

## Supplemental Information

Large-scale structural rearrangement of a serine hydrolase from *Francisella tularensis* facilitates catalysis

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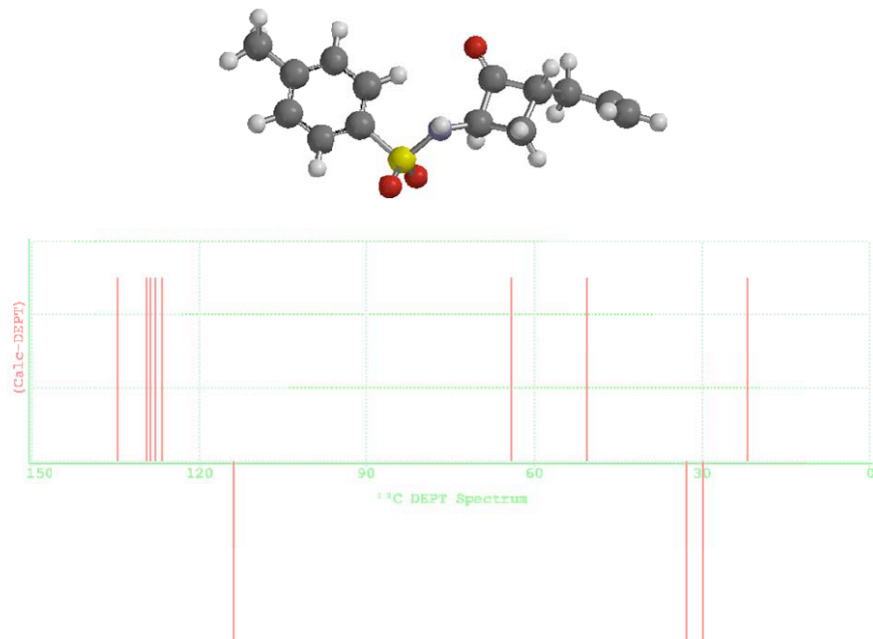
*Supplemental Spectrum:*

[Supplemental Tables and Figures](#)

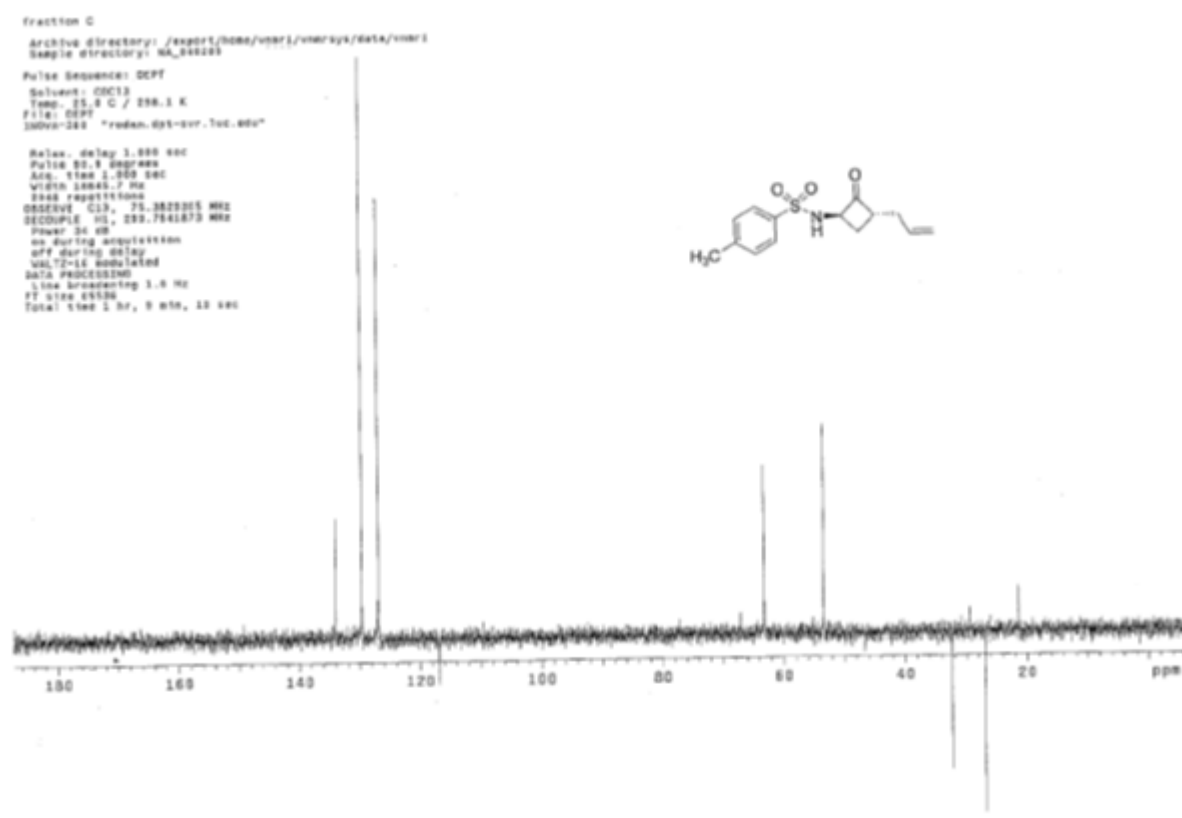
S2-S5

## Supplemental DEPT Spectrum

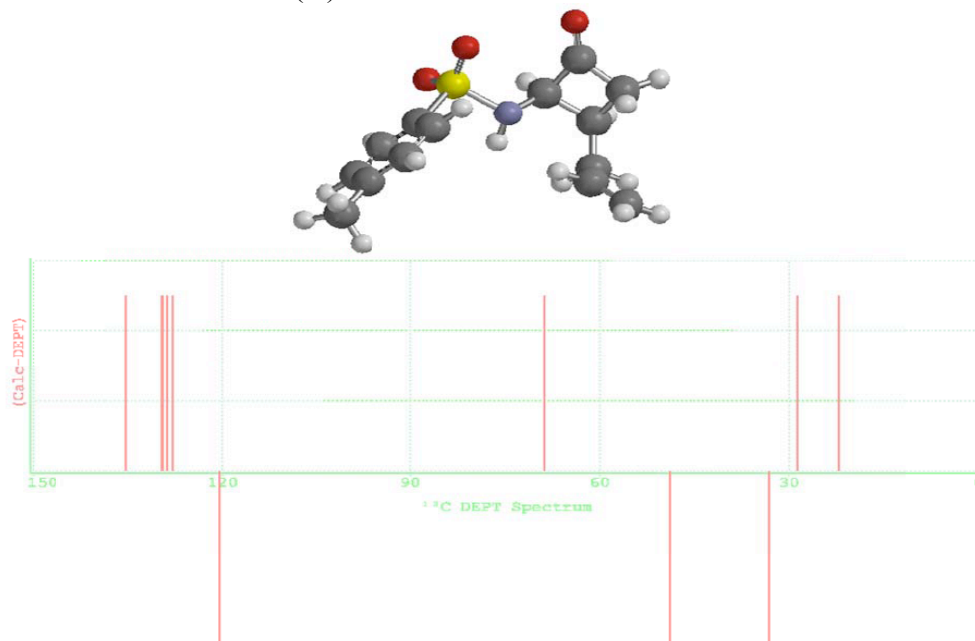
(±)-*N-trans*-(3-allyl-2-oxocyclobutyl)-4-methylbenzenesulfonamide (iii) calculated DEPT spectra generated by SpartanPro'10 (Wavefunction) from ab initio density functional level of theory using the RB3LYP functional and the 6-31-G(D) basis sets



