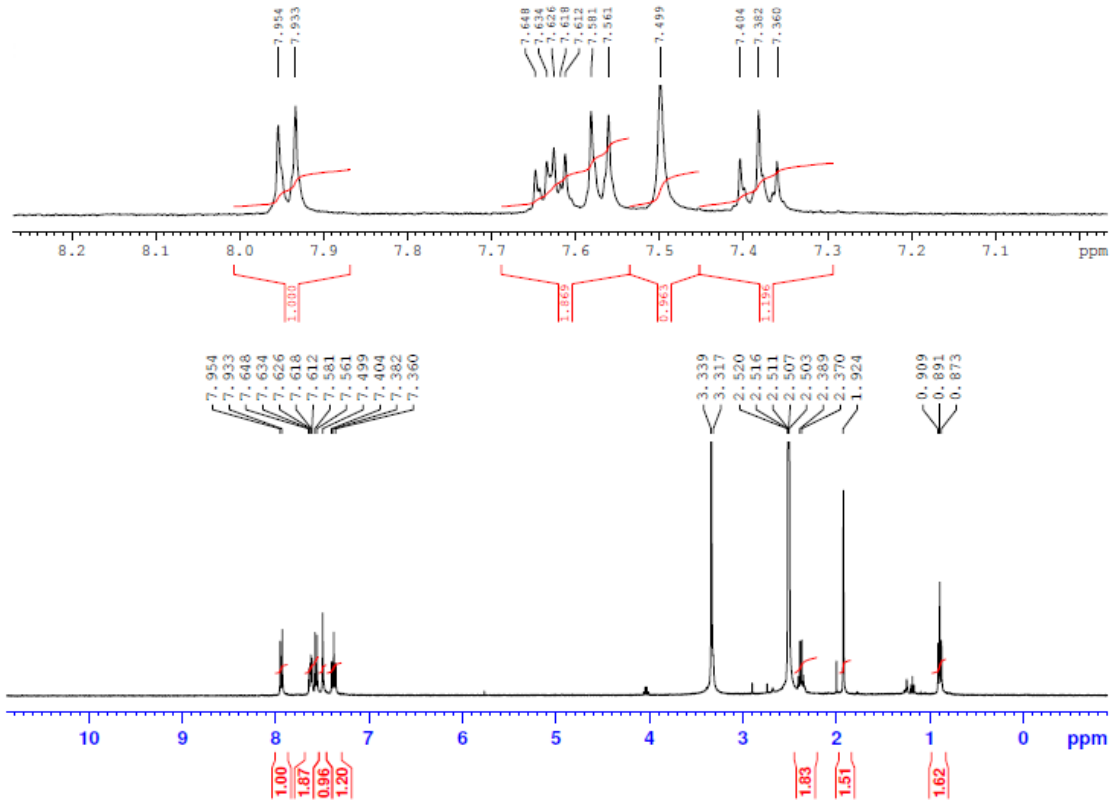




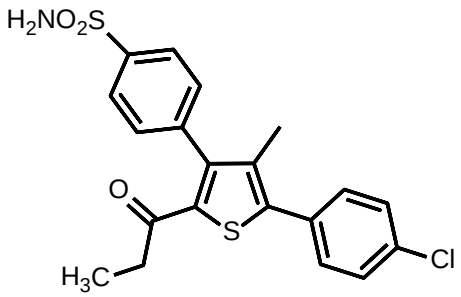


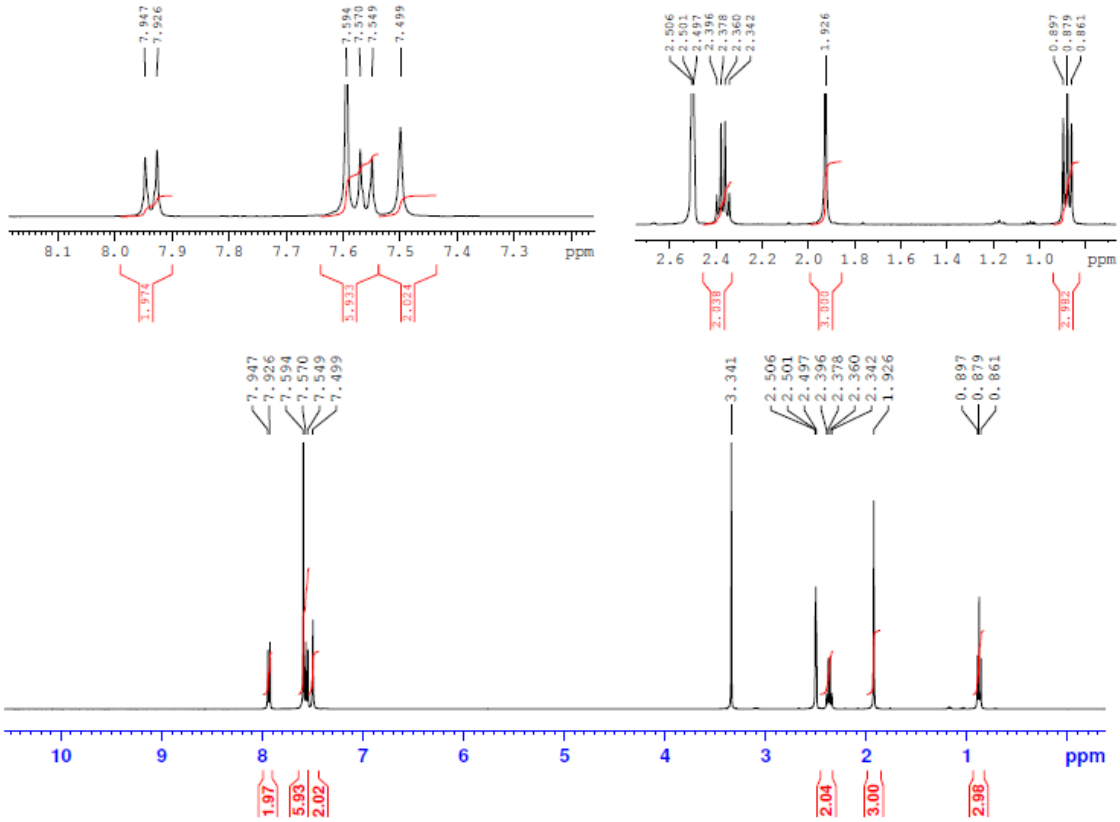
^{1}H NMR (DMSO-d$_6$, 400 MHz) for Compound 27:



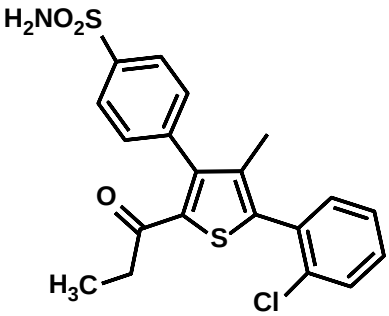


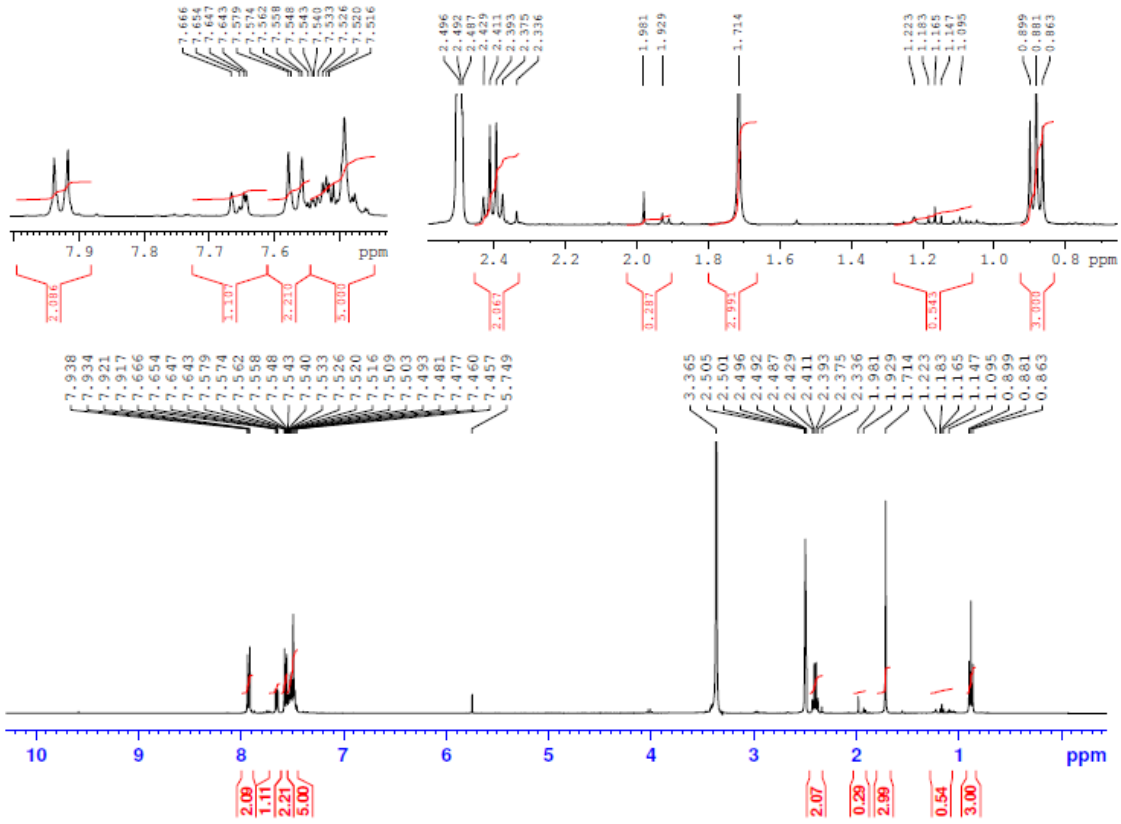
^{1}H NMR (DMSO-d$_6$, 400 MHz) for Compound 28:



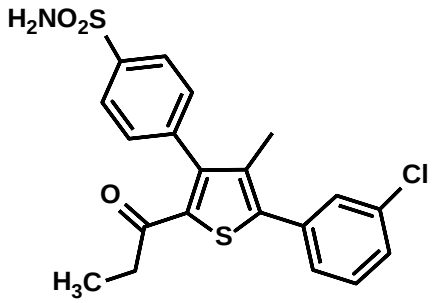


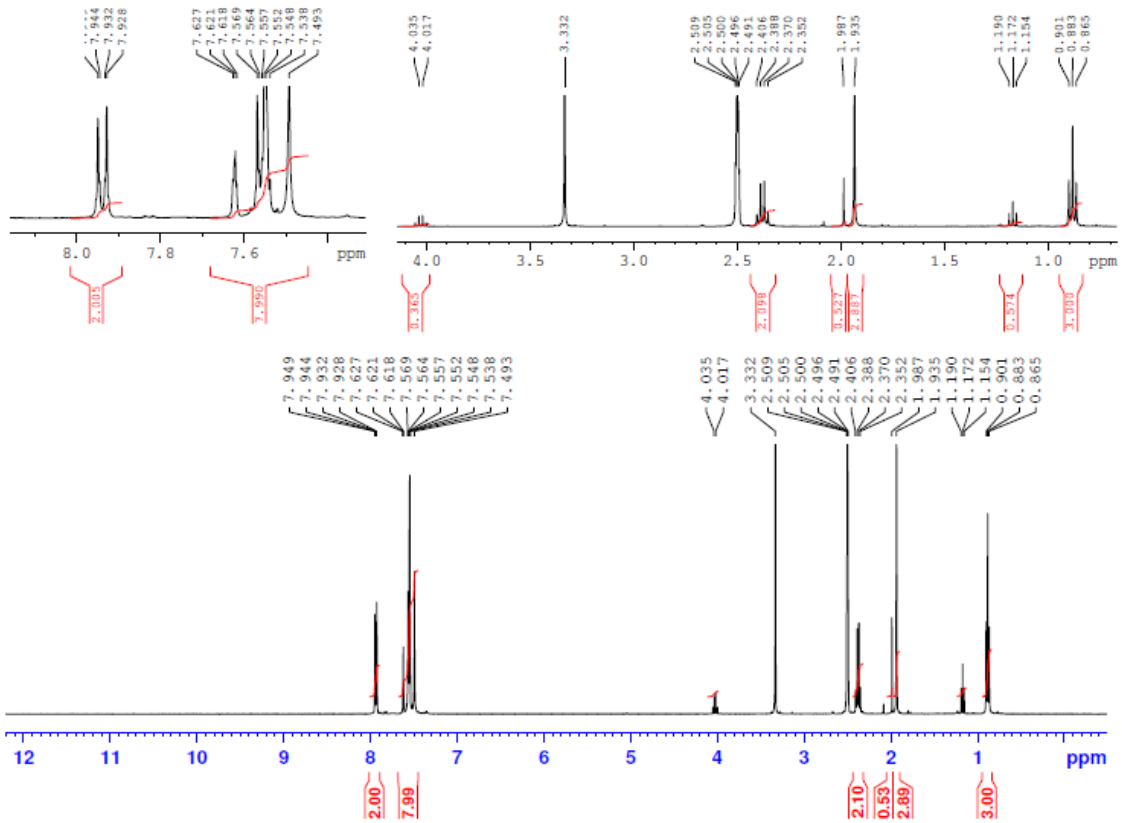
^{1}H NMR (DMSO-d$_6$, 400 MHz) for Compound 29:



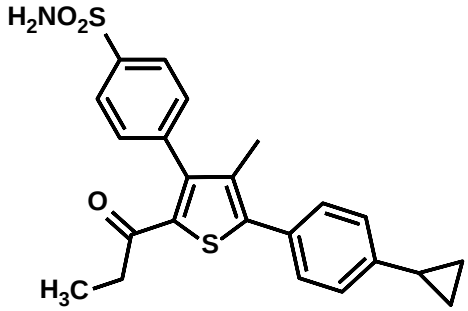


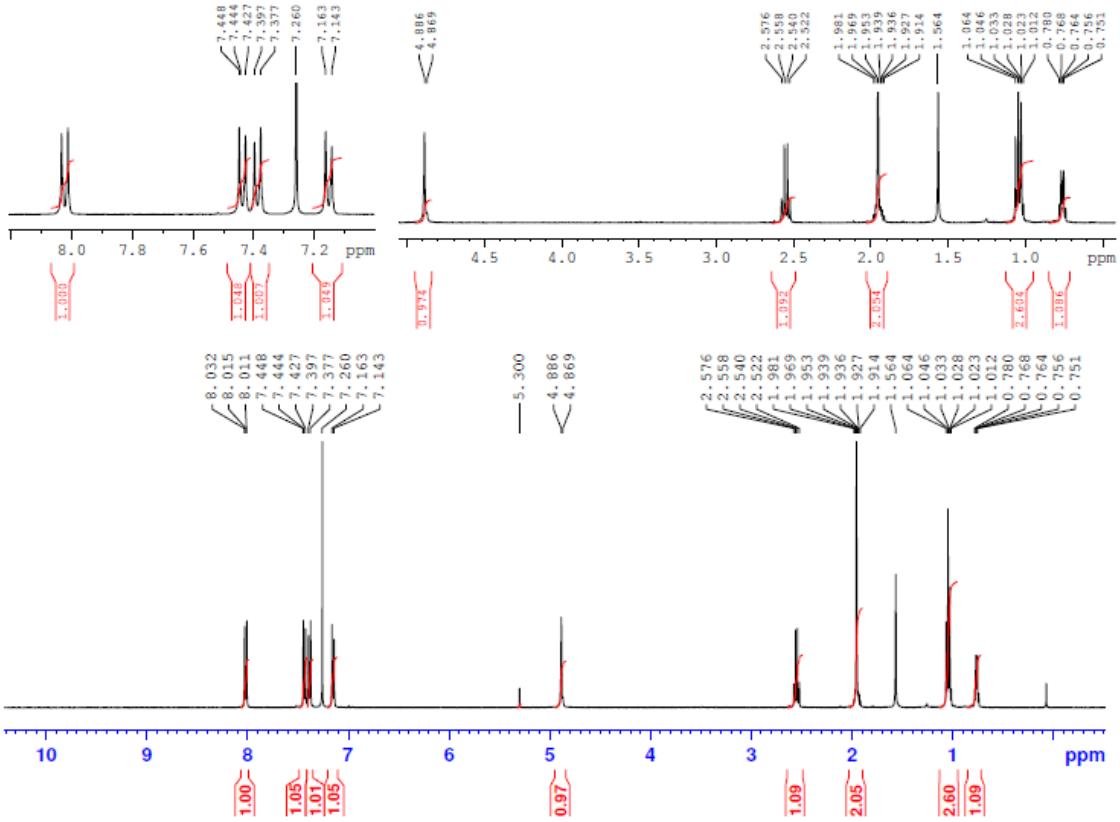
^{1}H NMR (DMSO-d$_6$, 400 MHz) for Compound 30:



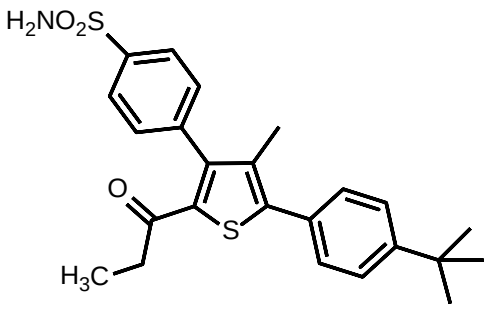


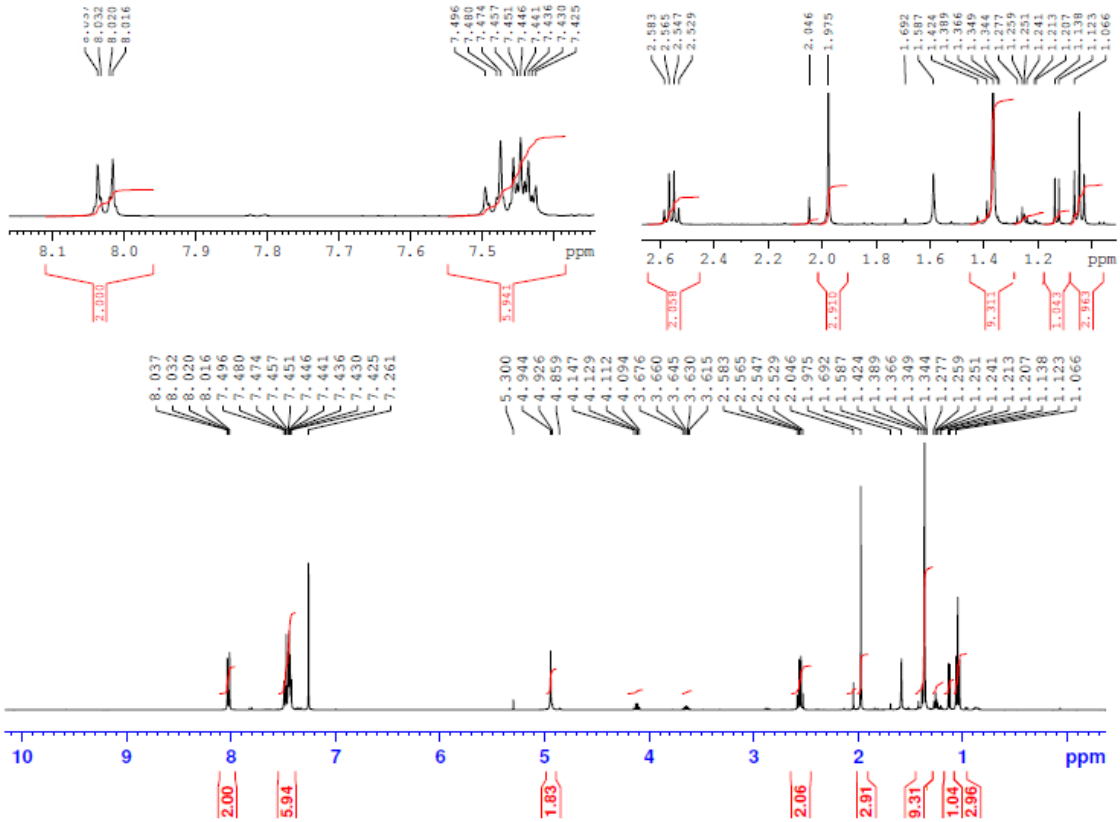
^{1}H NMR ($CDCl_3$, 400 MHz) for Compound 31:



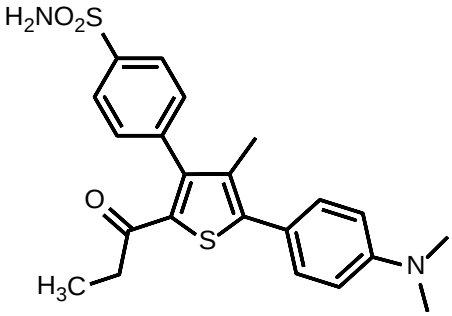


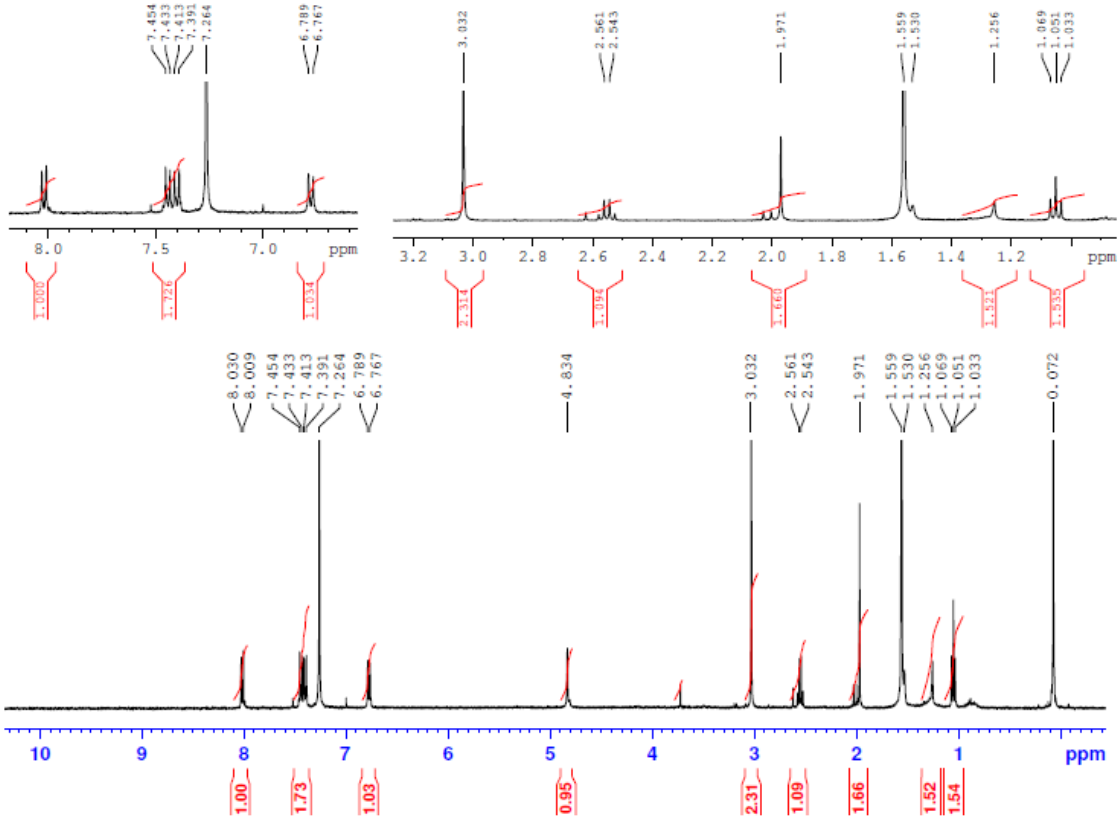
^{1}H NMR ($CDCl_3$, 400 MHz) for Compound 32:



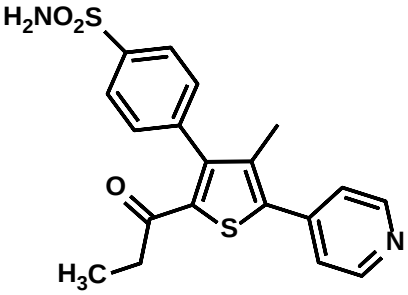


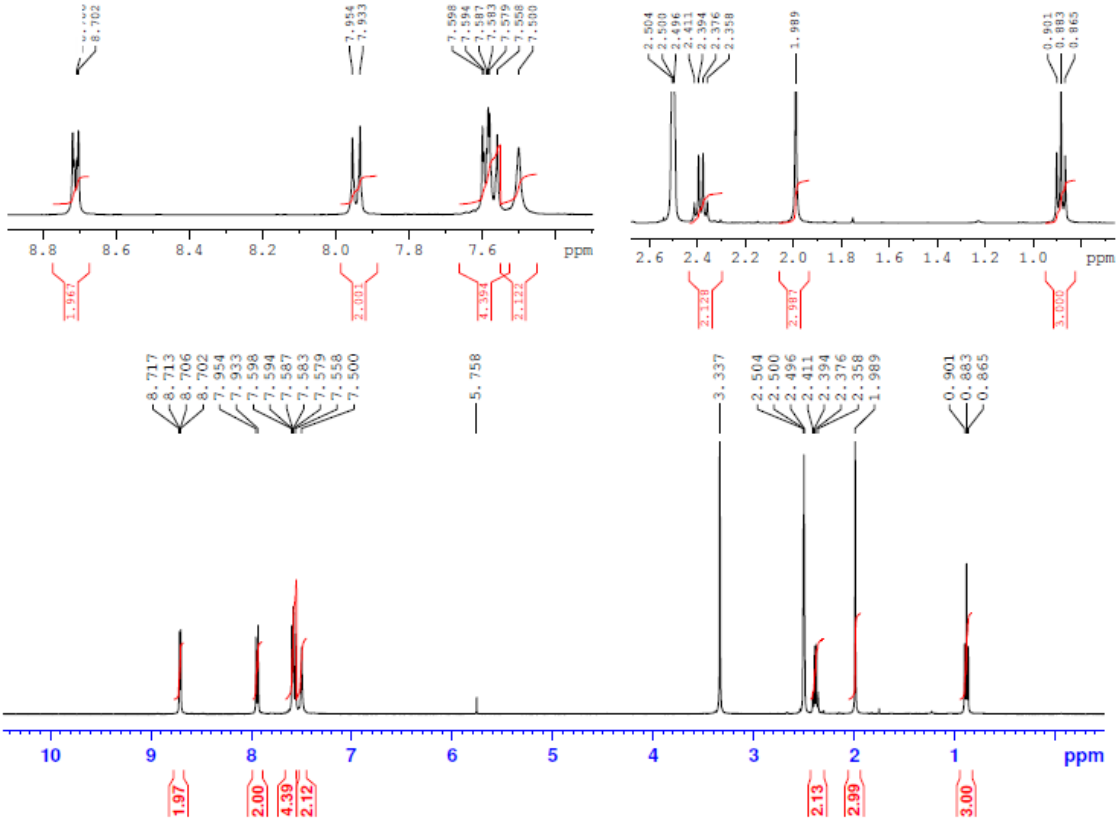
^{1}H NMR ($CDCl_3$, 400 MHz) for Compound 33:



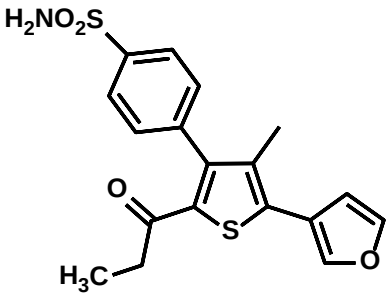


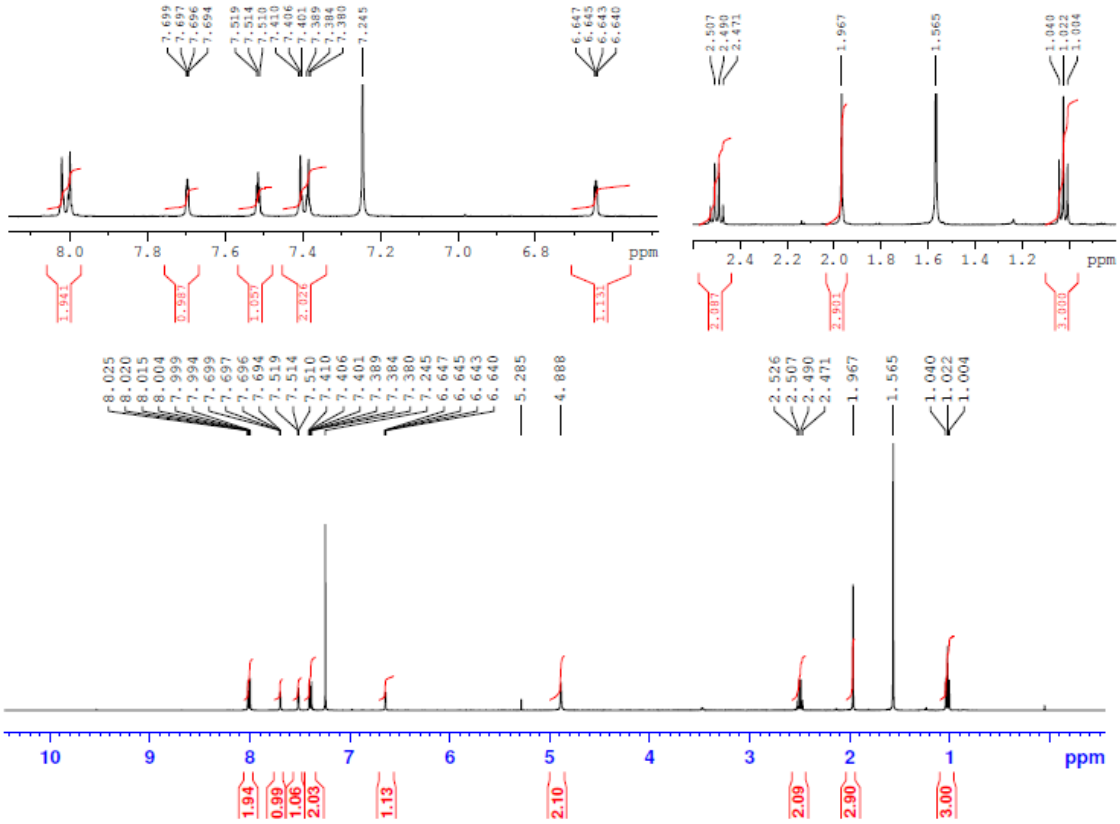
^{1}H NMR (DMSO-d$_6$, 400 MHz) for Compound 34:



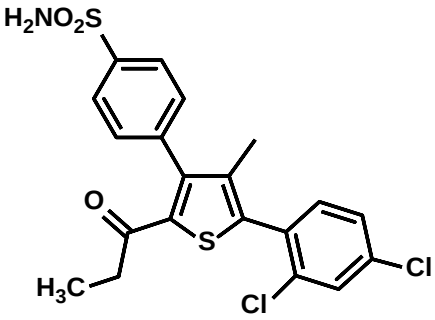


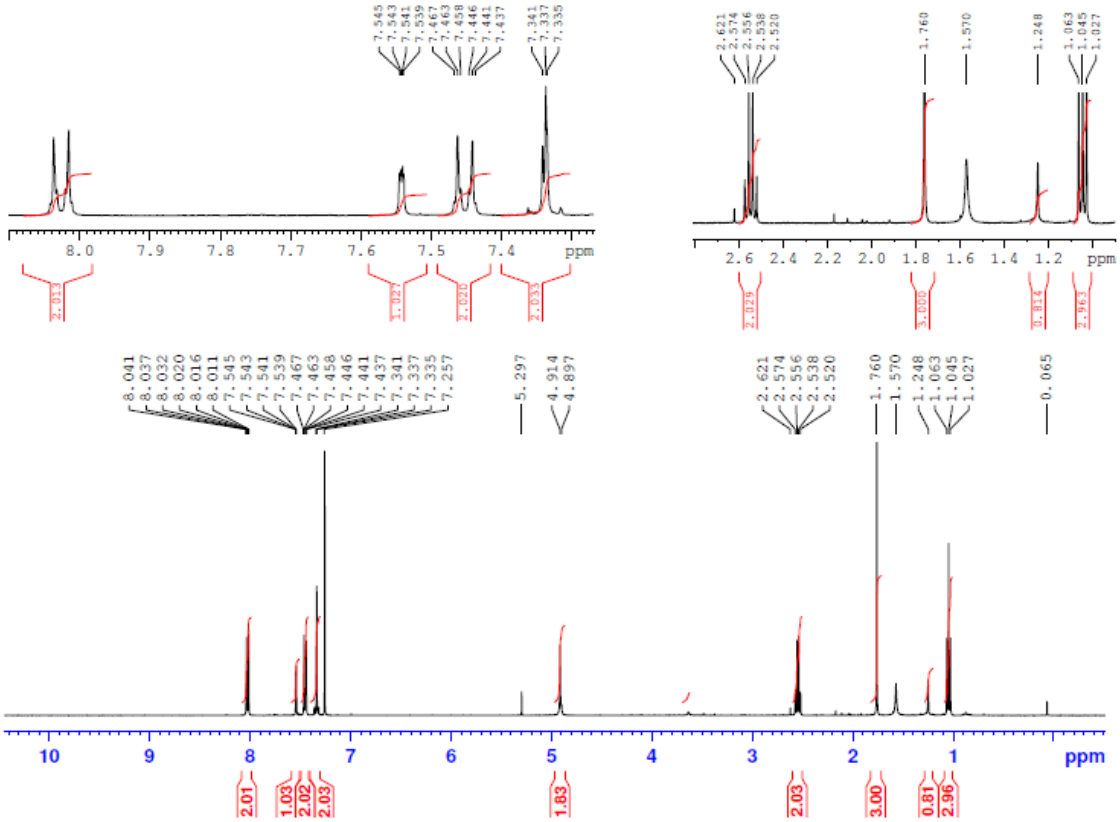
^{1}H NMR ($CDCl_3$, 400 MHz) for Compound 35:



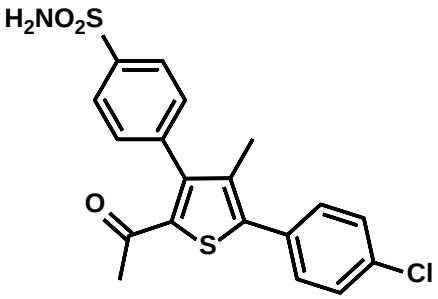


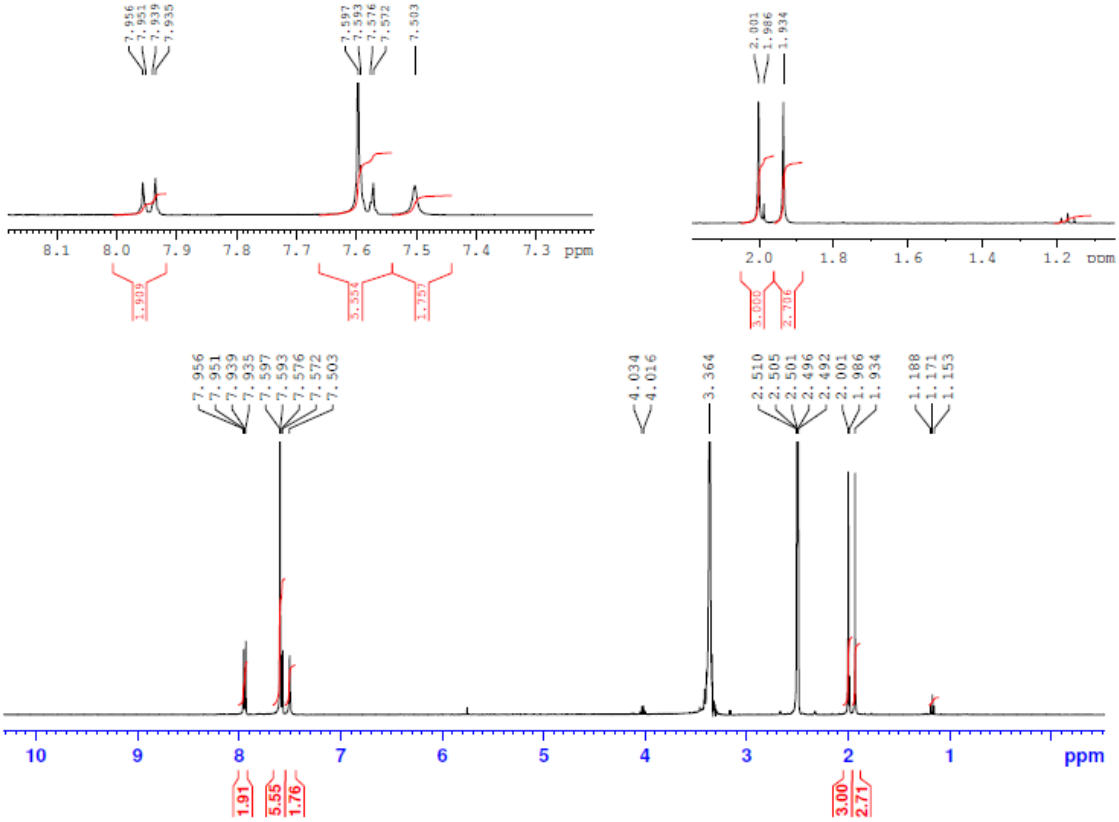
^{1}H NMR ($CDCl_3$, 400 MHz) for Compound 36:



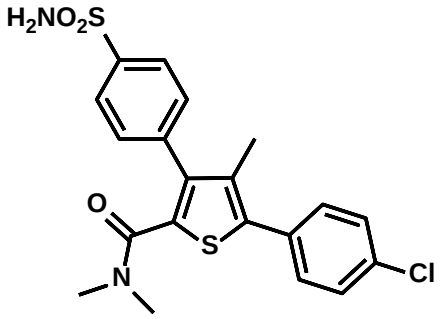


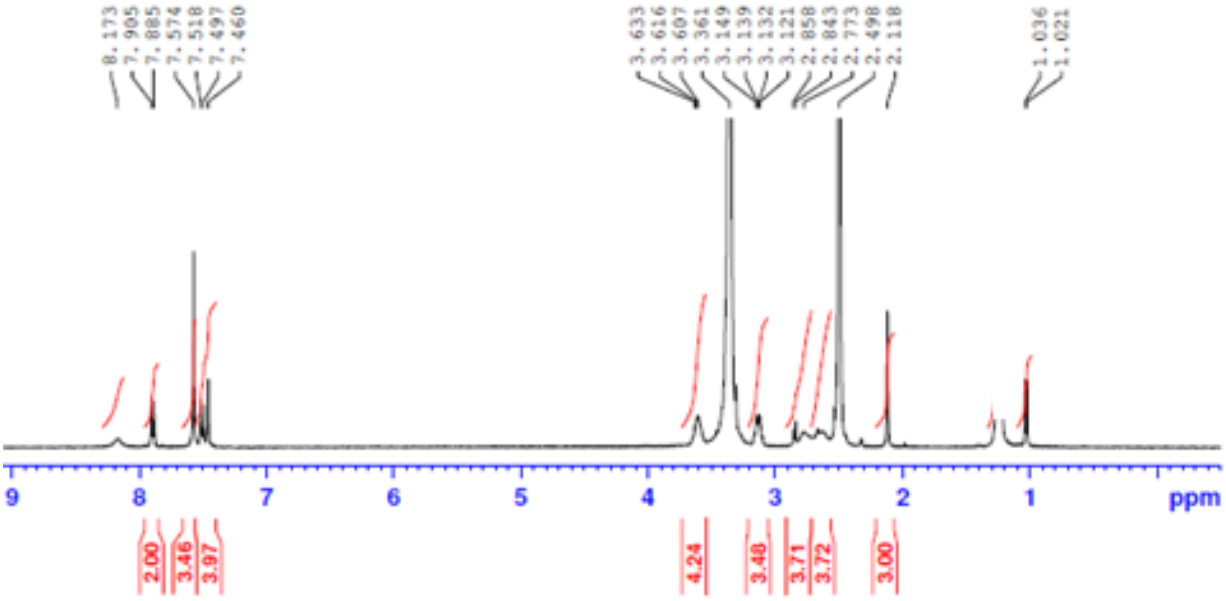
^{1}H NMR (DMSO-d_6, 400 MHz) for Compound 37:



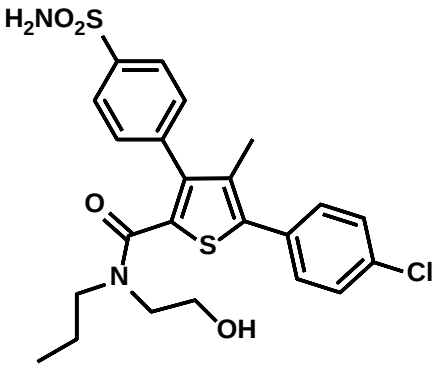


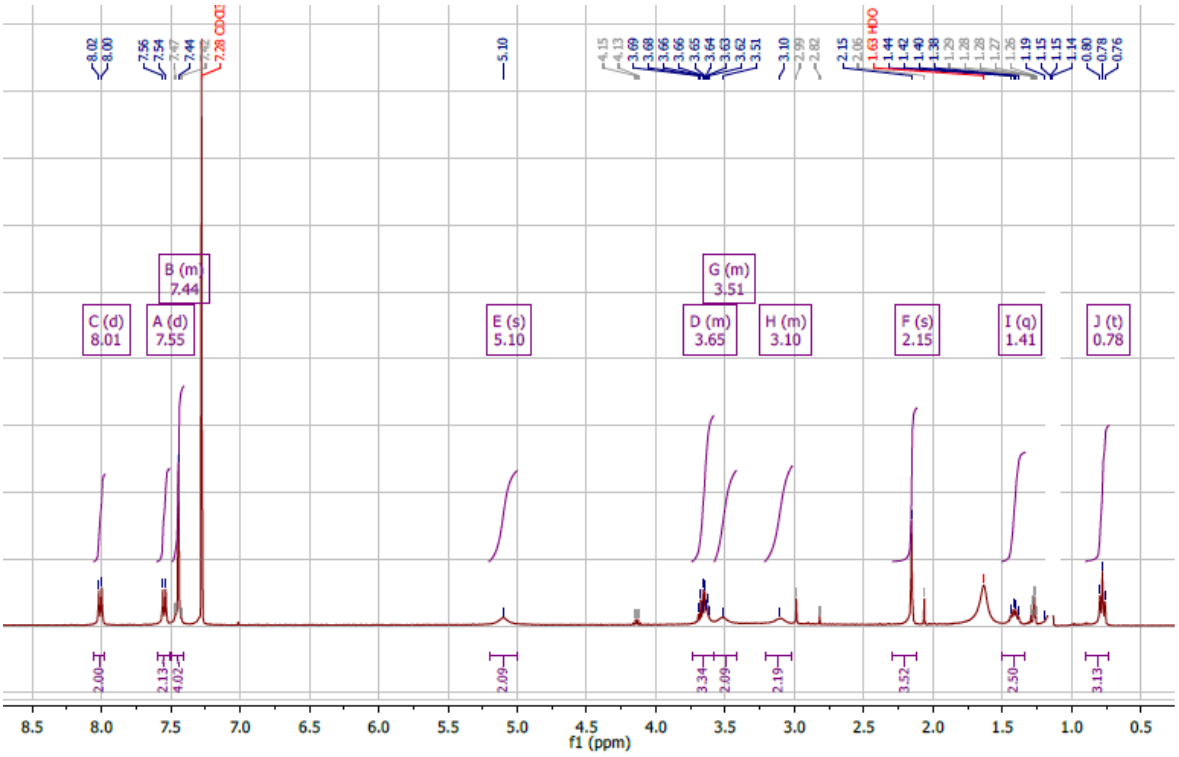
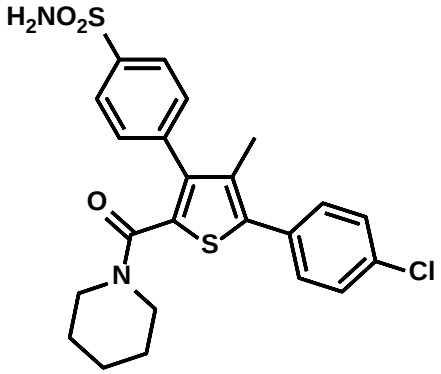
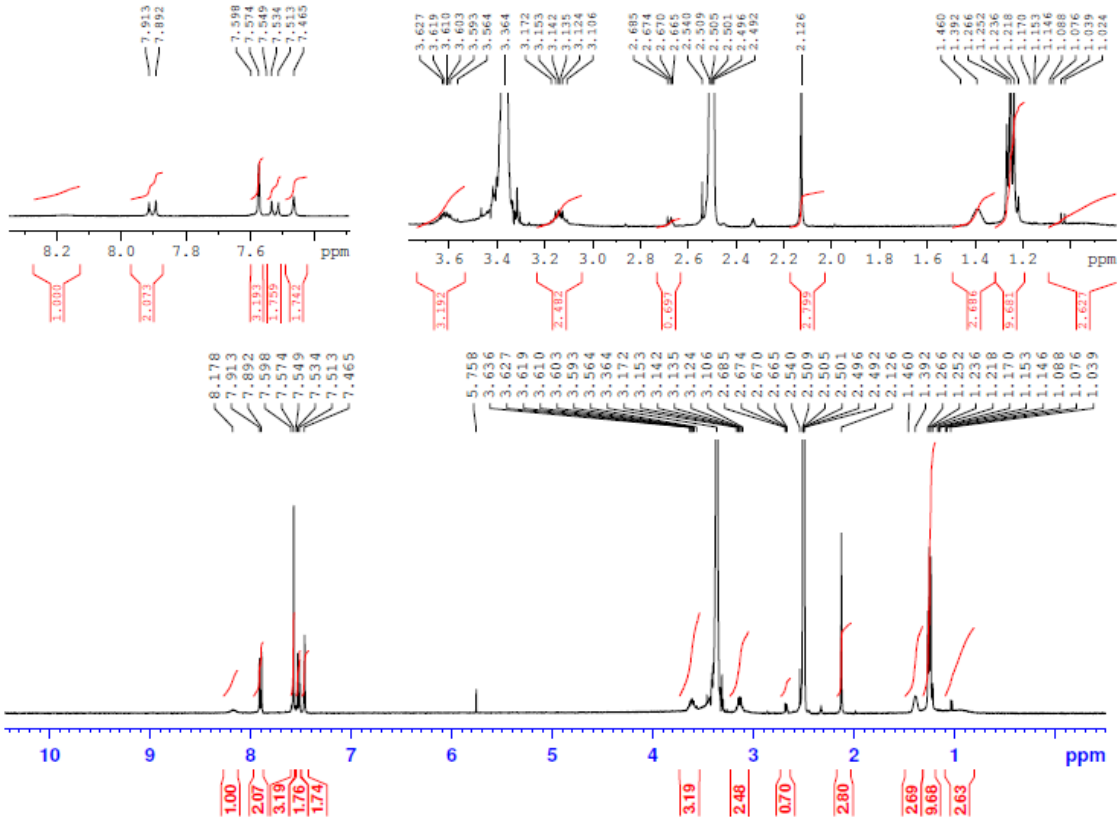
^{1}H NMR (DMSO-d$_6$, 400 MHz) for Compound 38:





^{1}H NMR ($CDCl_3$, 400 MHz) for Compound 39:





^{1}H NMR (DMSO-d$_6$, 400 MHz) for Compound 40: