

Supplementary Material

Synthesis of benzotriazole–amino acid–benzenesulfonamide conjugates and phenylsulfonyl-dipeptides

James Anayochukwu Ezugwu^{1,2} and Hasan Küçükbay^{2*}

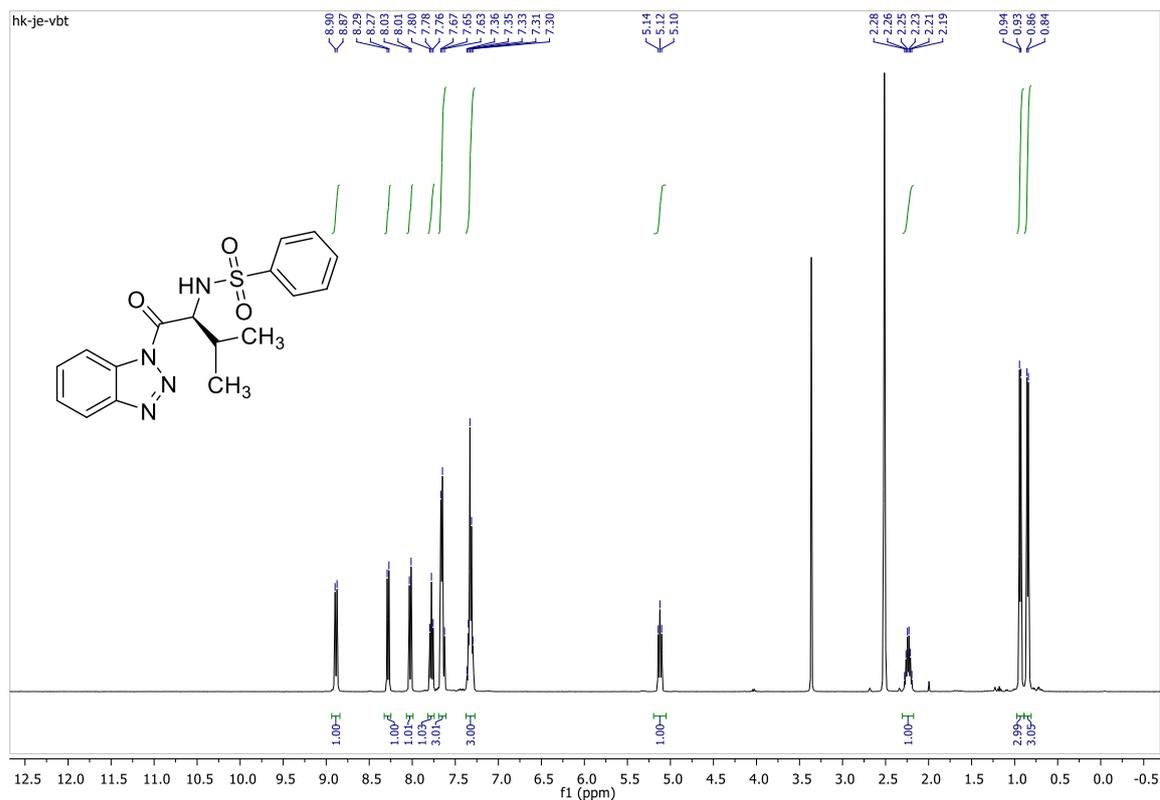
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²*Inonu University, Faculty of Arts and Sciences, Department of Chemistry, 44280 Malatya, Turkey*

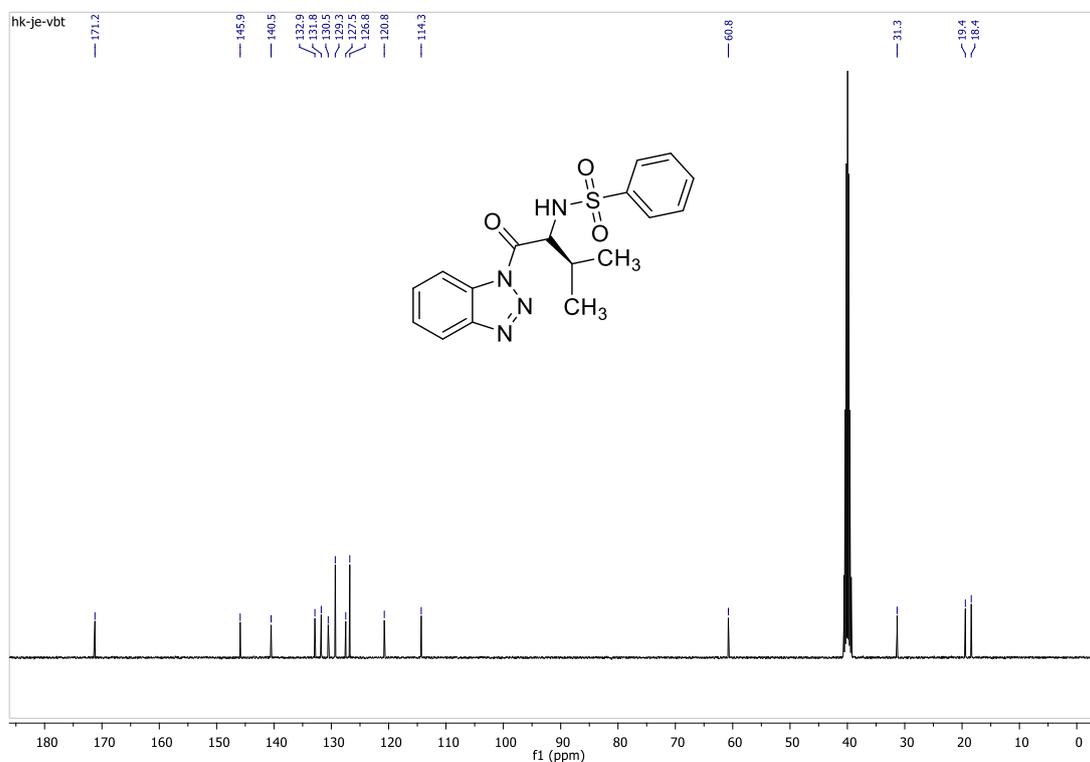
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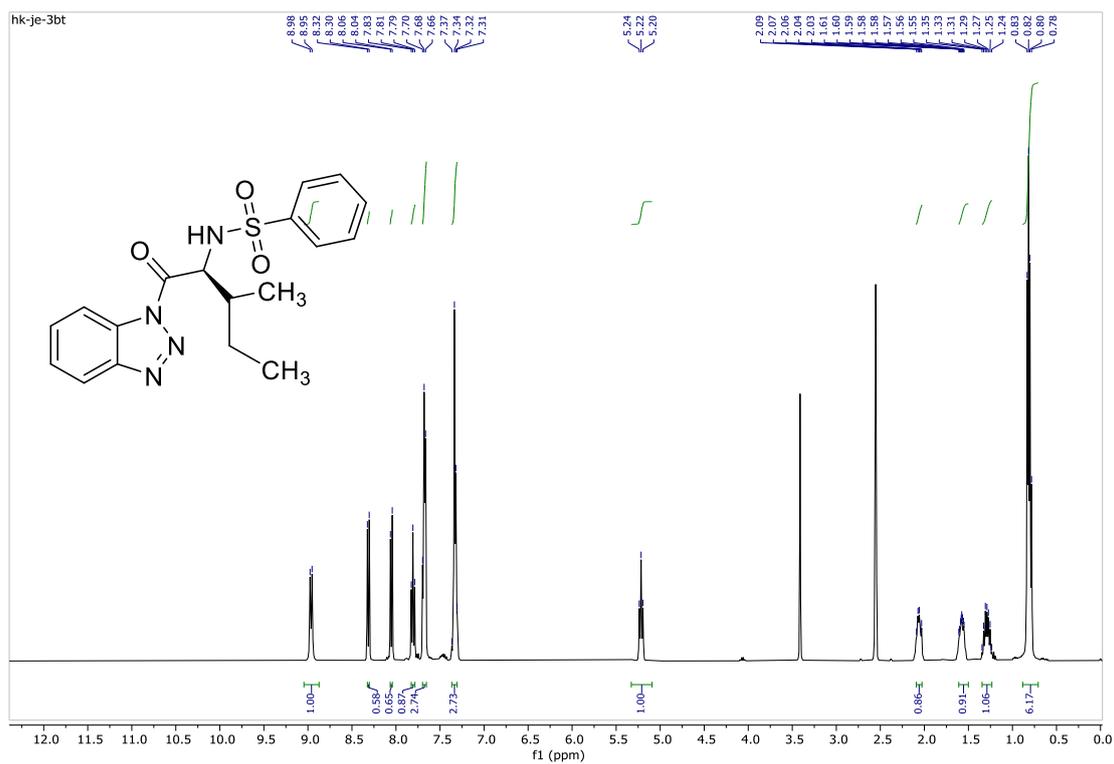
¹H NMR, ¹³C NMR, HRMS and FTIR of compounds **5a-h**, **7a-f**S2



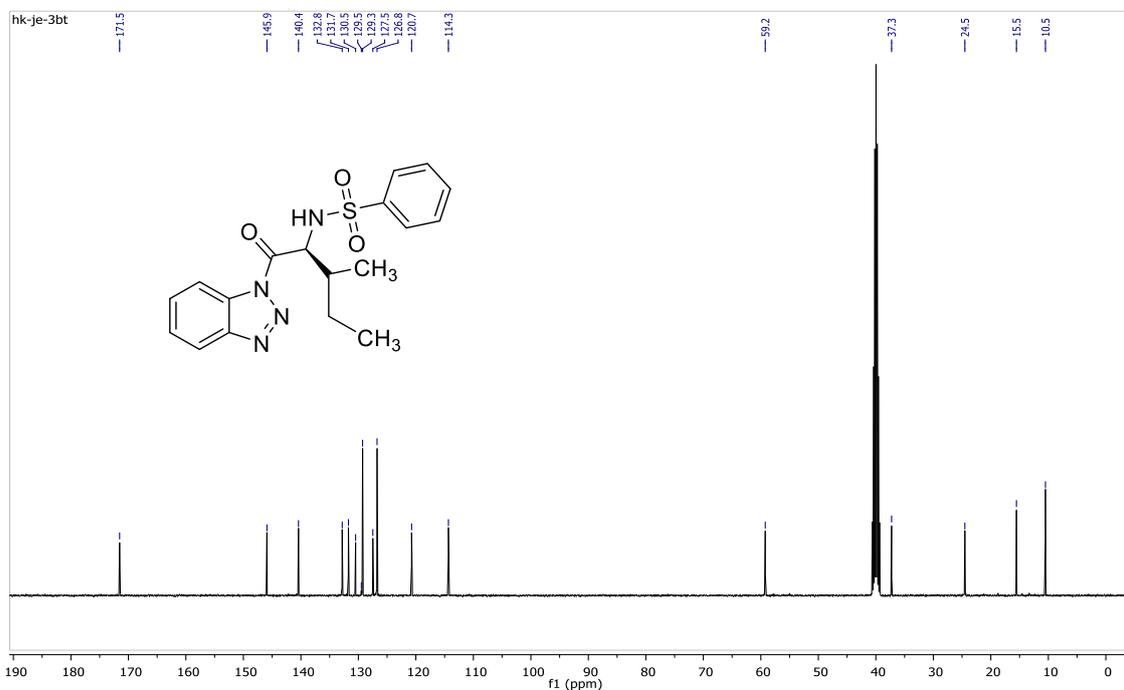
^1H NMR Spectrum of *N*-(1-(1H-benzo[d][1,2,3]triazol-1-yl)-3-methyl-1-oxobutan-2-yl)benzenesulfonamide [**5a**]



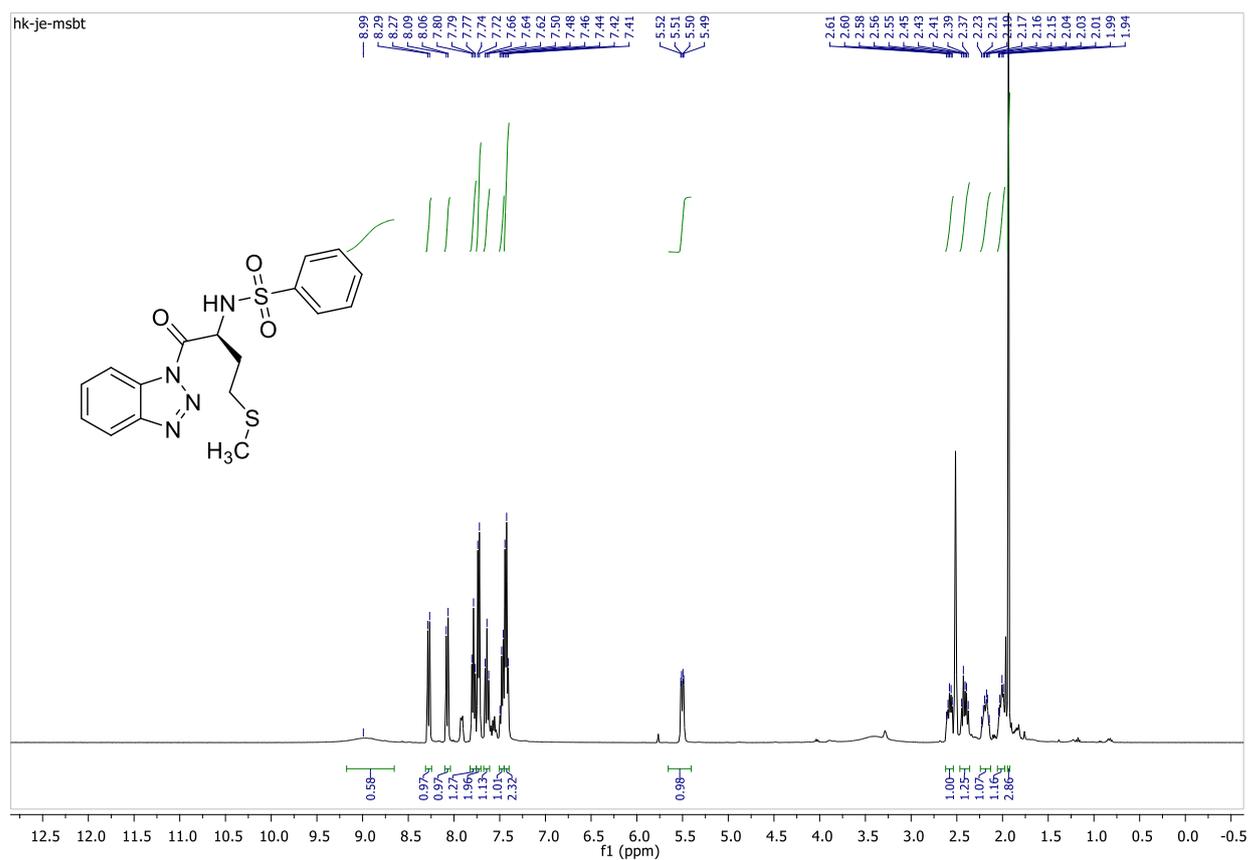
^{13}C NMR Spectrum of *N*-(1-(1H-benzo[d][1,2,3]triazol-1-yl)-3-methyl-1-oxobutan-2-yl)benzenesulfonamide [**5a**]