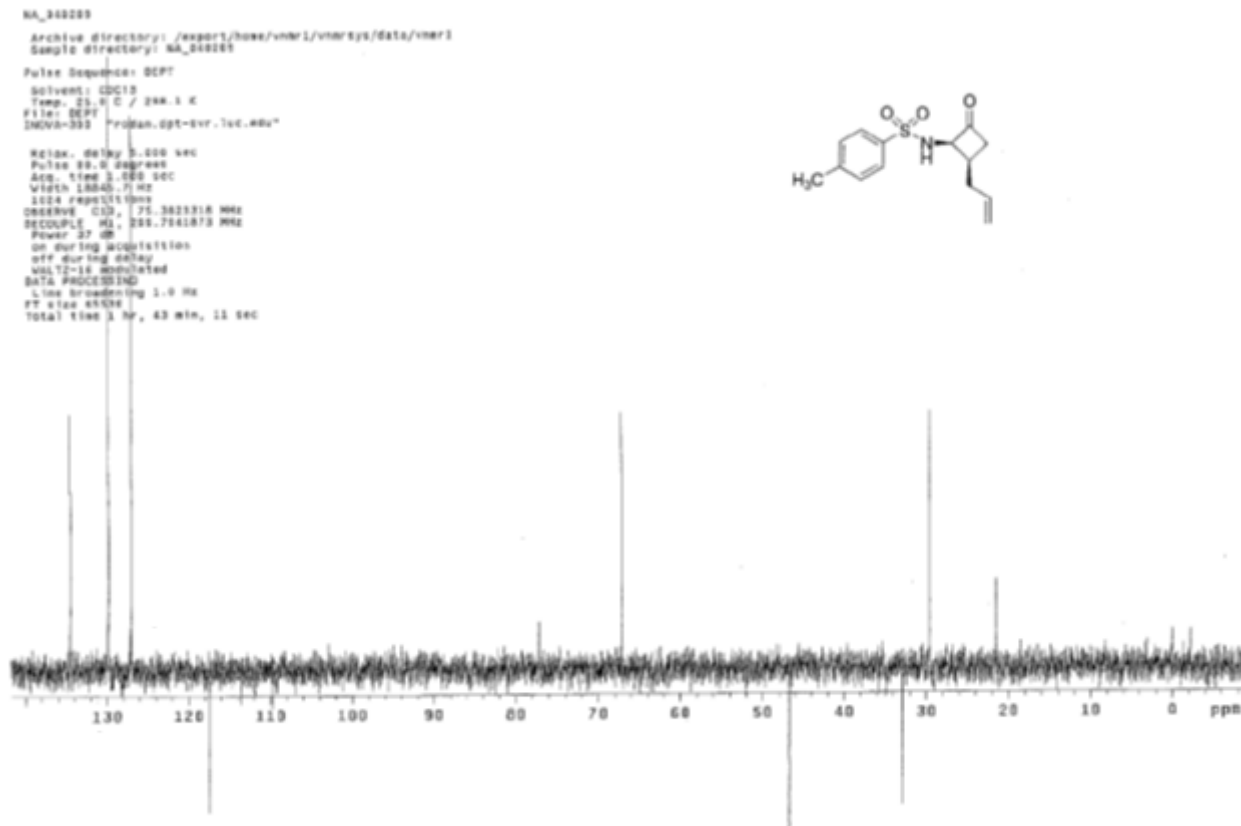
DEPT spectrum of (±)-*N-trans*-(3-allyl-2-oxocyclobutyl)-4-methylbenzenesulfonamide (iii)



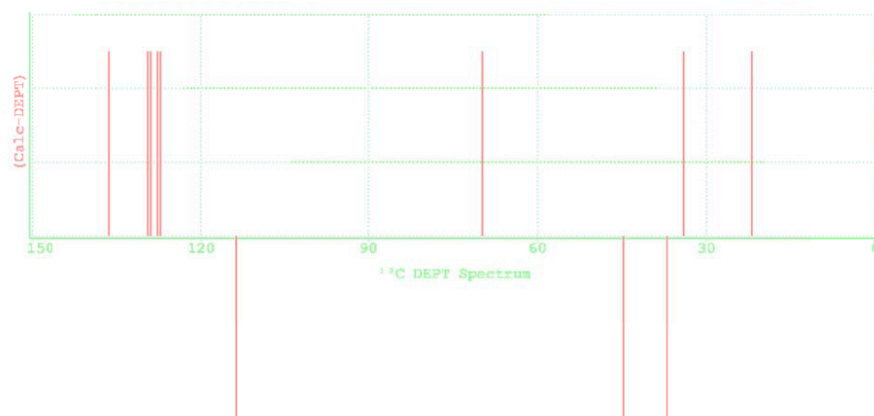
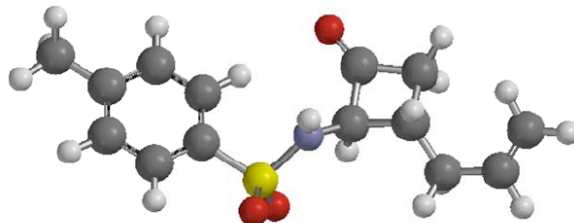
(±)-N-cis-(2-allyl-4-oxocyclobutyl)-4-methylbenzenesulfonamide (iv) calculated DEPT spectra generated by SpartanPro'10 (Wavefunction) from ab initio density functional level of theory using the RB3LYP functional and the 6-31-G(D) basis sets



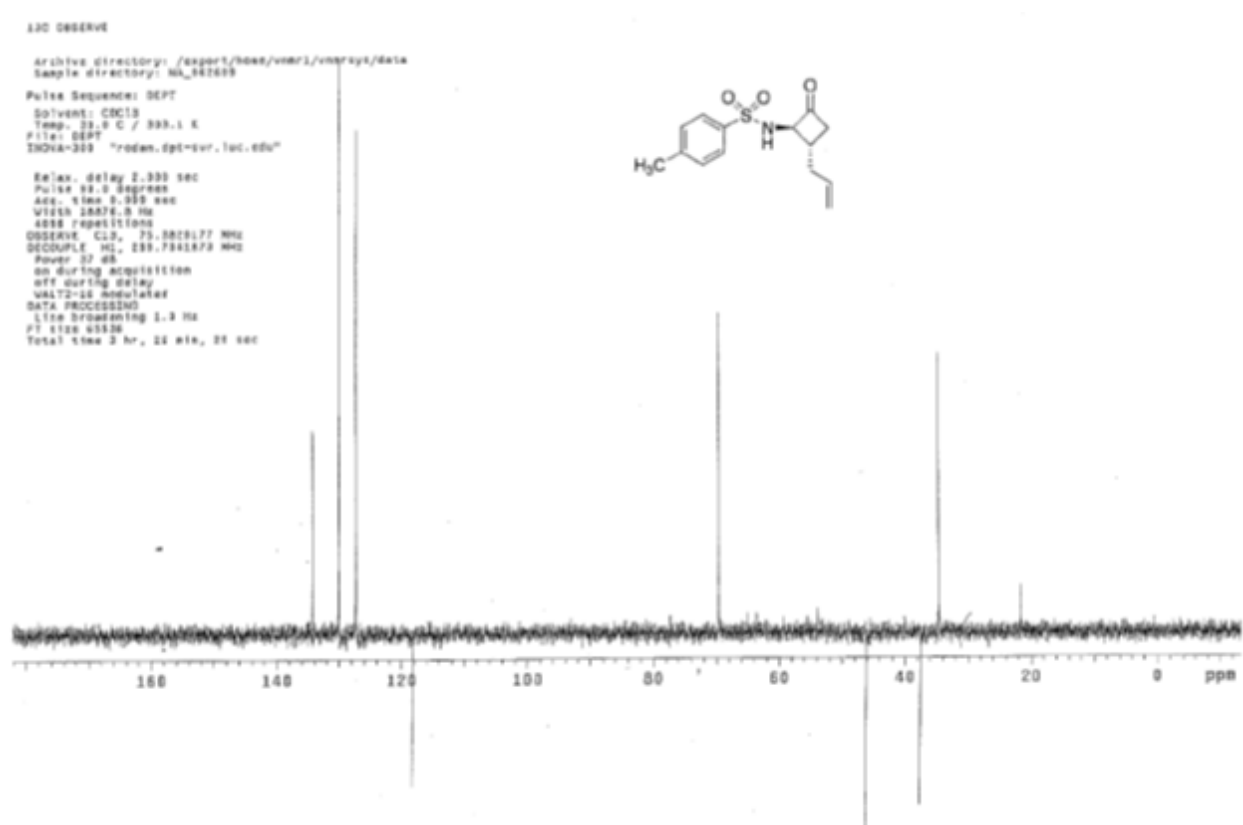
DEPT spectrum of (±)-N-cis-(2-allyl-4-oxocyclobutyl)-4-methylbenzenesulfonamide (iv)



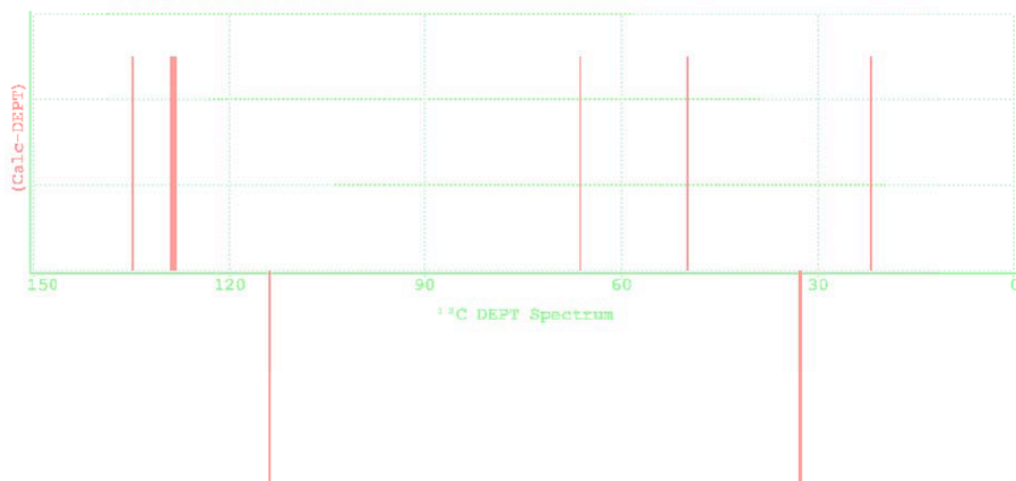
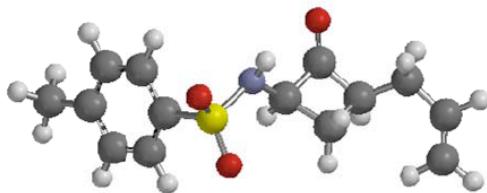
(±)-N-*trans*-(2-allyl-4-oxocyclobutyl)-4-methylbenzenesulfonamide (**14**) calculated DEPT spectra generated by SpartanPro'10 (Wavefunction) from ab initio density functional level of theory using the RB3LYP functional and the 6-31-G(D) basis sets



DEPT spectrum of (±)-N-(*trans*-2-allyl-4-oxocyclobutyl)-4-methylbenzenesulfonamide (**14**)



**(±)-N-trans-(2-allyl-4-oxocyclobutyl)-4-methylbenzenesulfonamide** calculated DEPT spectra generated by SpartanPro'10 from ab initio density functional level of theory using the RB3LYP functional and the 6-31-G(D) basis sets



**(±)-N-cis-(3-allyl-2-oxocyclobutyl)-4-methylbenzenesulfonamide** was not detected or isolated.