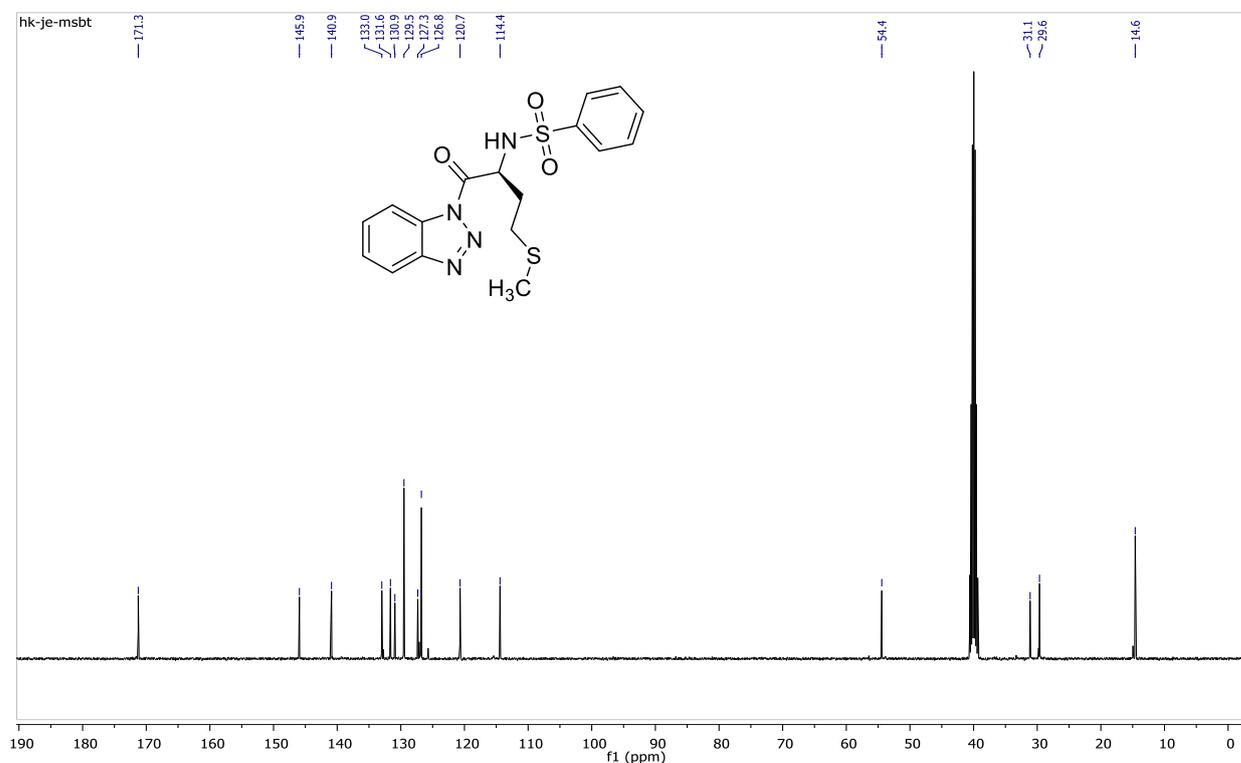
¹H NMR Spectrum of *N*-(1-(1H-benzo[d][1,2,3]triazol-1-yl)-3-methyl-1-oxopentan-2-yl)benzenesulfonamide [**5b**]



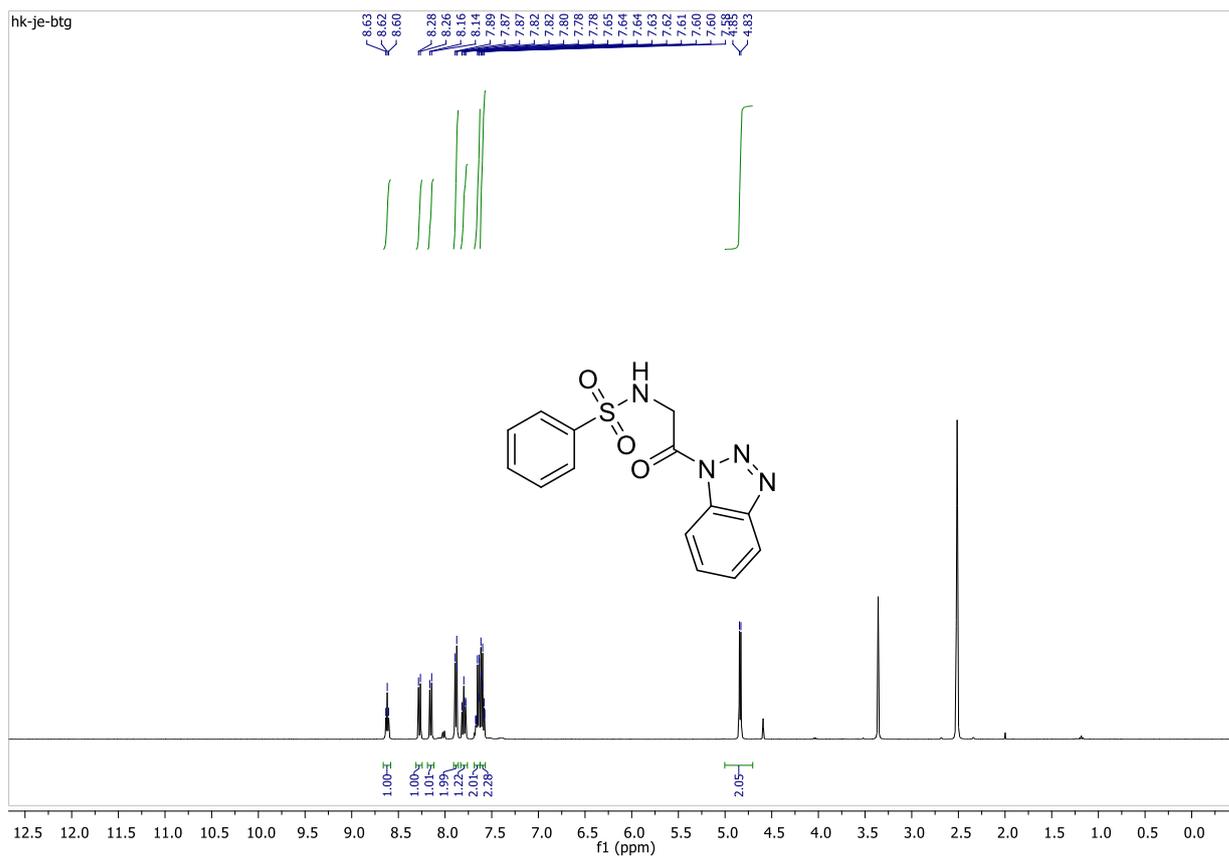
¹³C NMR Spectrum of *N*-(1-(1H-benzo[d][1,2,3]triazol-1-yl)-3-methyl-1-oxopentan-2-yl)benzenesulfonamide [**5b**]



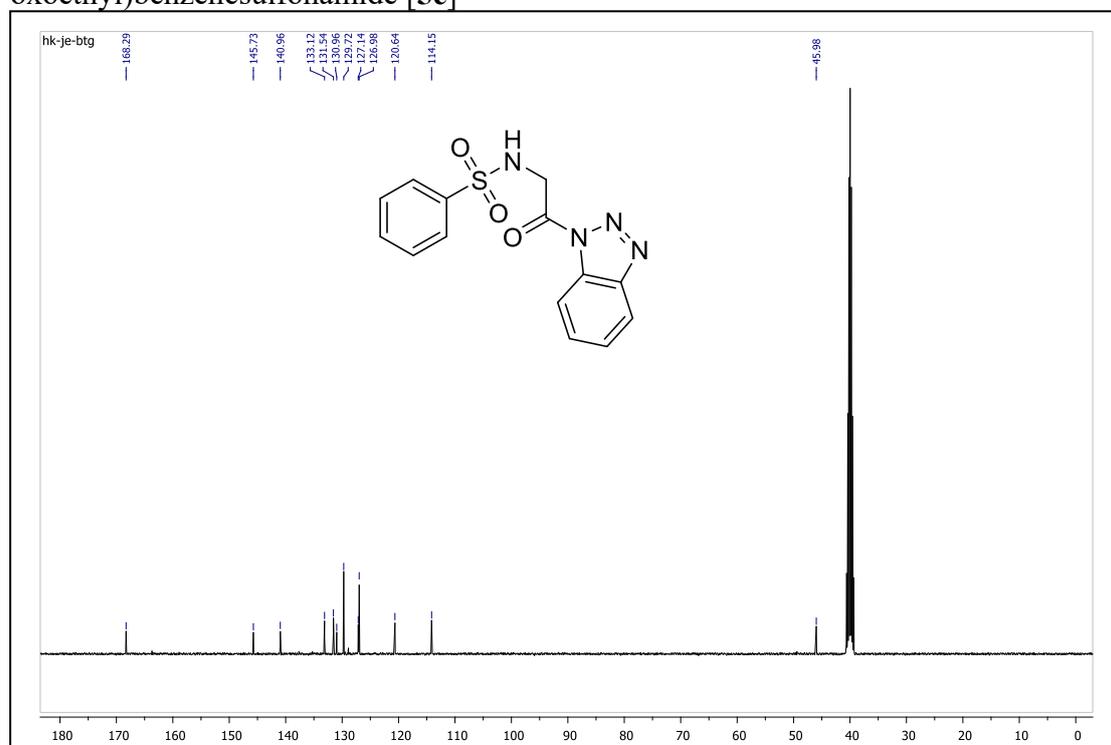
¹H NMR Spectrum of *N*-(1-(1H-benzo[d][1,2,3]triazol-1-yl)-4-(methylthio)-1-oxobutan-2-yl)benzenesulfonamide[**5d**]



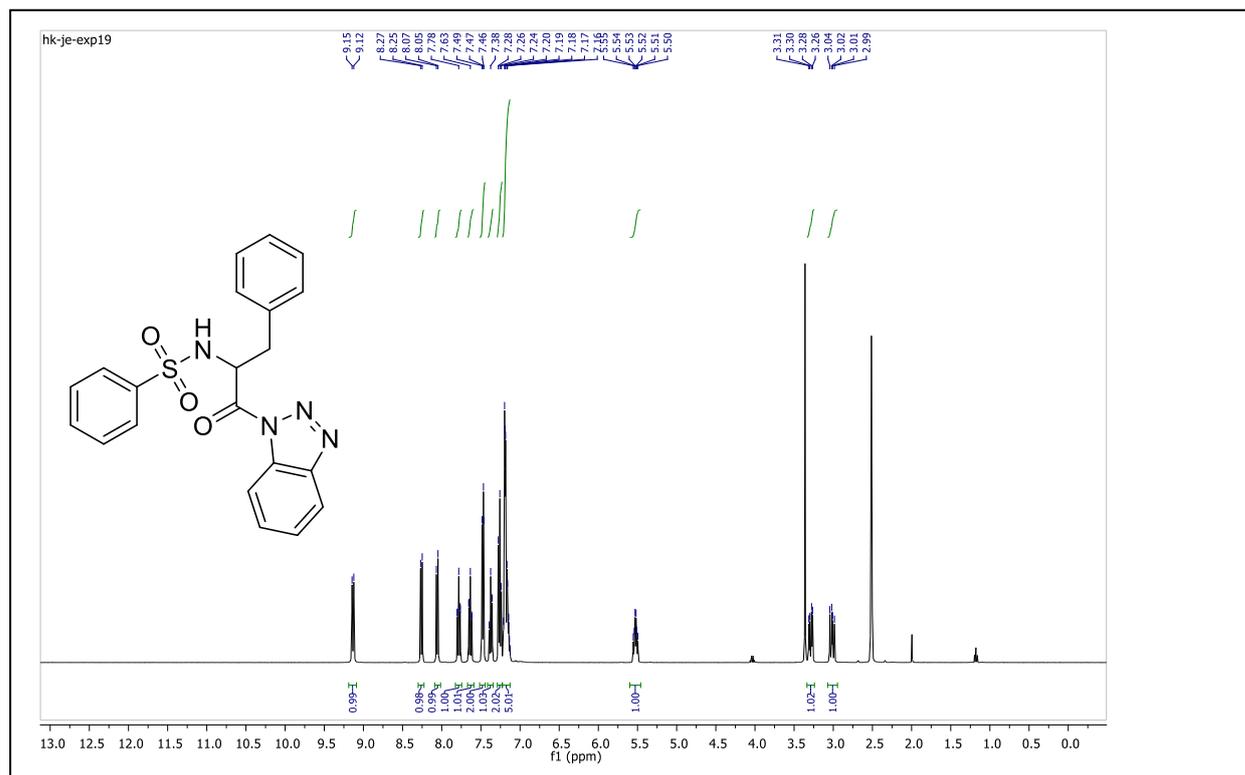
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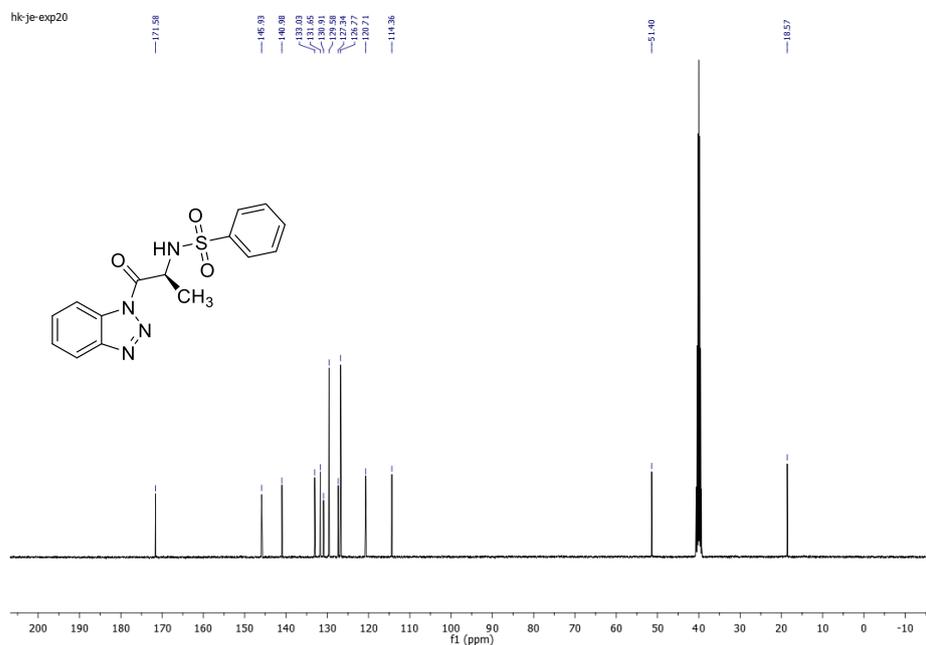
¹H NMR Spectrum of *N*-(2-(1H-benzo[d][1,2,3]triazol-1-yl)-2-oxoethyl)benzenesulfonamide [5e]



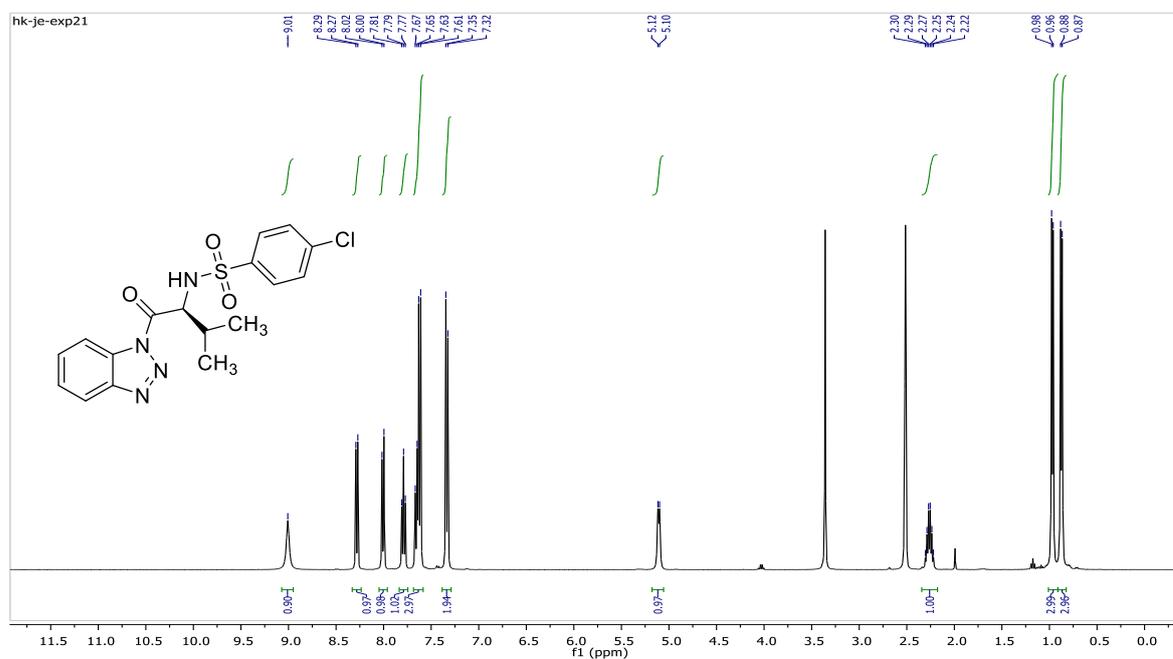
¹³C NMR Spectrum of *N*-(2-(1H-benzo[d][1,2,3]triazol-1-yl)-2-oxoethyl)benzenesulfonamide [5e]



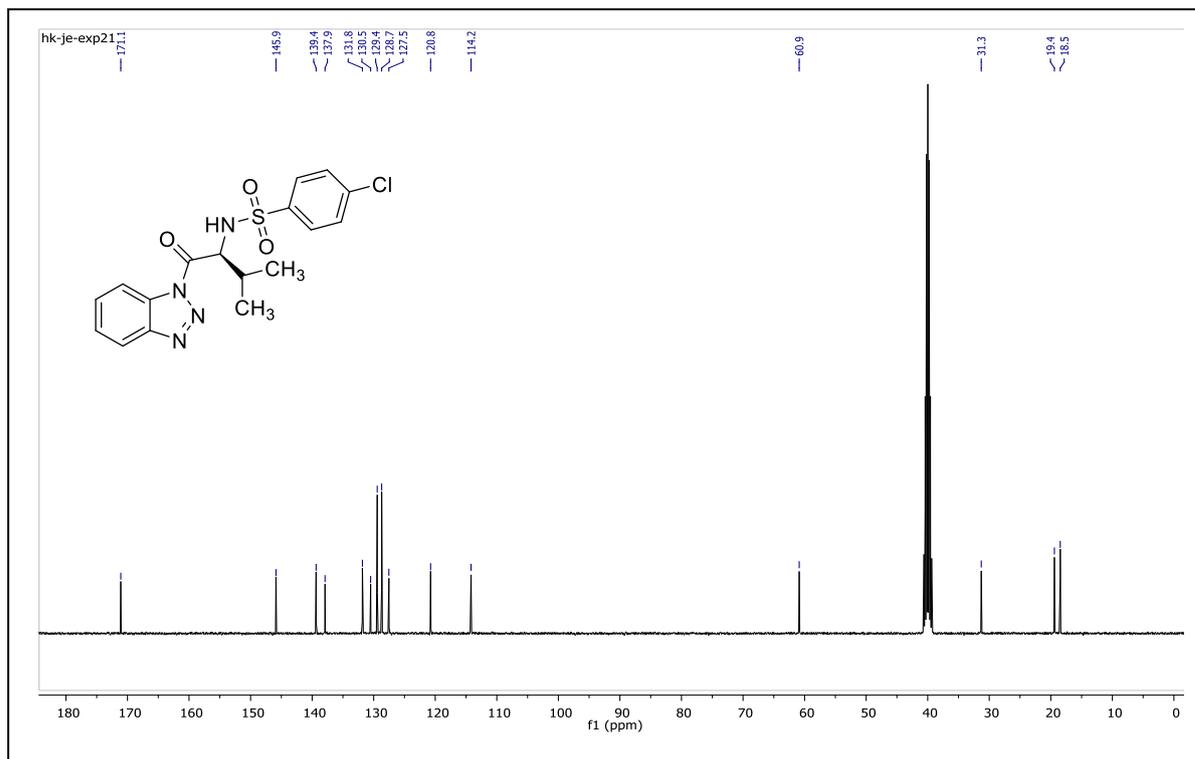
¹H NMR Spectrum of *N*-(1-(1H-benzo[d][1,2,3]triazol-1-yl)-1-oxo-3-phenylpropan-2-yl)benzenesulfonamide [**5f**]



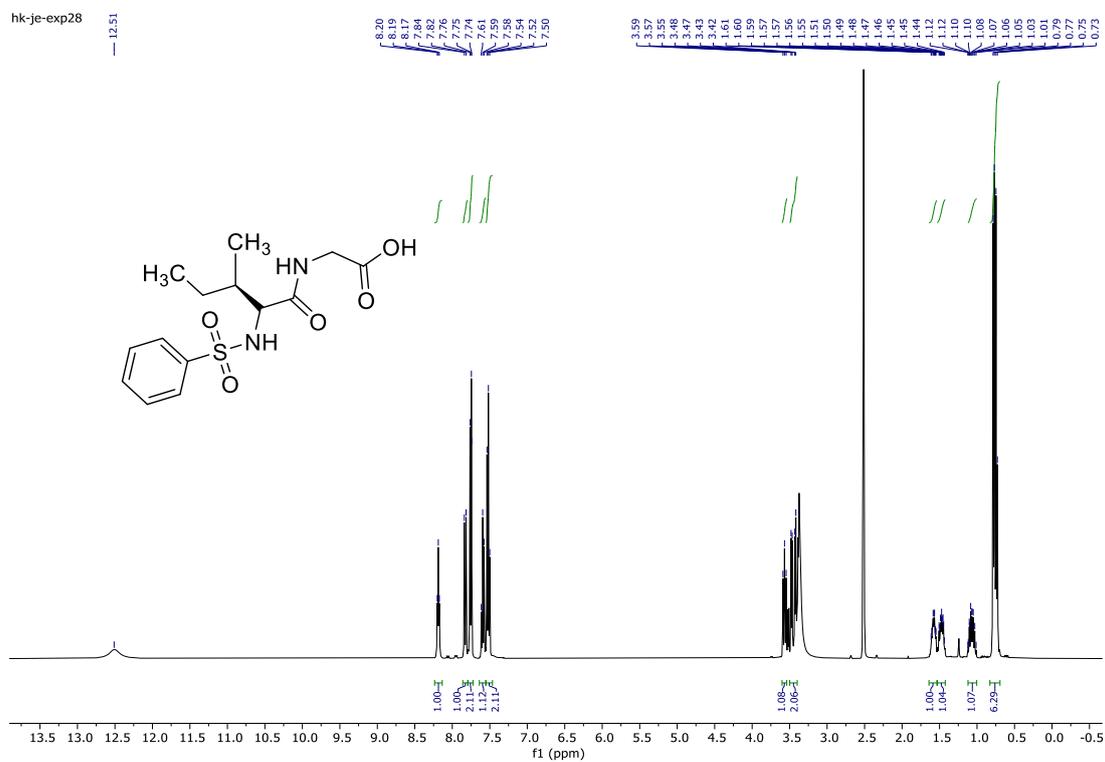
^{13}C NMR Spectrum of *N*-(1-(1H-benzo[d][1,2,3]triazol-1-yl)-1-oxopropan-2-yl)benzenesulfonamide [**5g**]



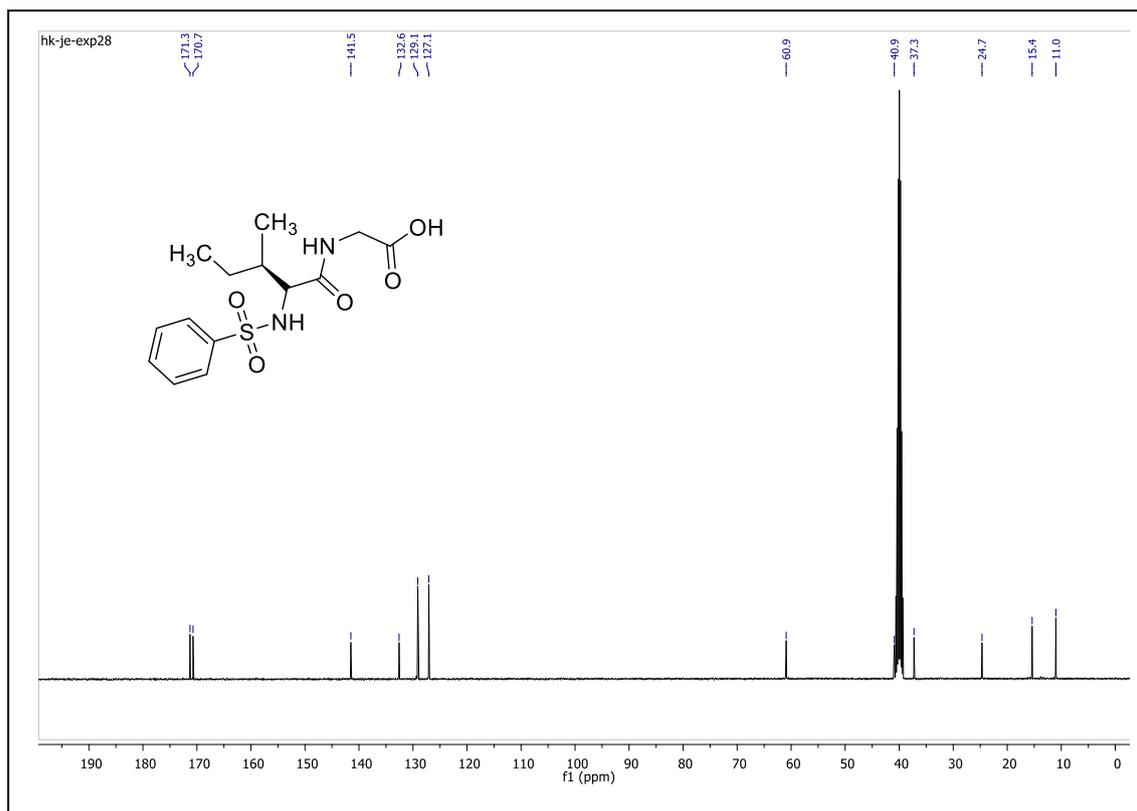
^1H NMR Spectrum of *N*-(1-(1H-benzo[d][1,2,3]triazol-1-yl)-3-methyl-1-oxobutan-2-yl)-4-chlorobenzenesulfonamide [**5h**]



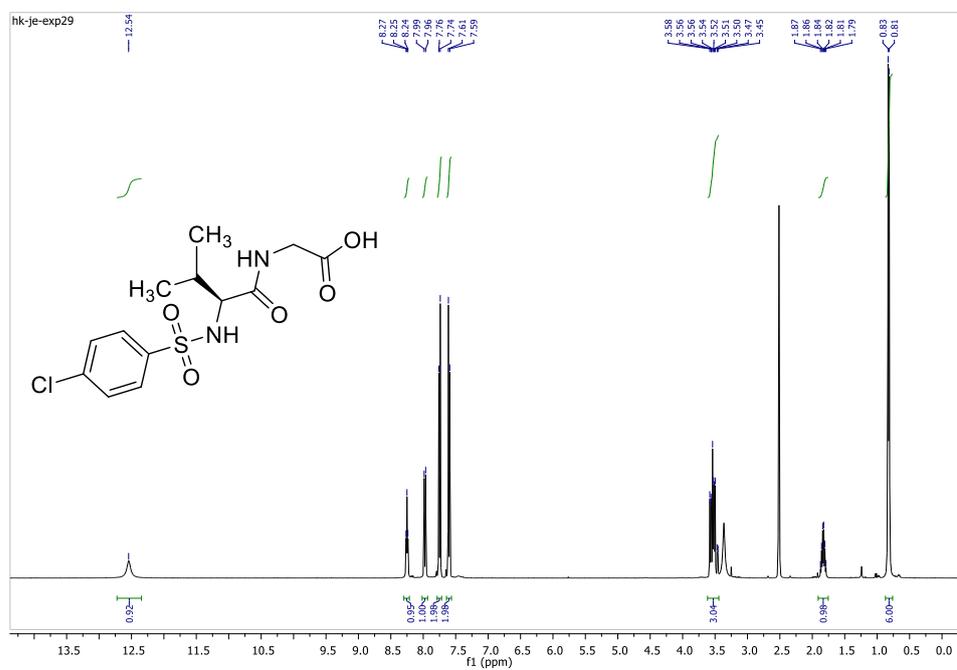
¹³C NMR Spectrum of *N*-(1-(1H-benzo[*d*][1,2,3]triazol-1-yl)-3-methyl-1-oxobutan-2-yl)-4-chlorobenzenesulfonamide [**5h**]



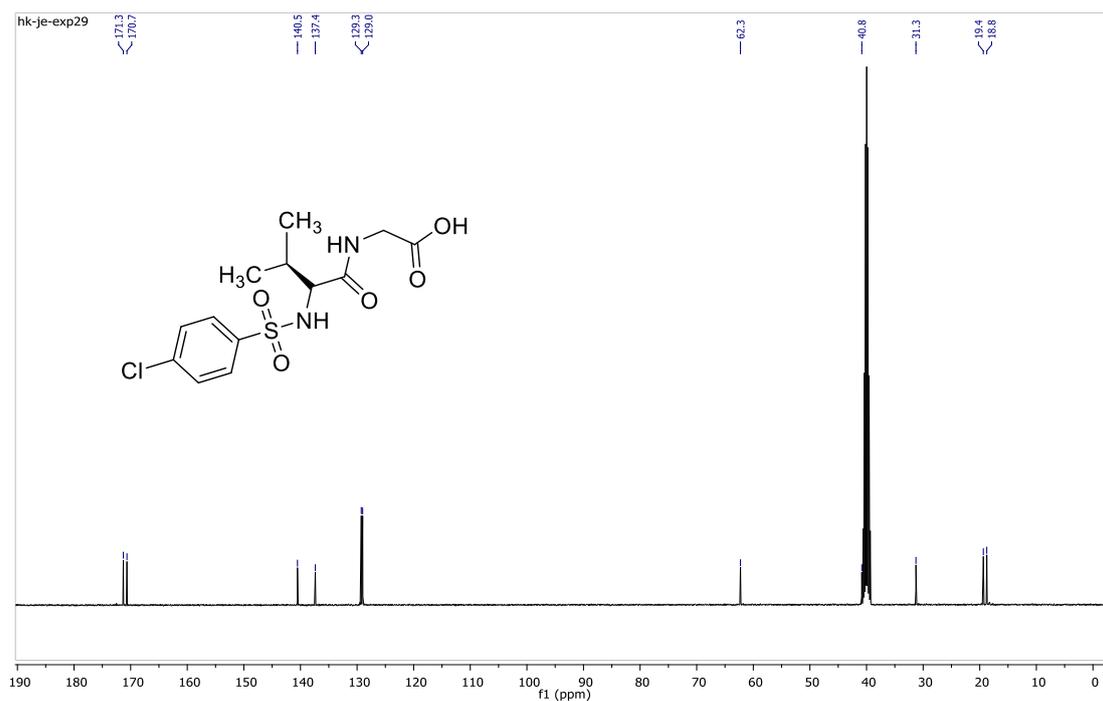
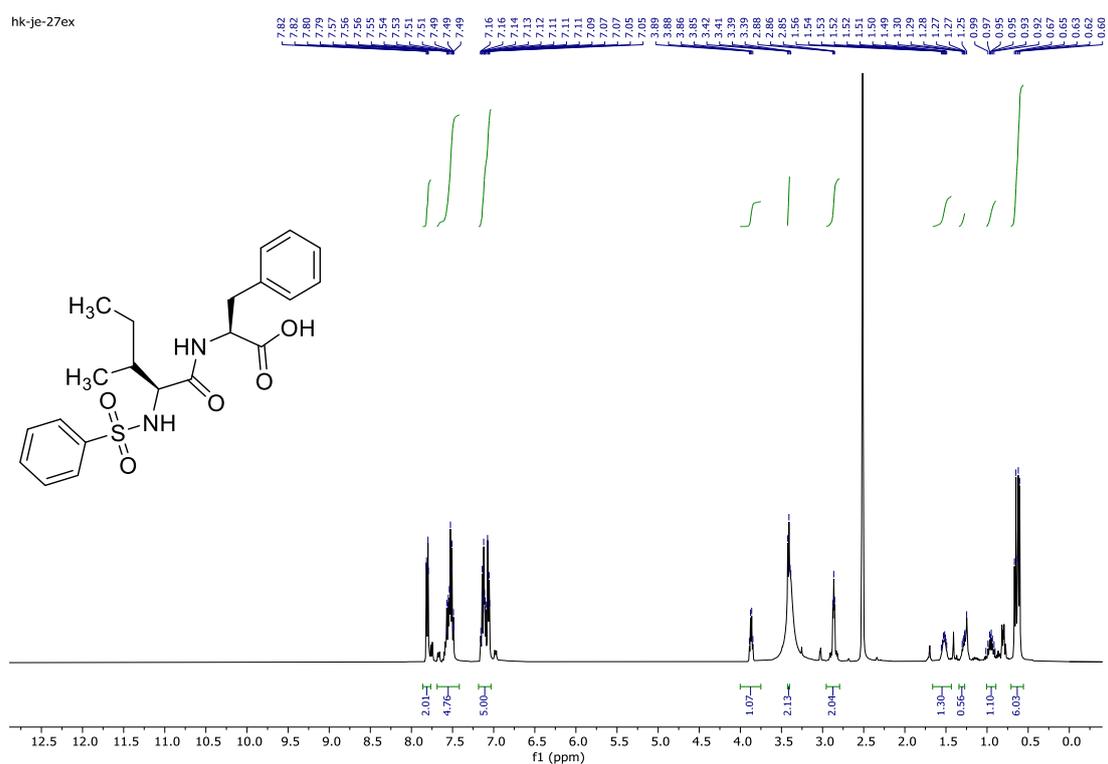
¹H NMR Spectrum of (phenylsulfonyl)Ile-Gly [**7a**]

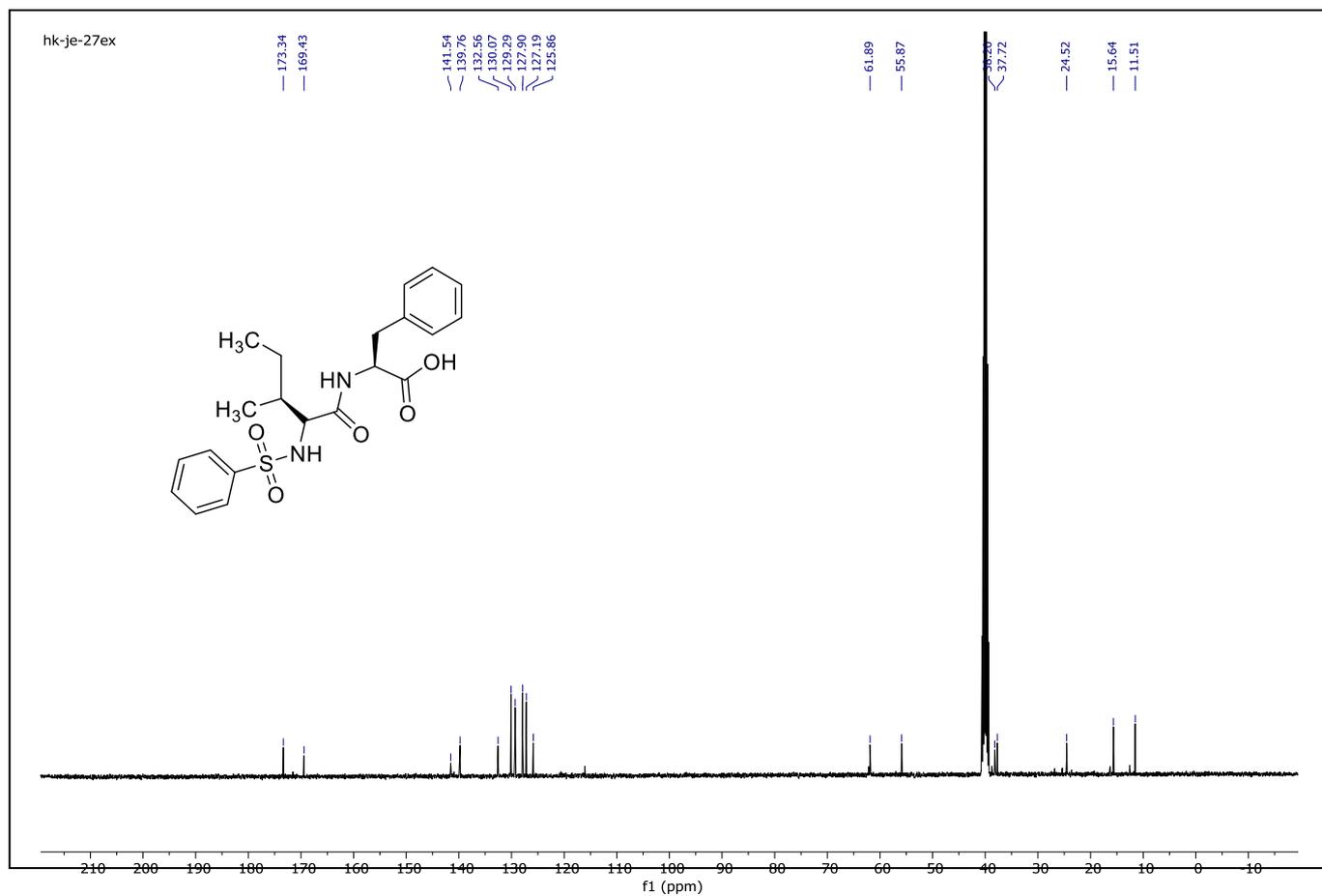
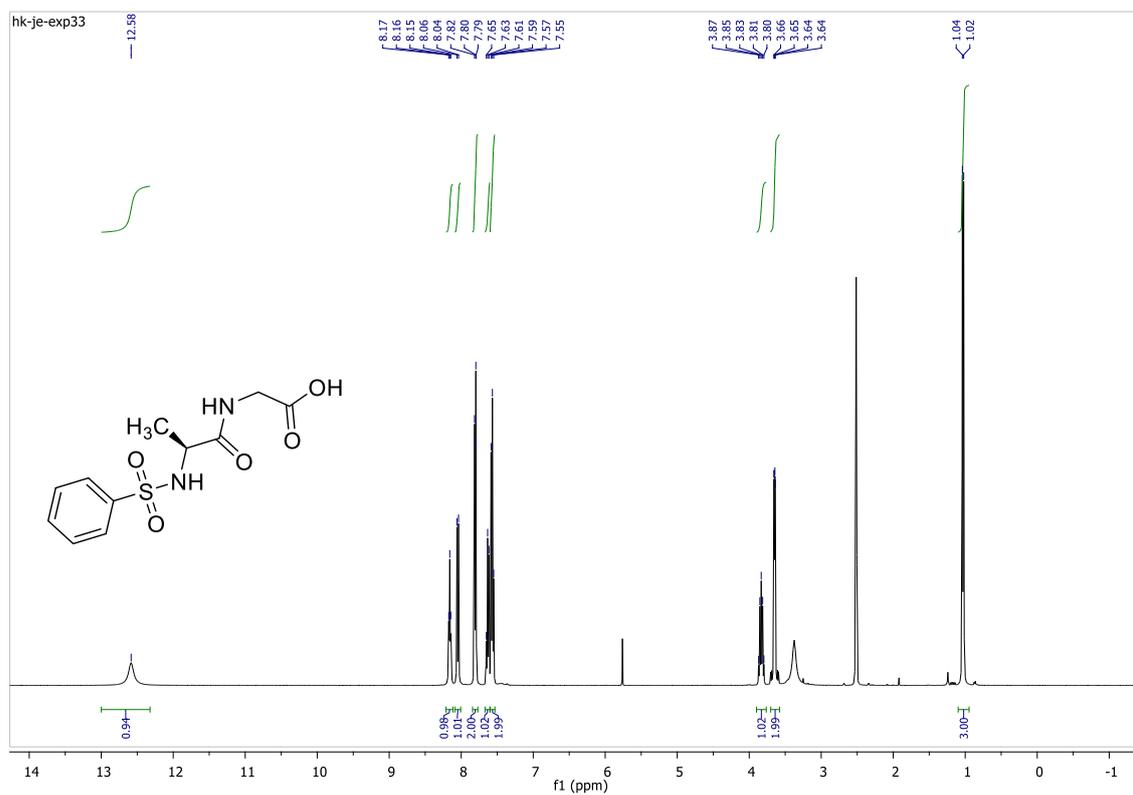


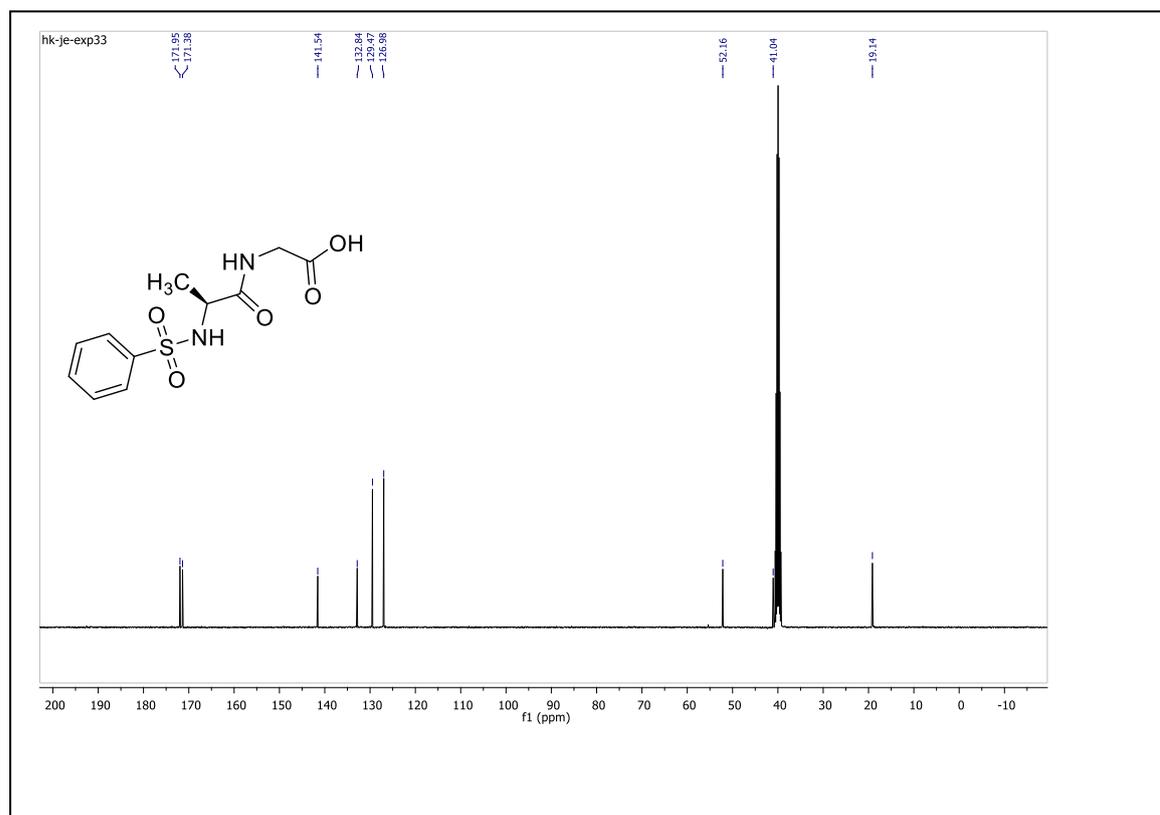
¹³C NMR Spectrum of (phenylsulfonyl)Ile-Gly [7a]

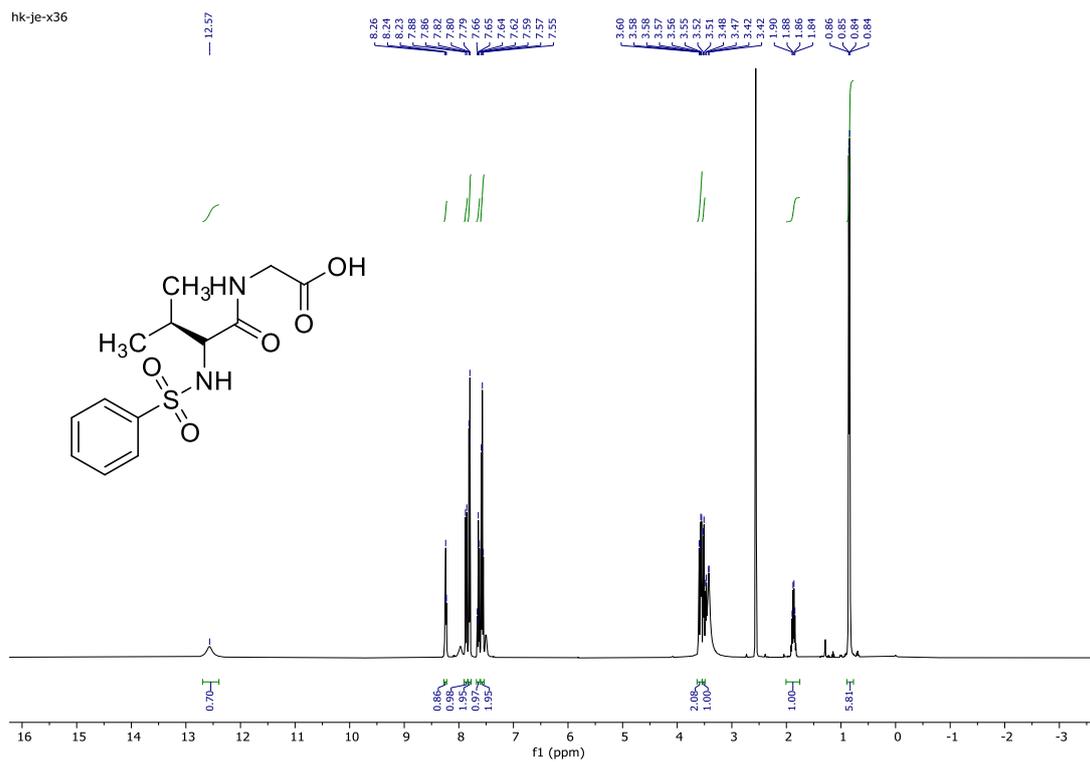


¹H NMR Spectrum of ((4-chlorophenyl)sulfonyl)Val-Gly [7b]

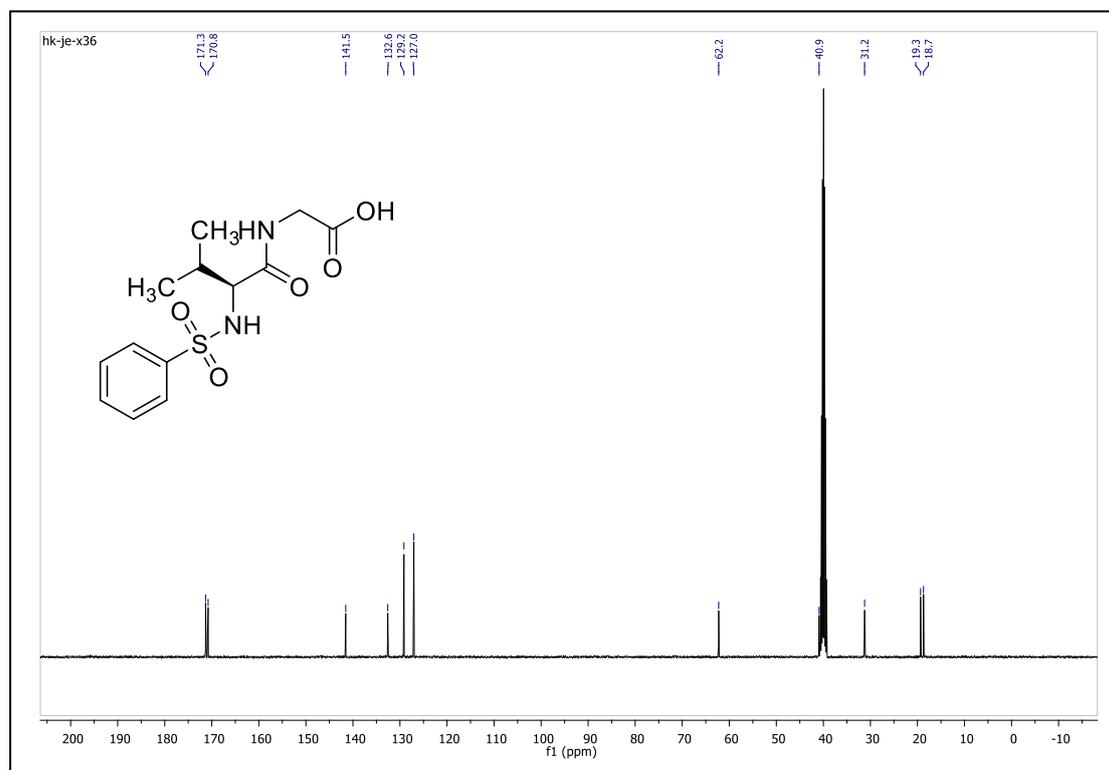
¹³C NMR Spectrum of ((4-chlorophenyl)sulfonyl)Val-Gly [7b]¹H NMR Spectrum of (phenylsulfonyl)Ile-Phe [7c]

 ^{13}C NMR Spectrum of (phenylsulfonyl)Ile-Phe[7c]

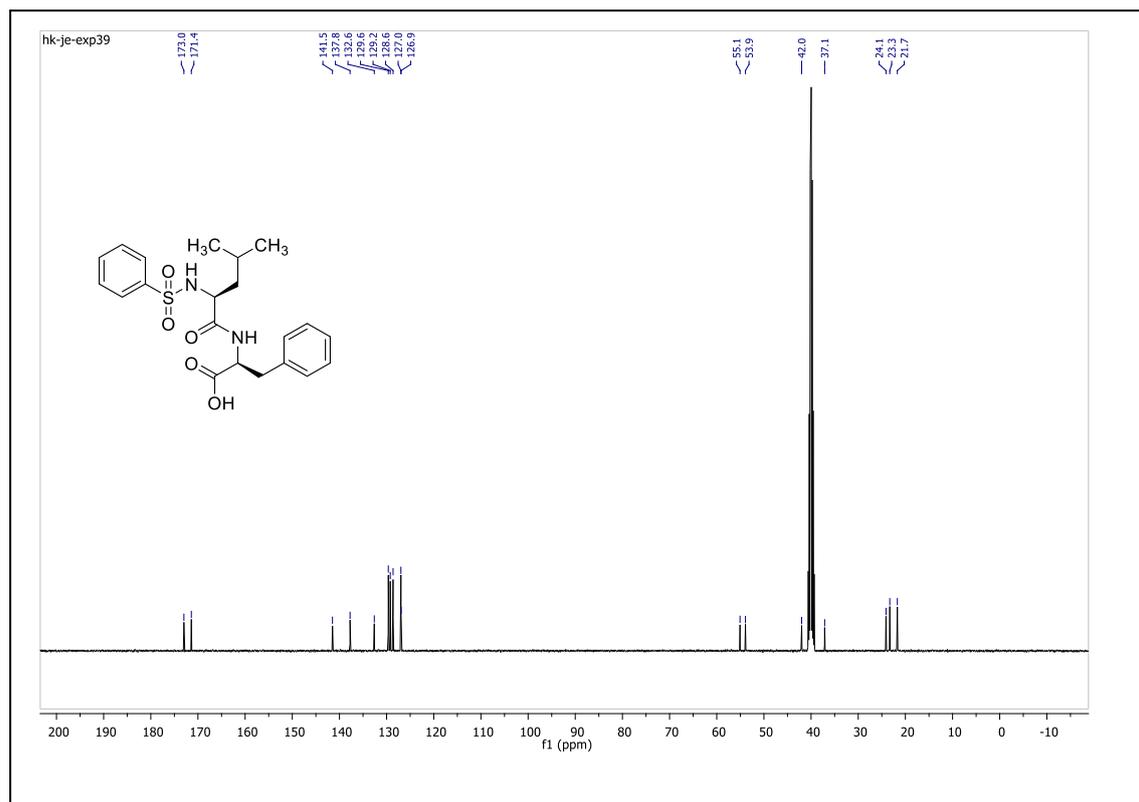
^1H NMR Spectrum of (phenylsulfonyl)Ala-Gly [7d] ^{13}C NMR Spectrum of (phenylsulfonyl)Ala-Gly [7d]



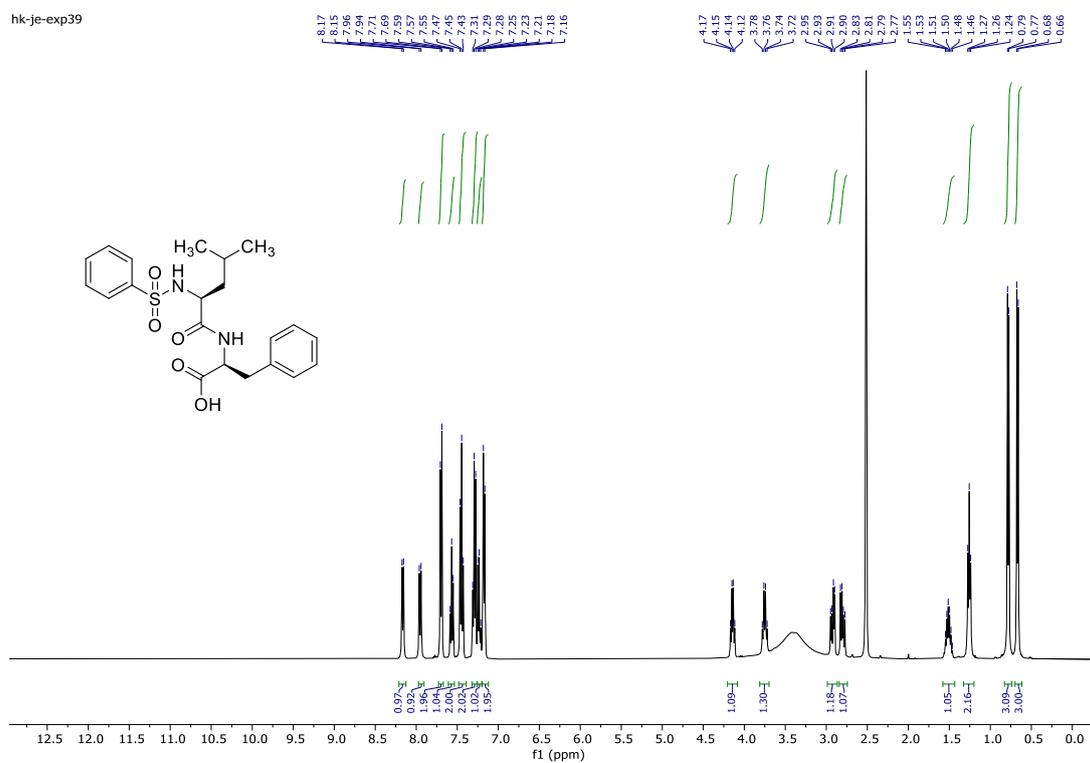
^1H NMR Spectrum of (phenylsulfonyl)Val-Gly [**7e**]



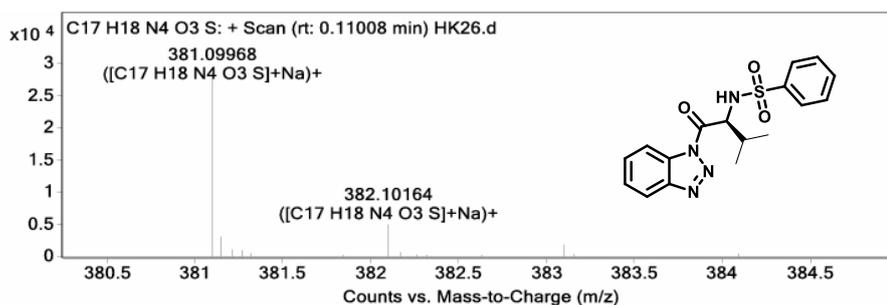
^{13}C NMR Spectrum of (phenylsulfonyl)Val-Gly [**7e**]



^1H NMR Spectrum of (phenylsulfonyl)Leu-Phe [7f]

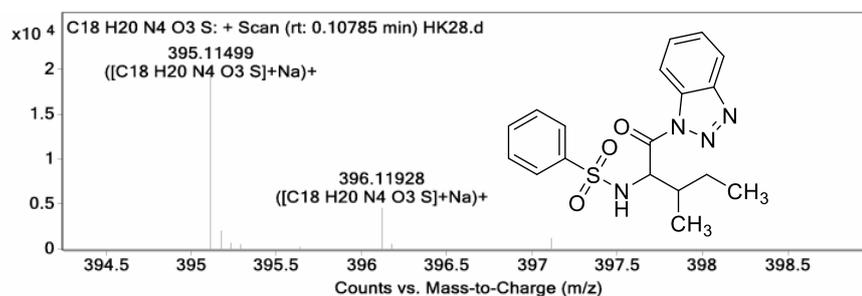


^{13}C NMR Spectrum of (phenylsulfonyl)Leu-Phe [7f]



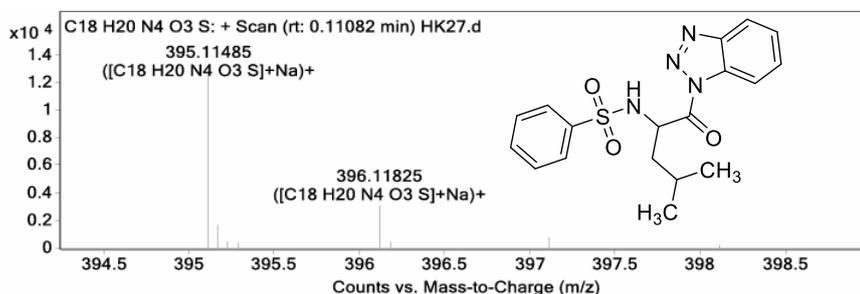
Peak List				
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HRMS of *N*-(1-(1H-benzo[d][1,2,3]triazol-1-yl)-3-methyl-1-oxobutan-2-yl)benzenesulfonamide [**5a**]



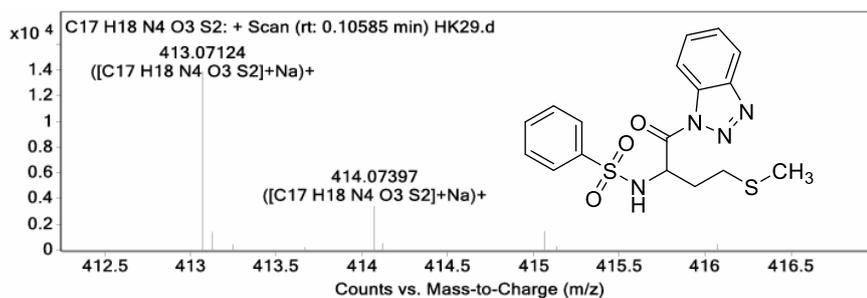
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HRMS of *N*-(1-(1H-benzo[d][1,2,3]triazol-1-yl)-3-methyl-1-oxopentan-2-yl)benzenesulfonamide [**5b**]



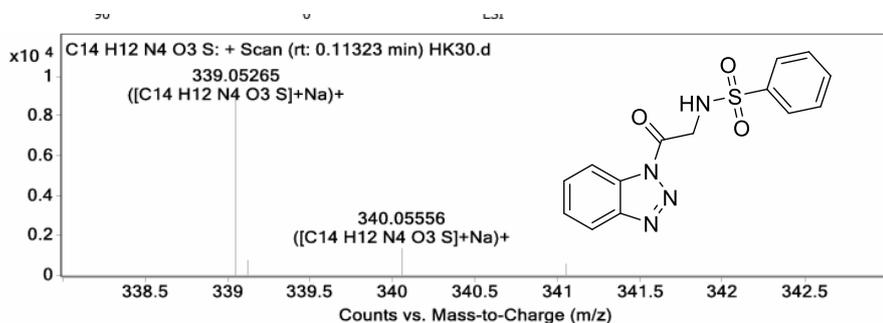
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HRMS of *N*-(1-(1H-benzo[d][1,2,3]triazol-1-yl)-4-methyl-1-oxopentan-2-yl)benzenesulfonamide [**5c**]



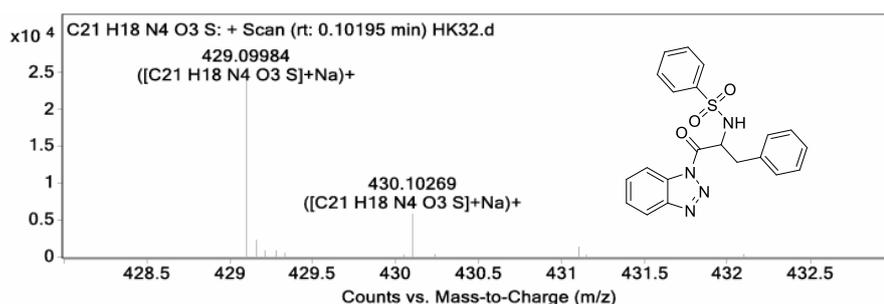
Peak List				
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HRMS of *N*-(1-(1H-benzo[d][1,2,3]triazol-1-yl)-4-(methylthio)-1-oxobutan-2-yl)benzenesulfonamide [5d]



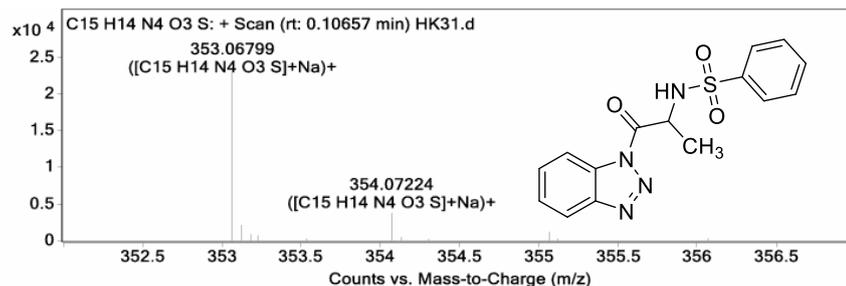
Peak List				
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HRMS of *N*-(2-(1H-benzo[d][1,2,3]triazol-1-yl)-2-oxoethyl)benzenesulfonamide [5e]



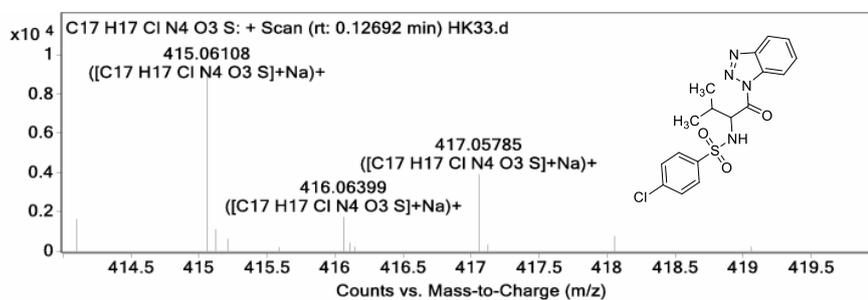
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HRMS of *N*-(1-(1H-benzo[d][1,2,3]triazol-1-yl)-1-oxo-3-phenylpropan-2-yl)benzenesulfonamide [5f]



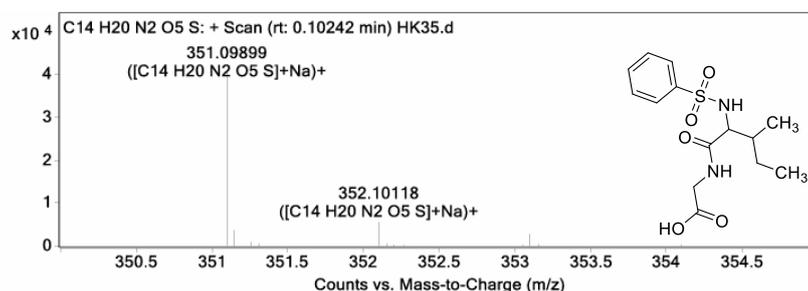
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HRMS of *N*-(1-(1H-benzo[d][1,2,3]triazol-1-yl)-1-oxopropan-2-yl)benzenesulfonamide [5g]



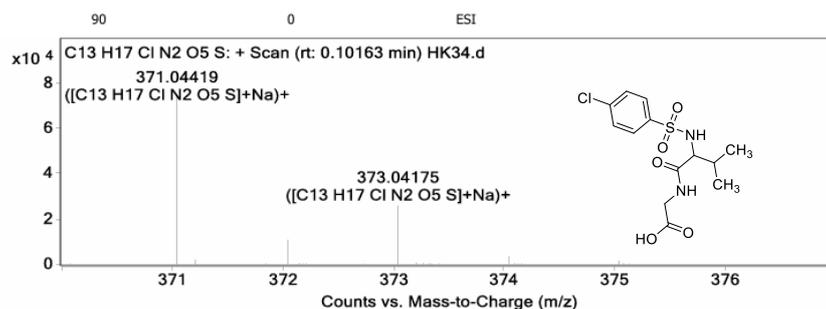
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HRMS of *N*-(1-(1H-benzo[d][1,2,3]triazol-1-yl)-3-methyl-1-oxobutan-2-yl)-4-chlorobenzenesulfonamide [5h]



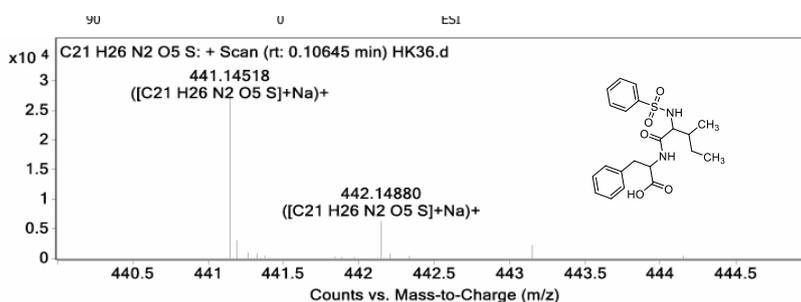
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HRMS of (phenylsulfonyl)Ile-Gly [7a]



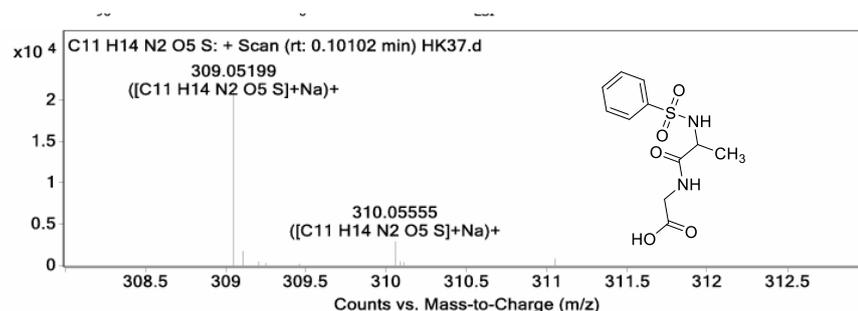
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HRMS of ((4-chlorophenyl)sulfonyl)Val-Gly [7b]



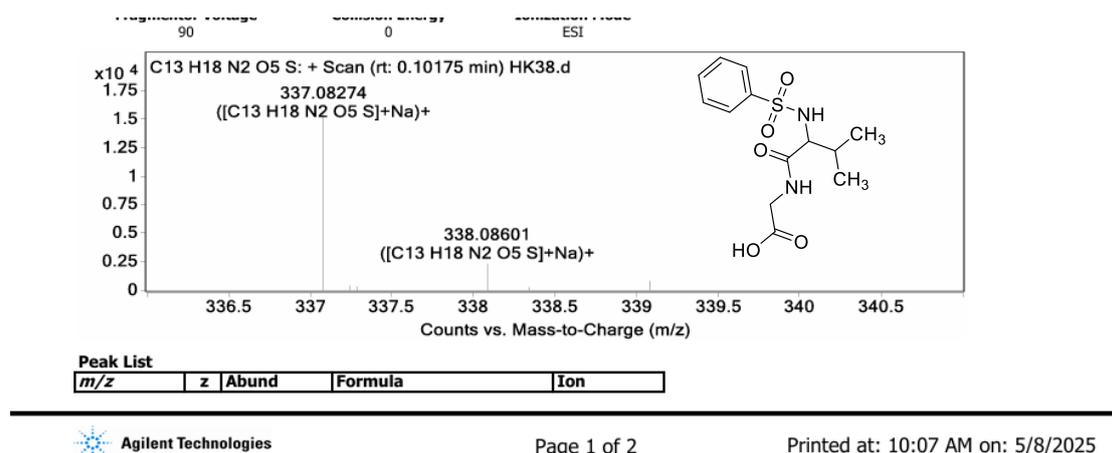
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HRMS of (phenylsulfonyl)Ile-Phe [7c]

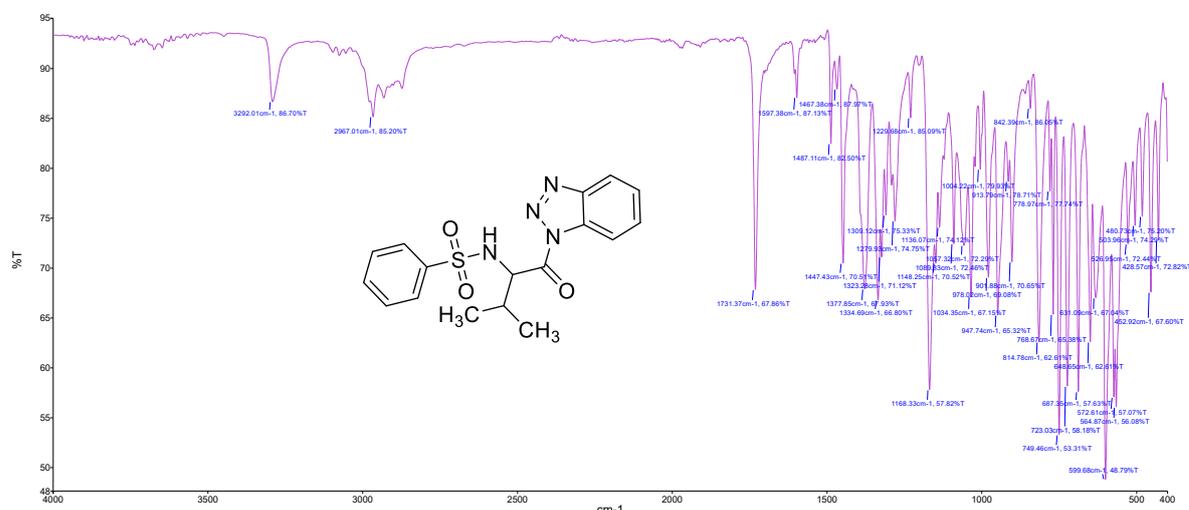
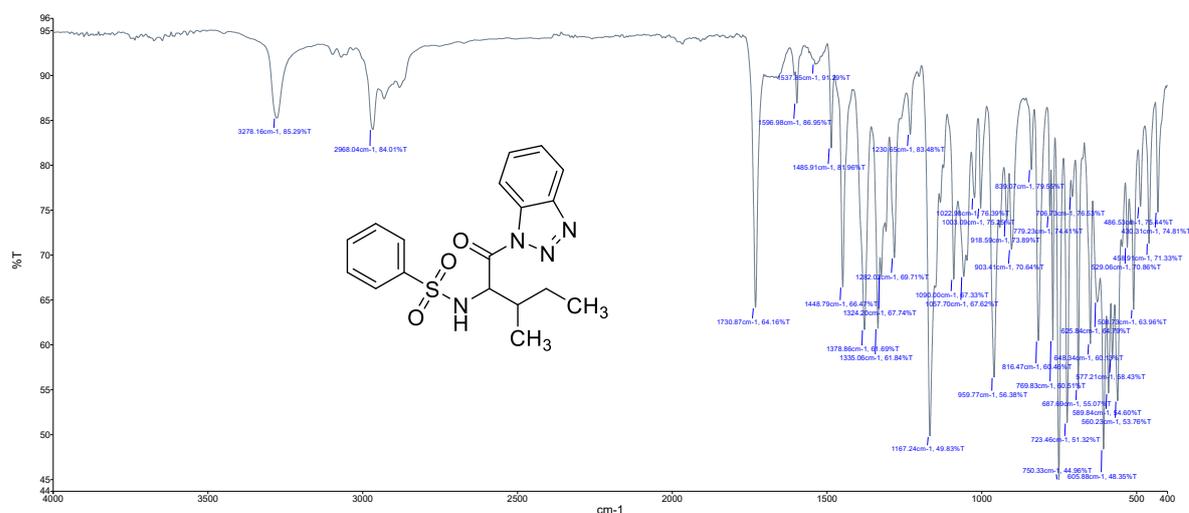


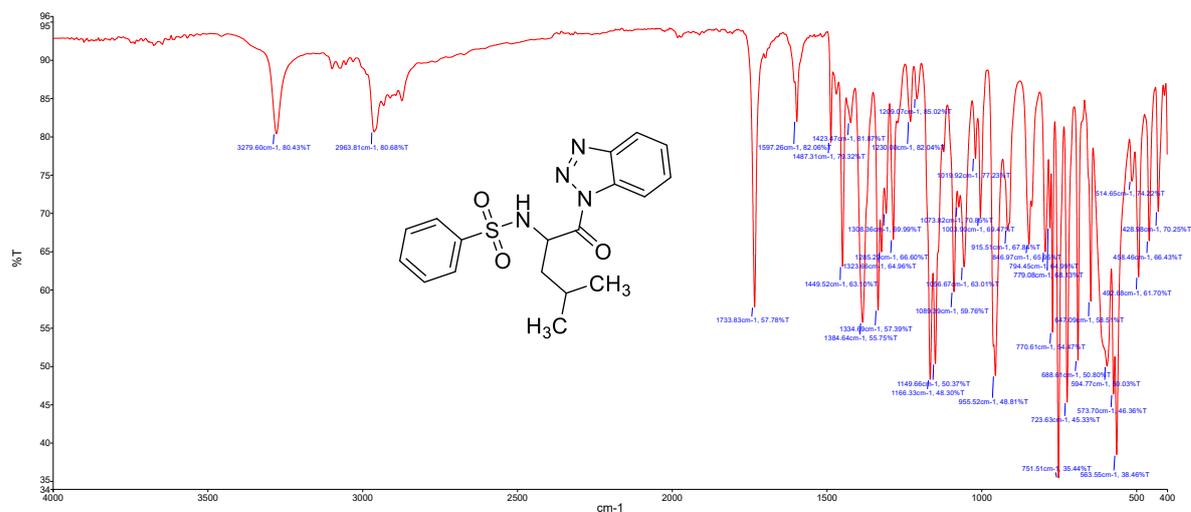
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HRMS of (phenylsulfonyl)Ala-Gly [7d]

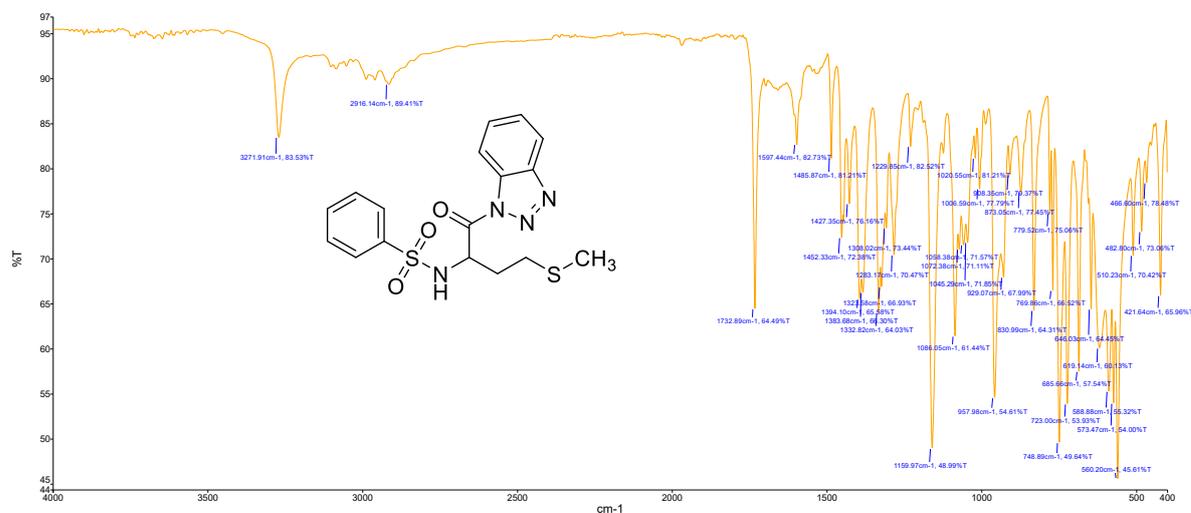


HRMS of (phenylsulfonyl)Val-Gly [7e]

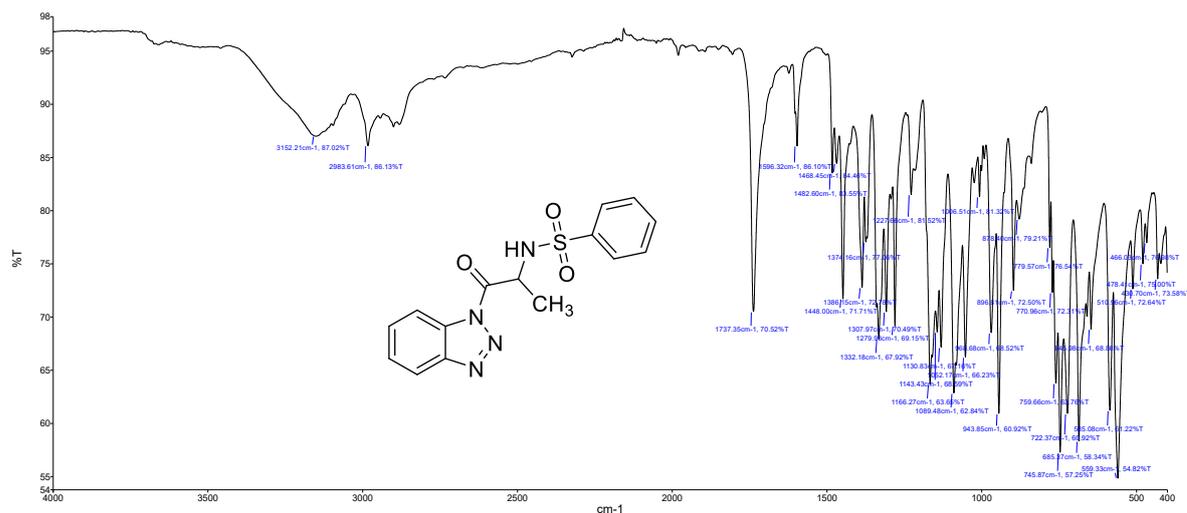
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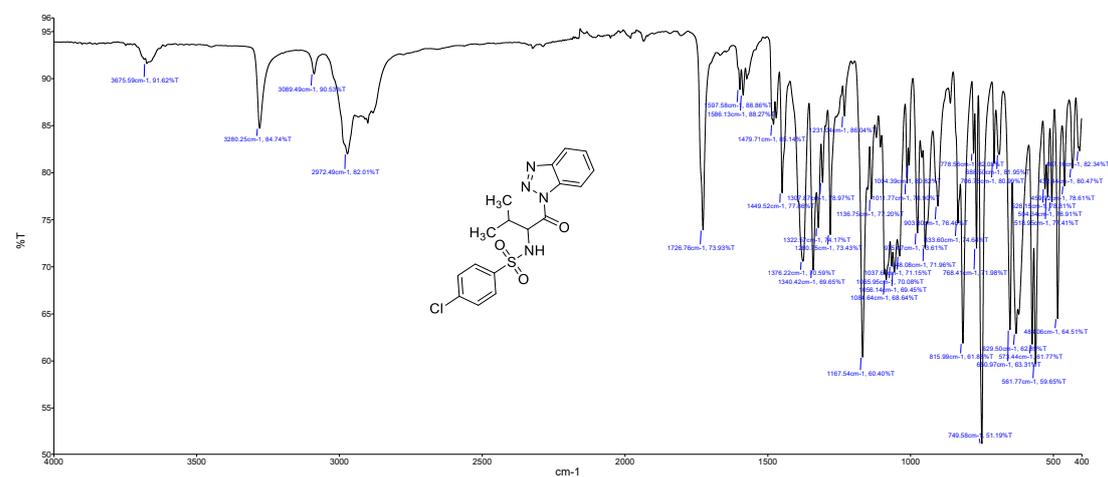
FTIR of *N*-(1-(1H-benzo[d][1,2,3]triazol-1-yl)-4-methyl-1-oxopentan-2-yl)benzenesulfonamide [5c]



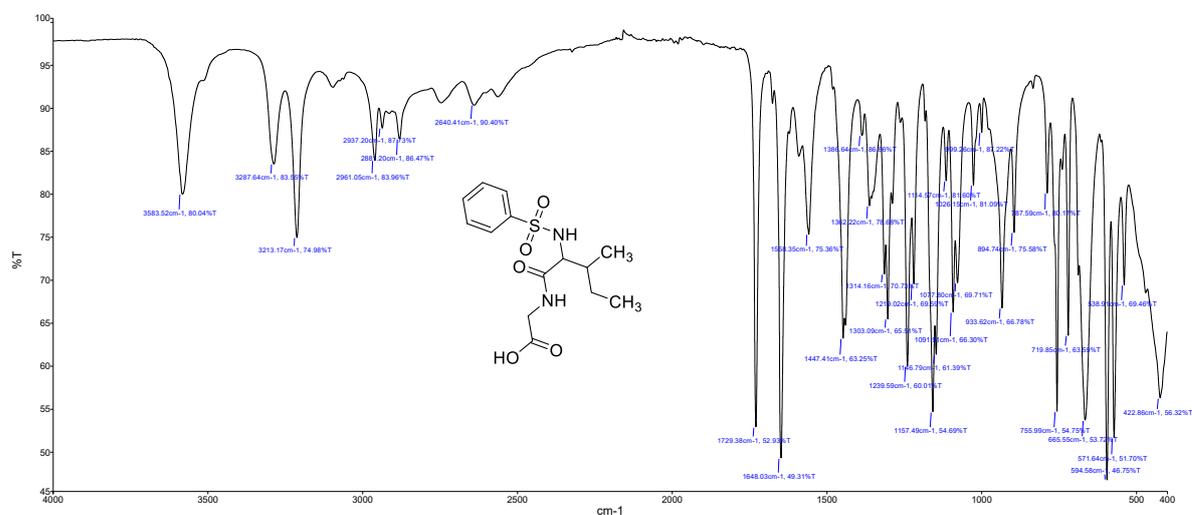
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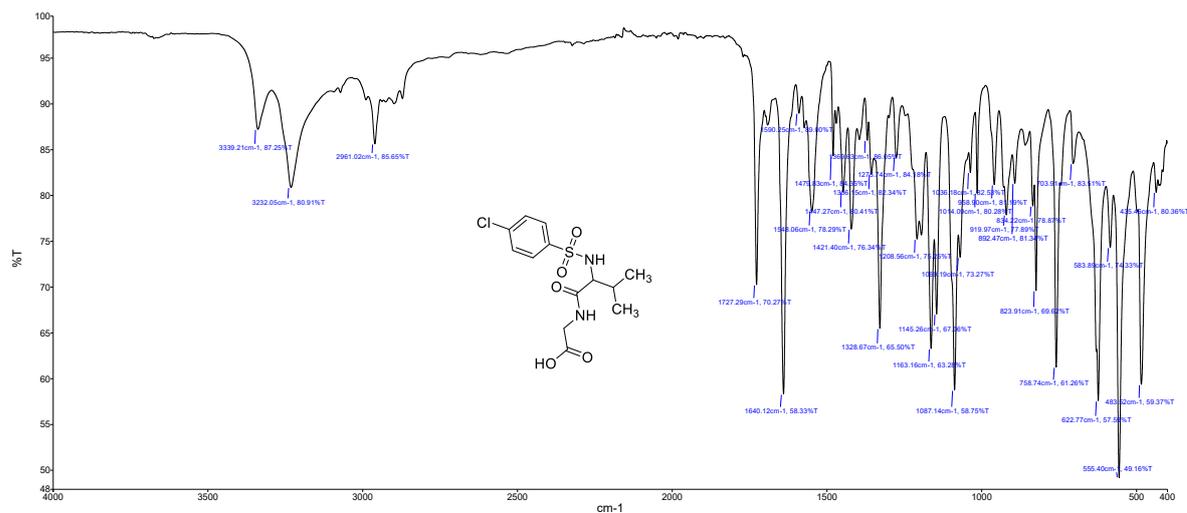
FTIR of *N*-(1-(1H-benzo[d][1,2,3]triazol-1-yl)-1-oxopropan-2-yl)benzenesulfonamide [5g]



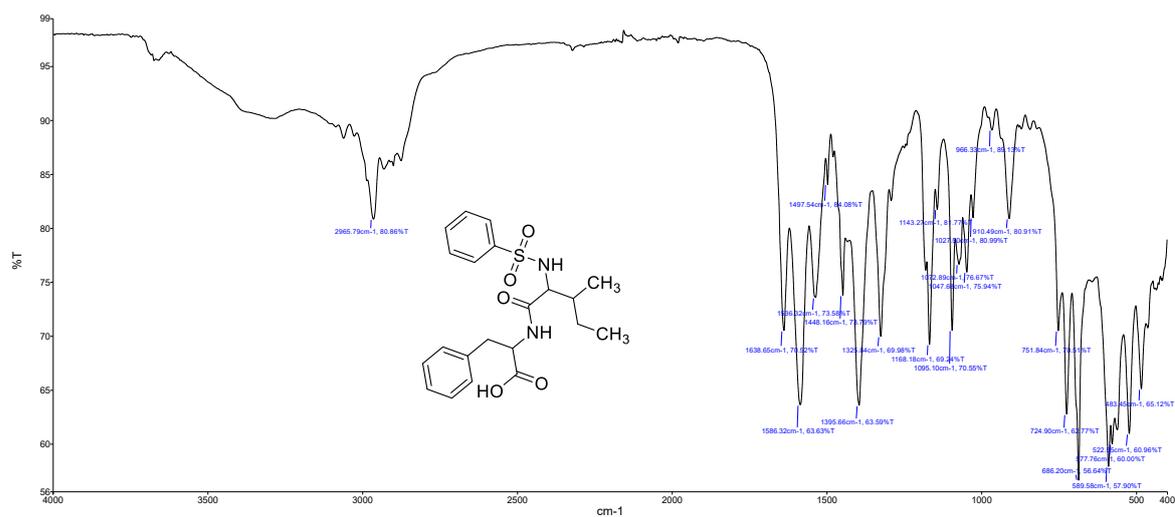
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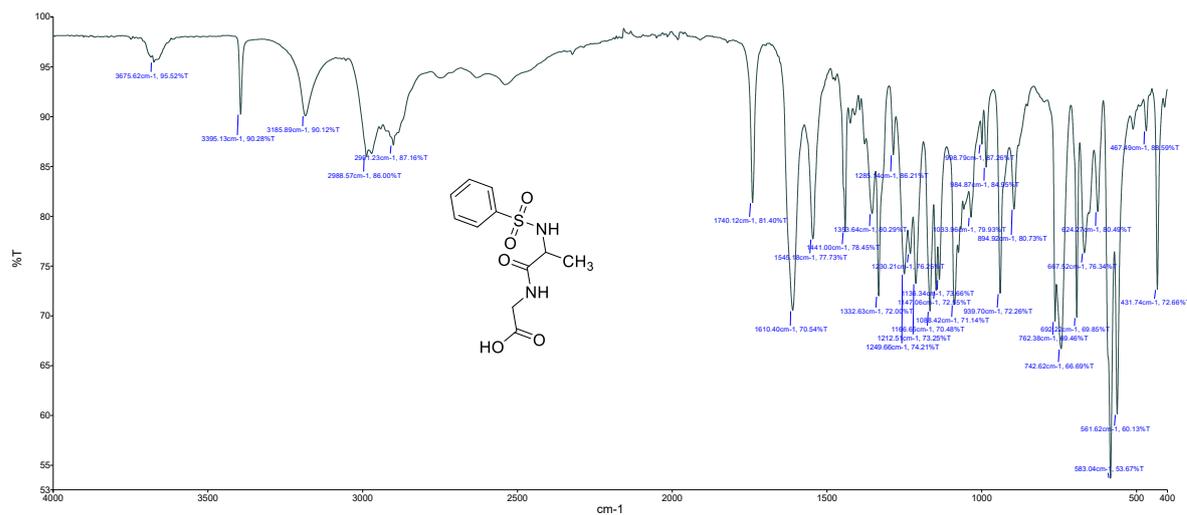
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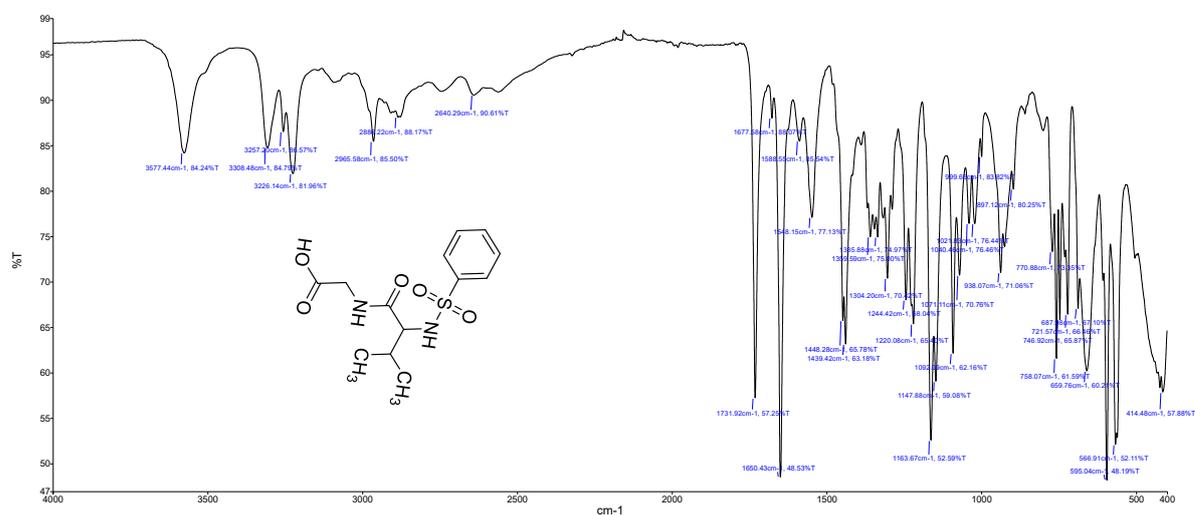
FTIR of ((4-chlorophenyl)sulfonyl)Val-Gly [7b]



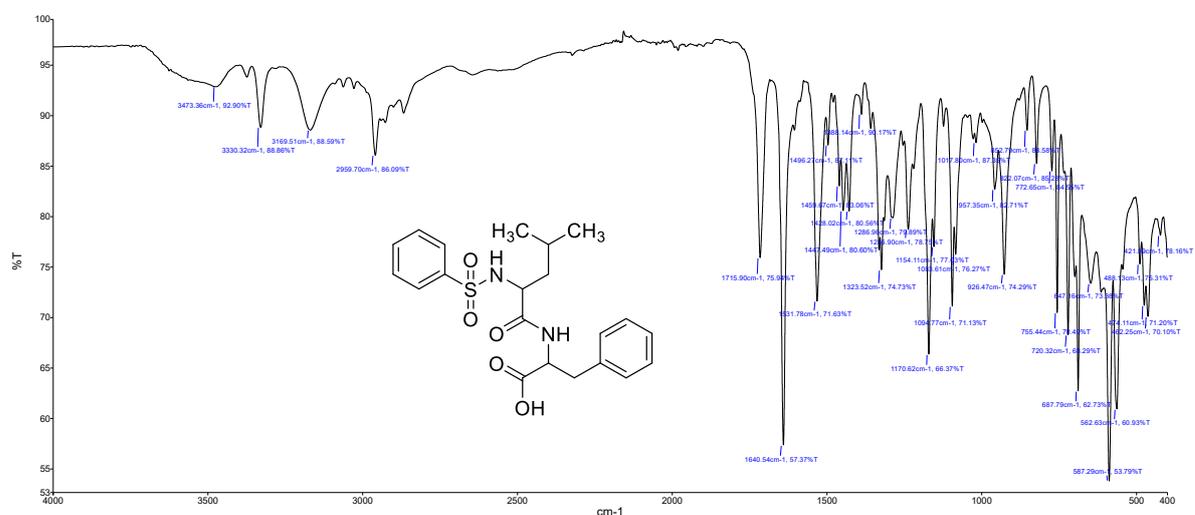
FTIR of (phenylsulfonyl)Ile-Phe [7c]



FTIR of (phenylsulfonyl)Ala-Gly [7d]



FTIR of (phenylsulfonyl)Val-Gly [7e]



FTIR of (phenylsulfonyl)Leu-Phe [7f]