

NaClO₂-mediated Preparation of Pyridine-2-Sulfonyl Chlorides and Synthesis of Chiral Sulfonamides

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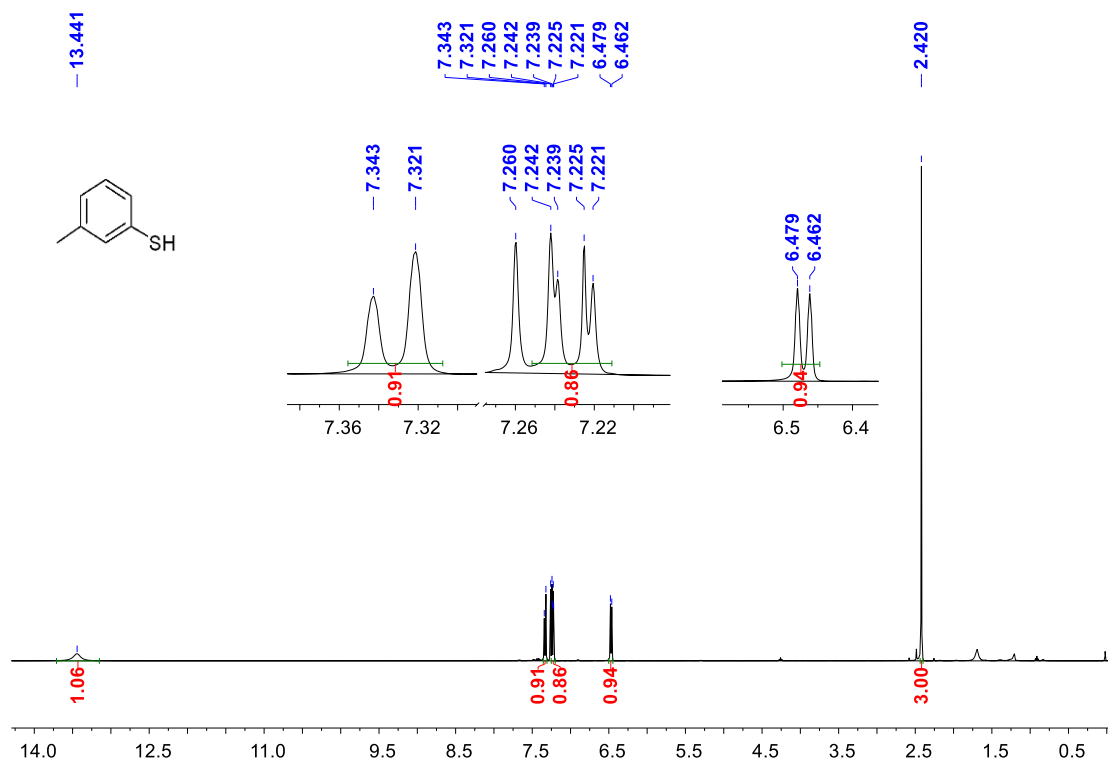
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Contact:

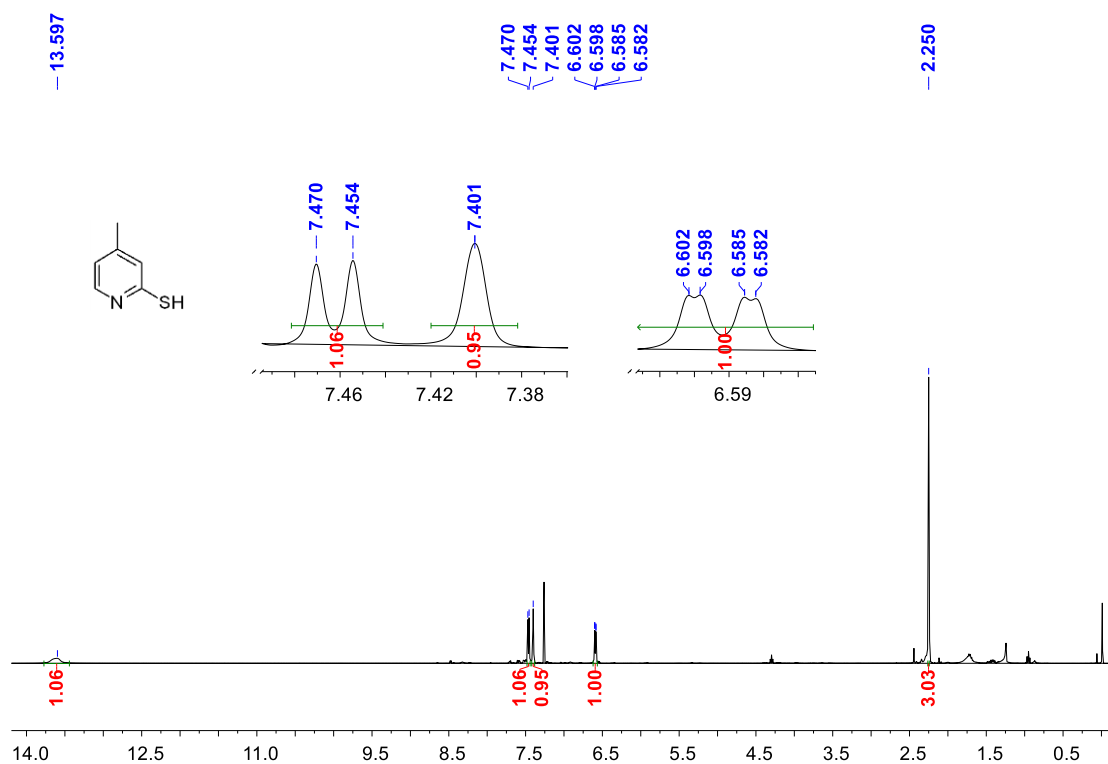
A. Gao: gaoaj@mail.buct.edu.cn

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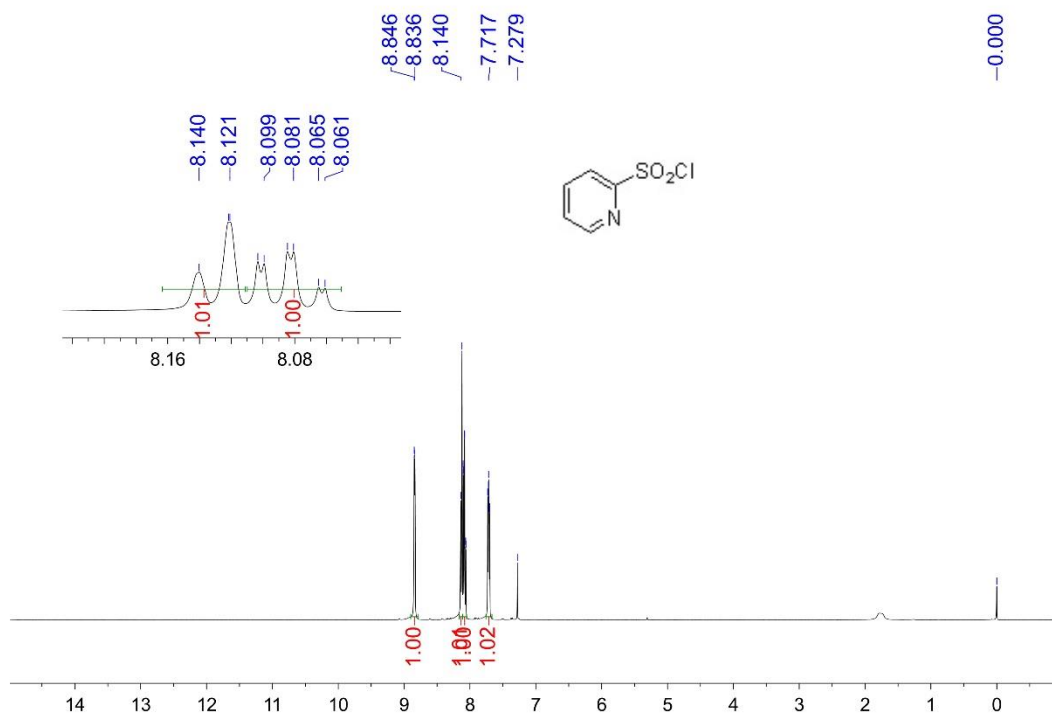
4-methylpyridine-2-thiol (1b)



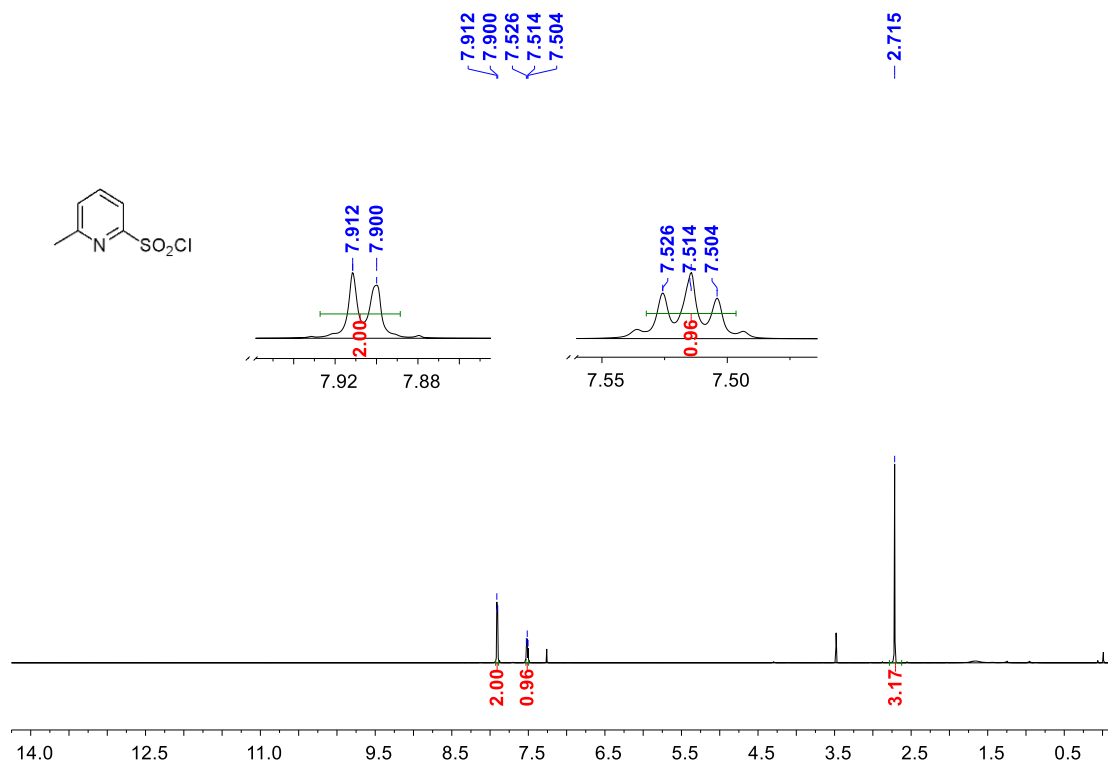
6-methylpyridine-2-thiol (1c)



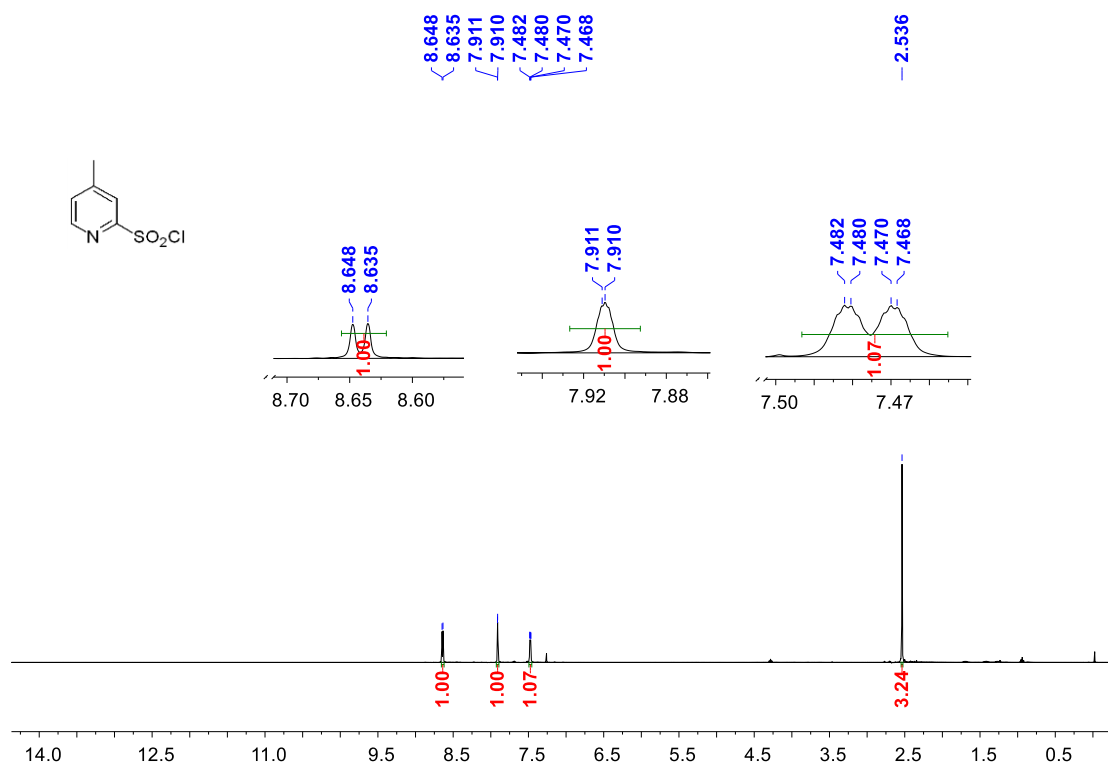
Pyridine-2-sulfonyl chloride (2a)



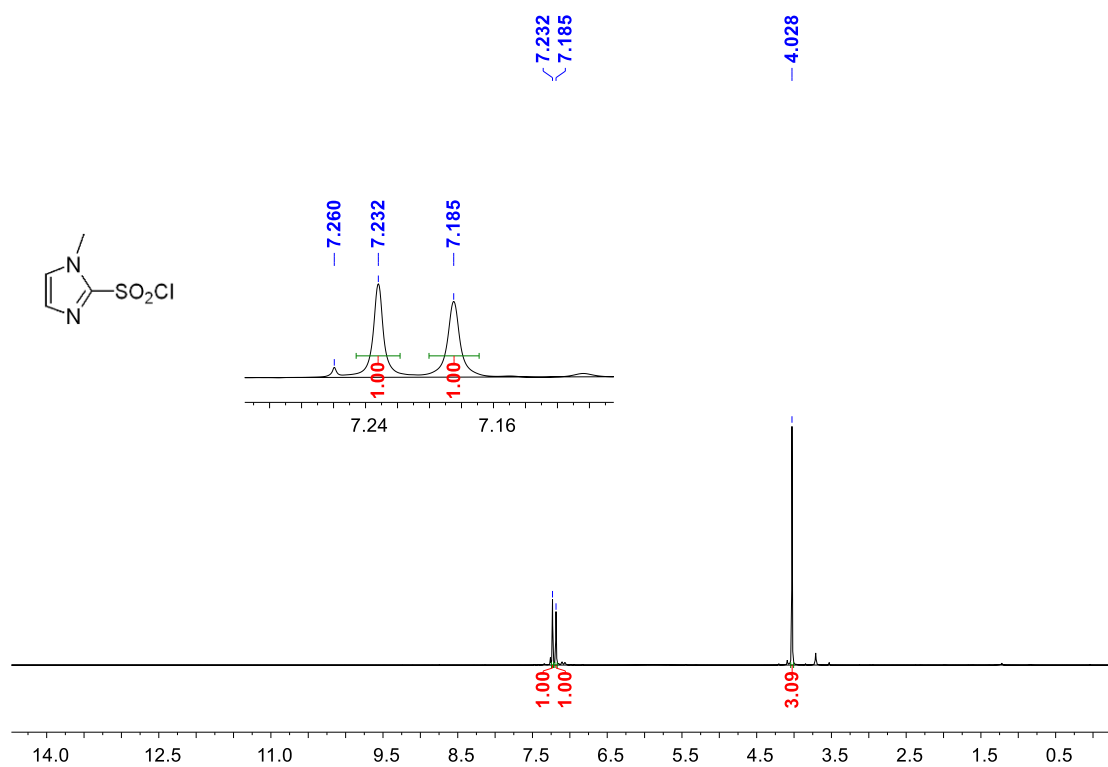
6-Methylpyridine-2-sulfonyl chloride (2b)



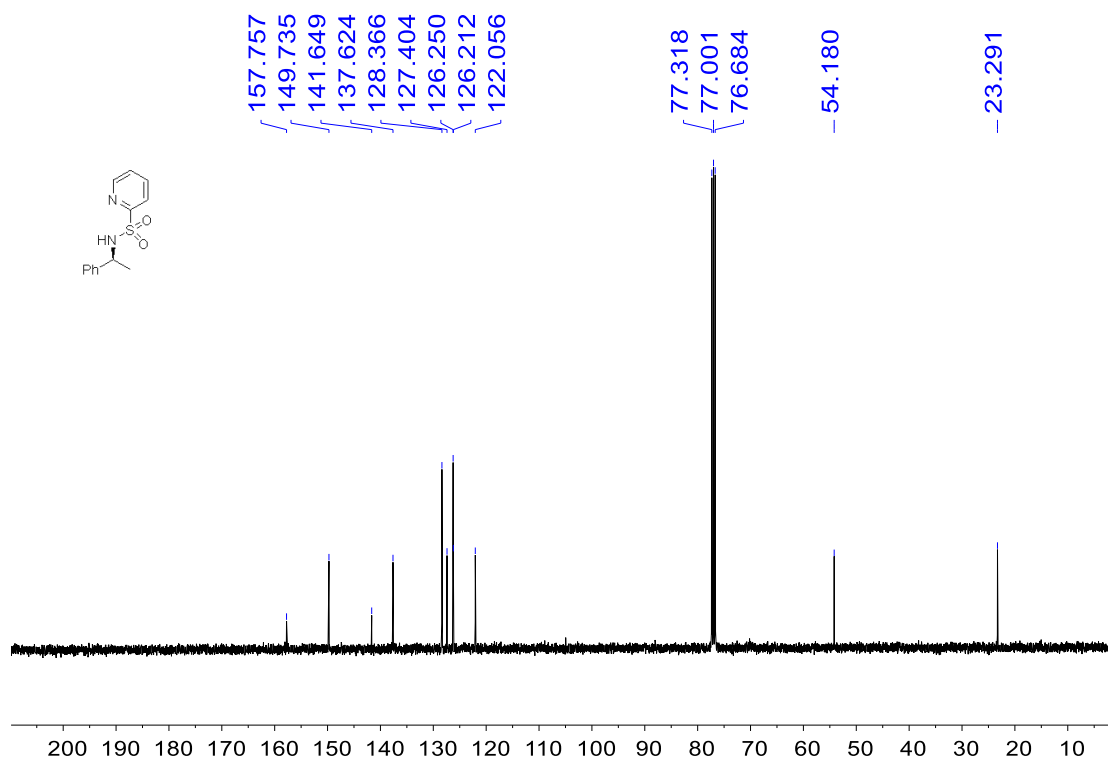
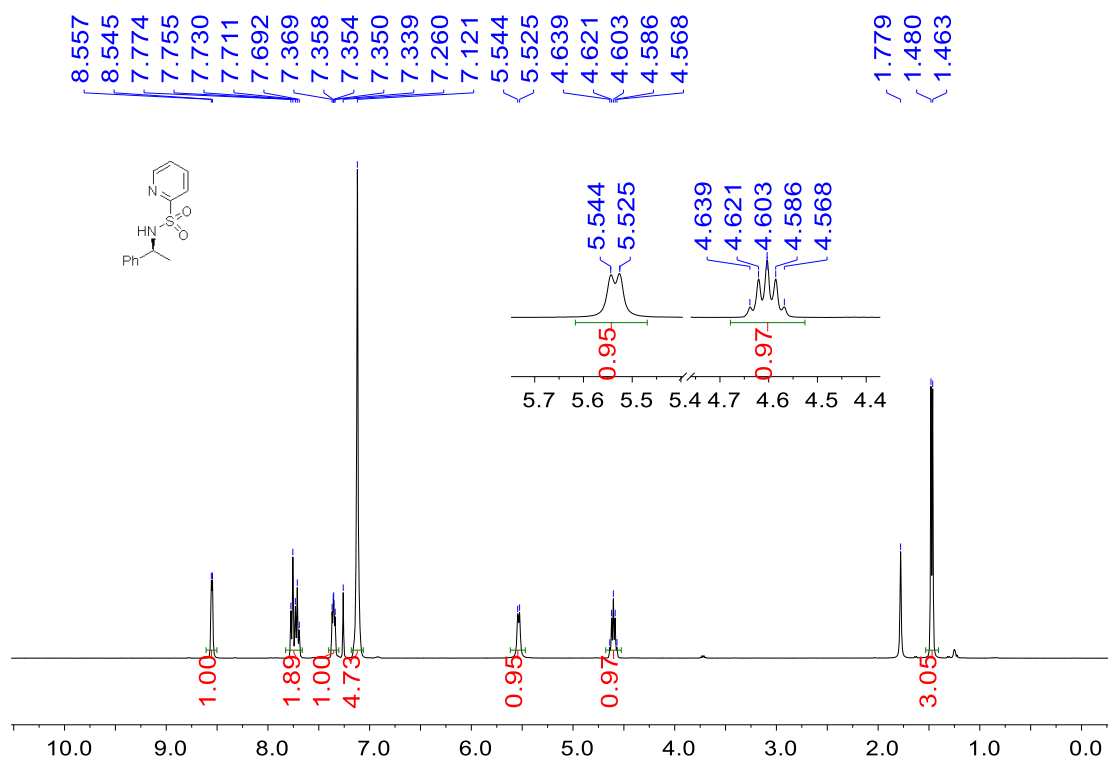
4-Methylpyridine-2-sulfonyl chloride (2c)



1-Methyl-1H-imidazole-2-sulfonyl chloride(2d)

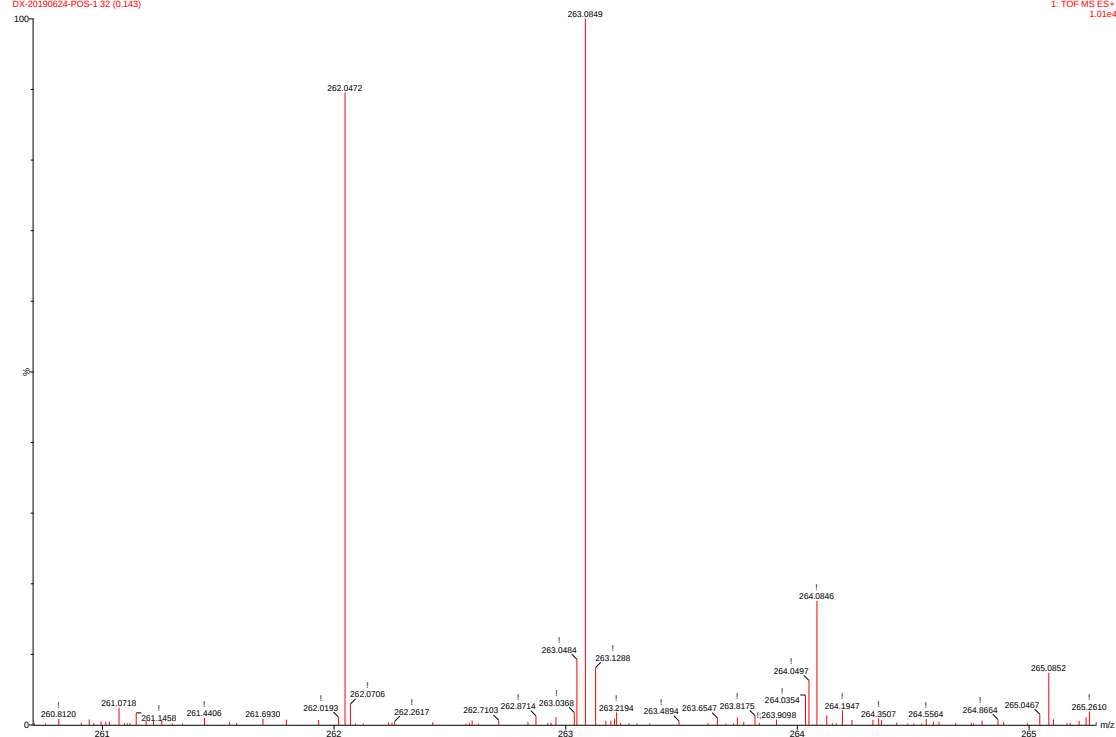


(S)-N-(1-phenylethyl) pyridine-2-sulfonamide (4aa)



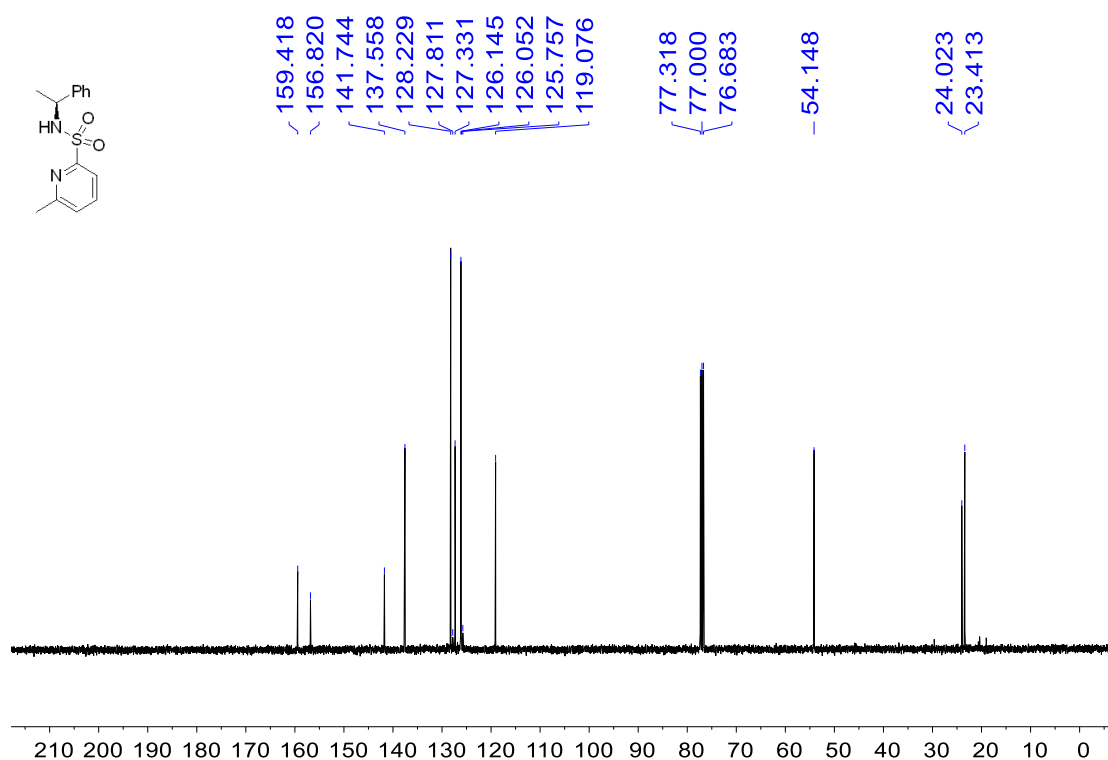
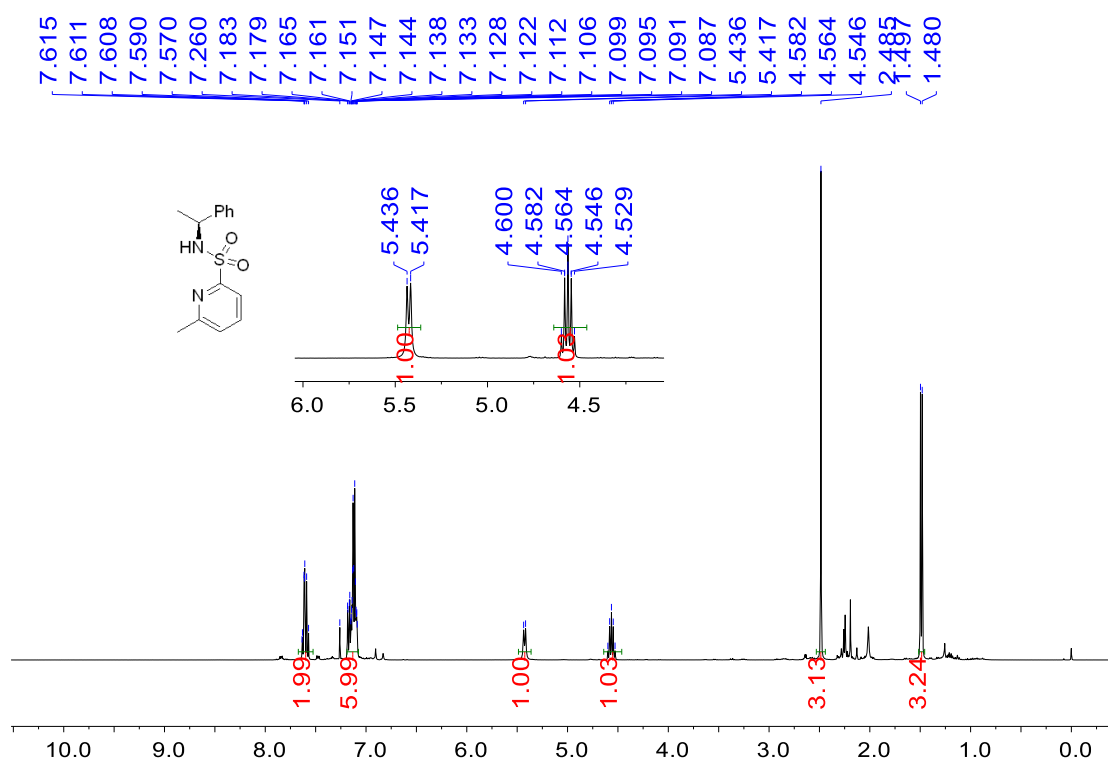
DX-20190624-POS-1 32 (0.143)

1: TOF MS ES+
1.0164



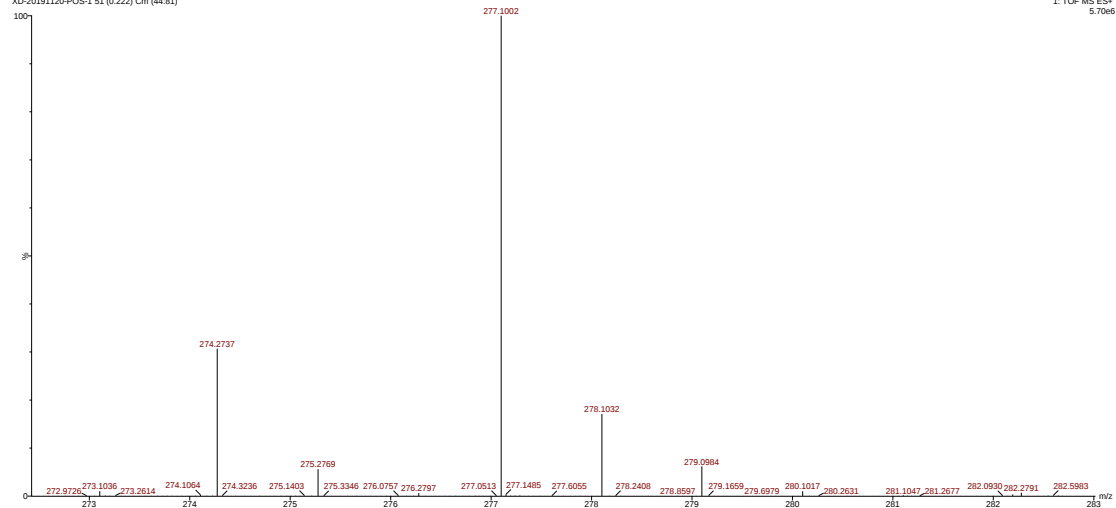
(S)-6-Methyl-N-(1-phenylethyl)pyridine-2-sulfonamide(4ba)

(with trace petroleum ether impurity)

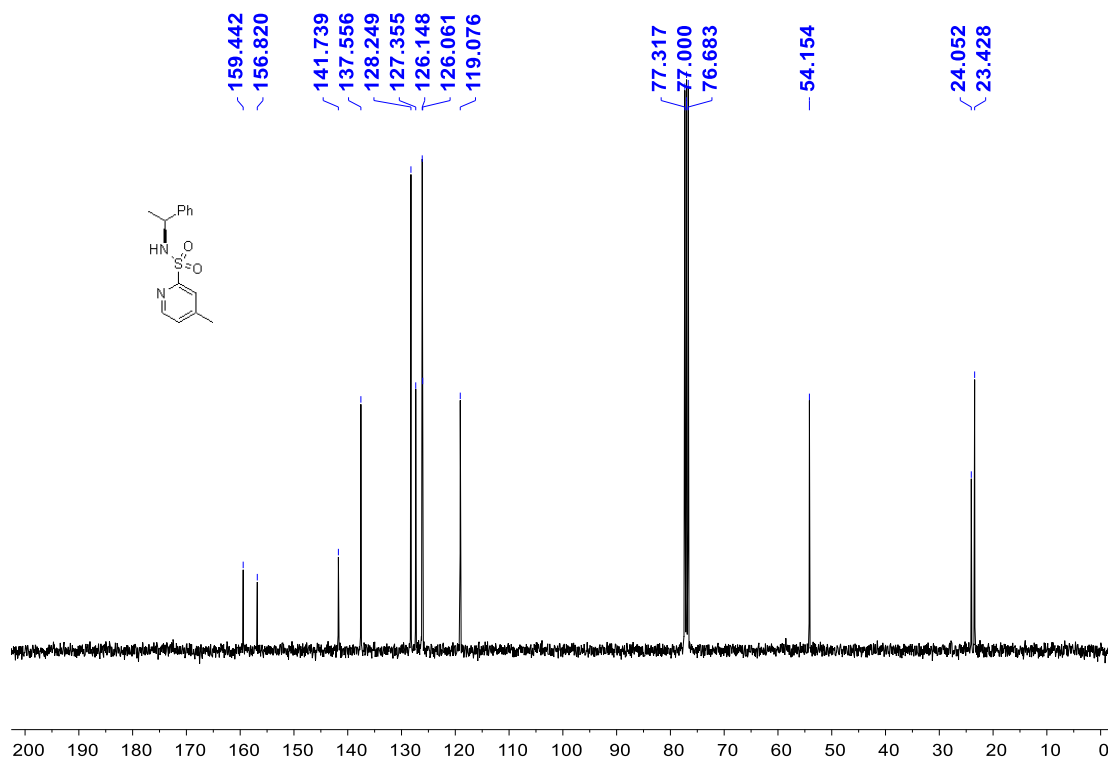
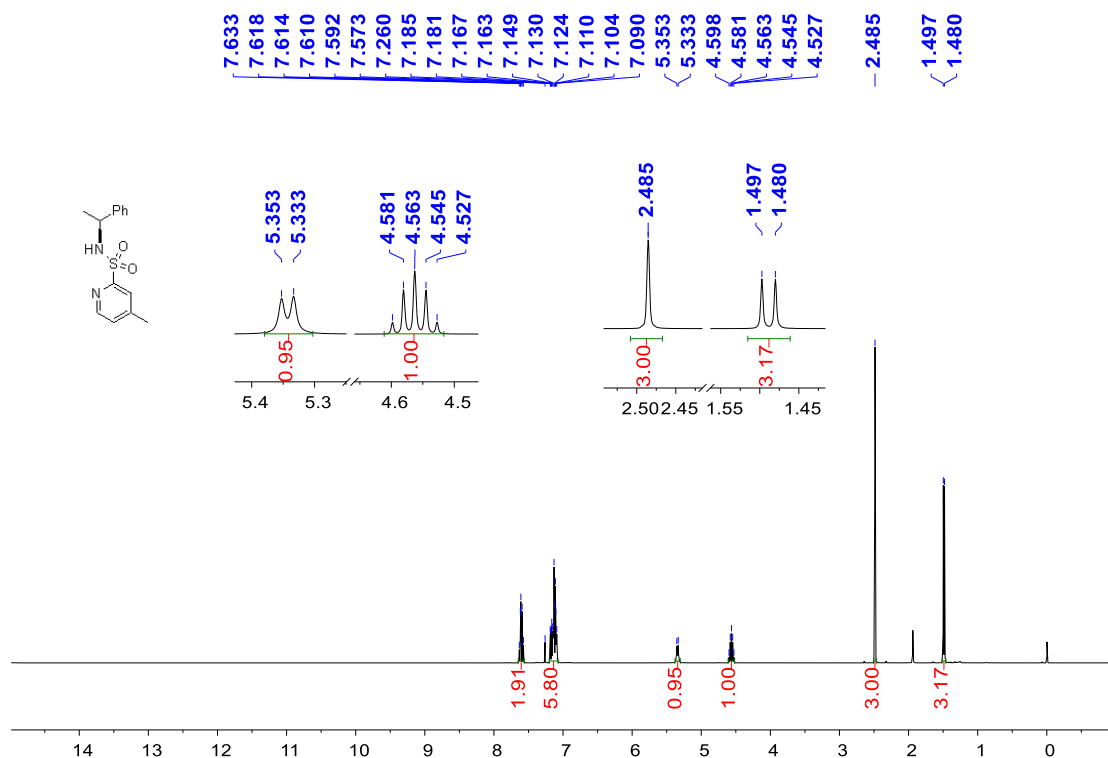


XD-20191120-POS-1 S1 (0.222) Cm (44.81)

1: TOF MS ES+
5.70e5

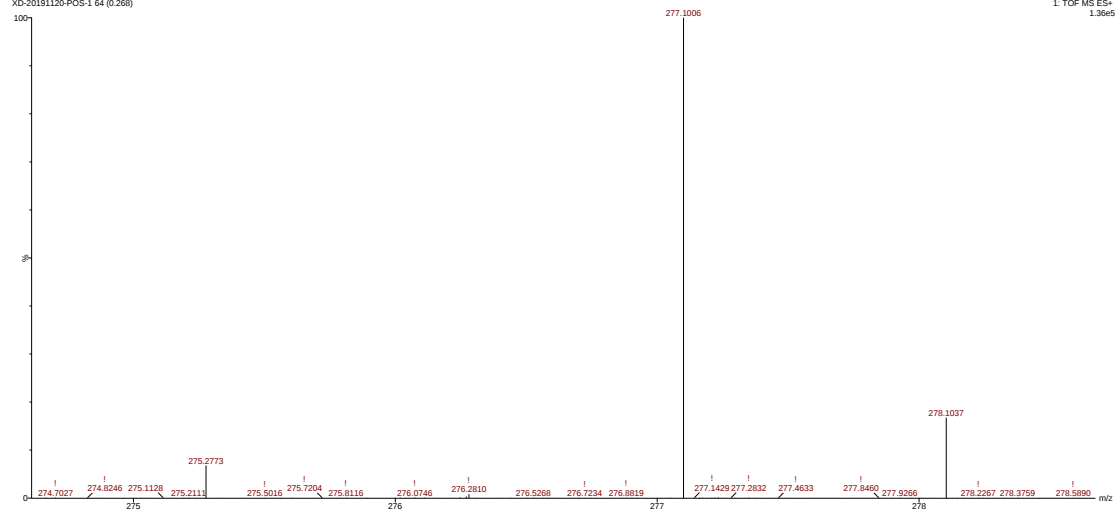


(S)-4-Methyl-N-(1-phenylethyl)pyridine-2-sulfonamide(4ca)

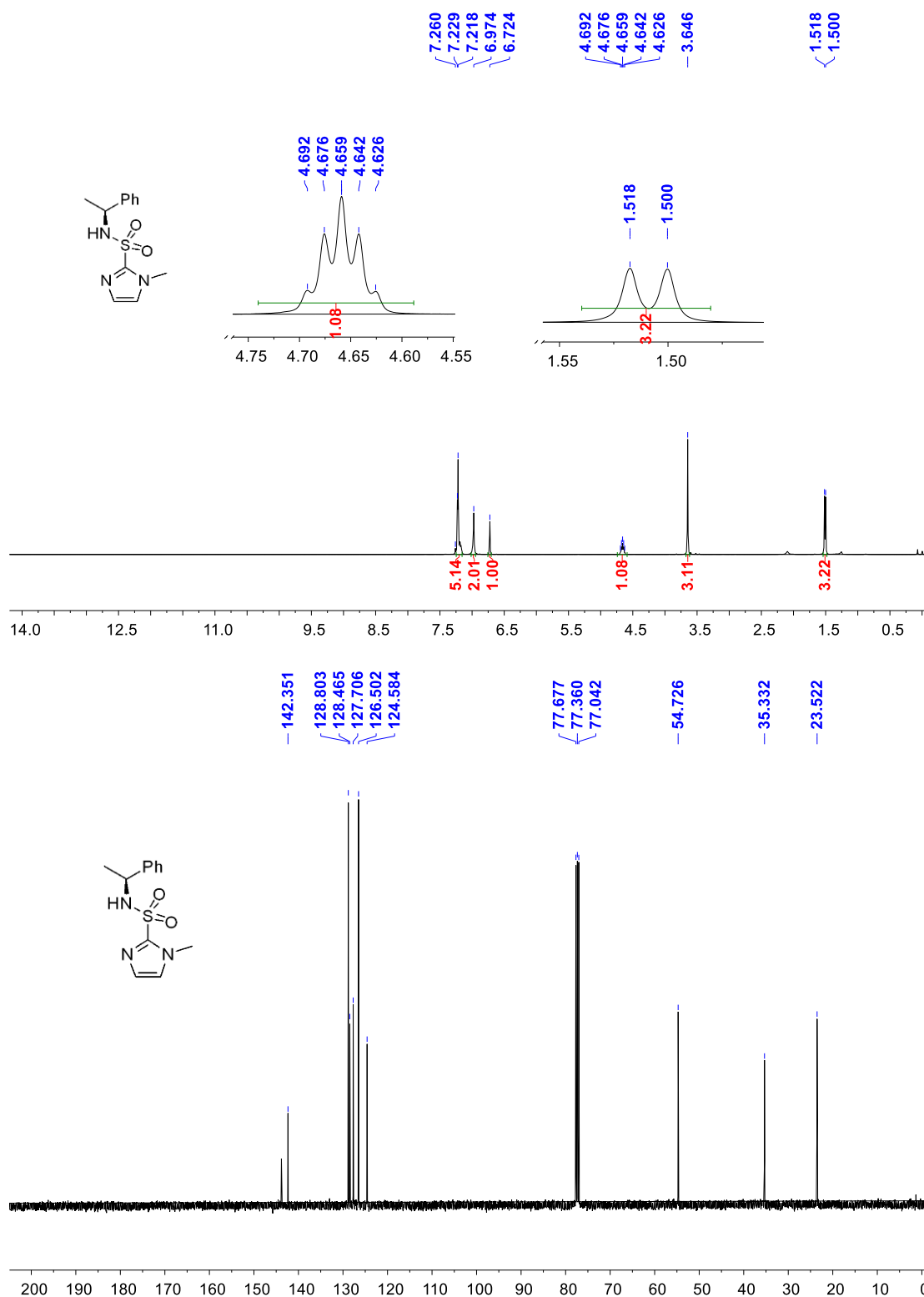


XD-20191120-POS-1.64 (0.268)

1: TOF MS ES+
1.39e5

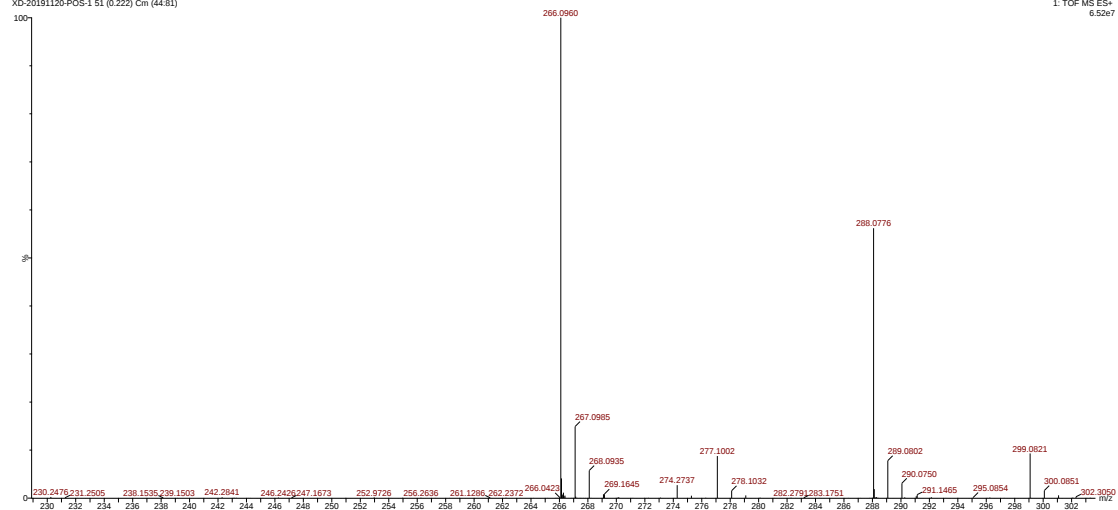


(S)-1-methyl-N-(1-phenylethyl)-1H-imidazole-2-sulfonamide(4da)

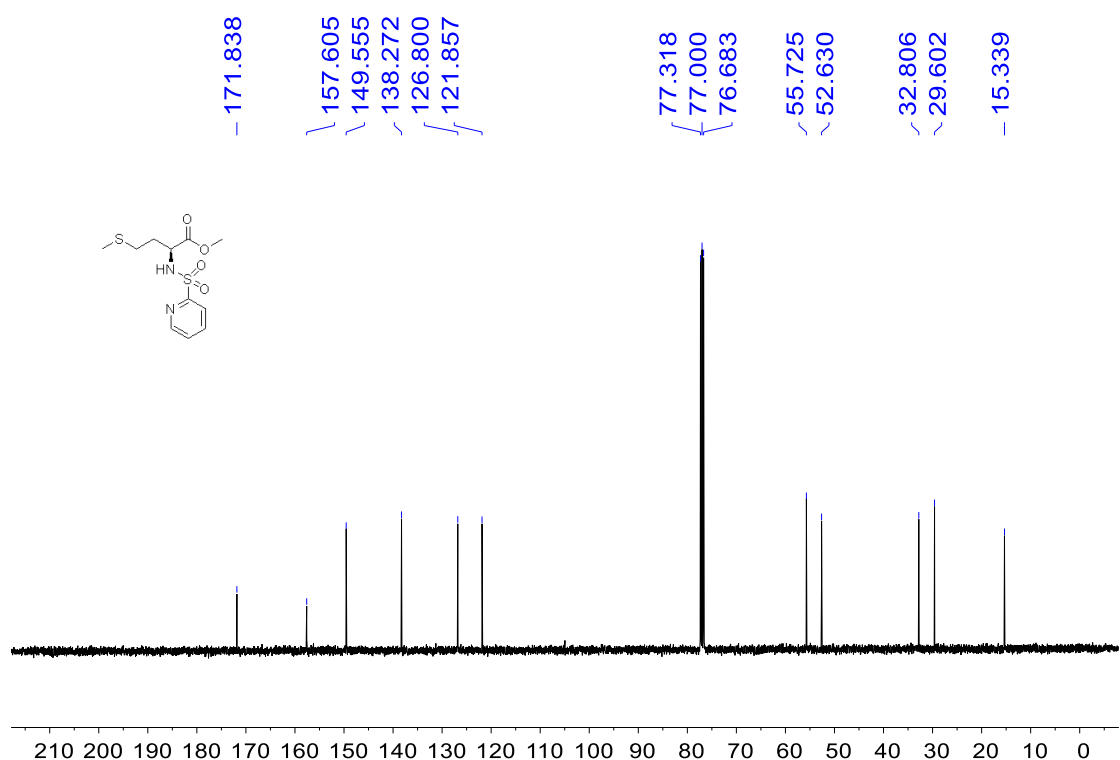
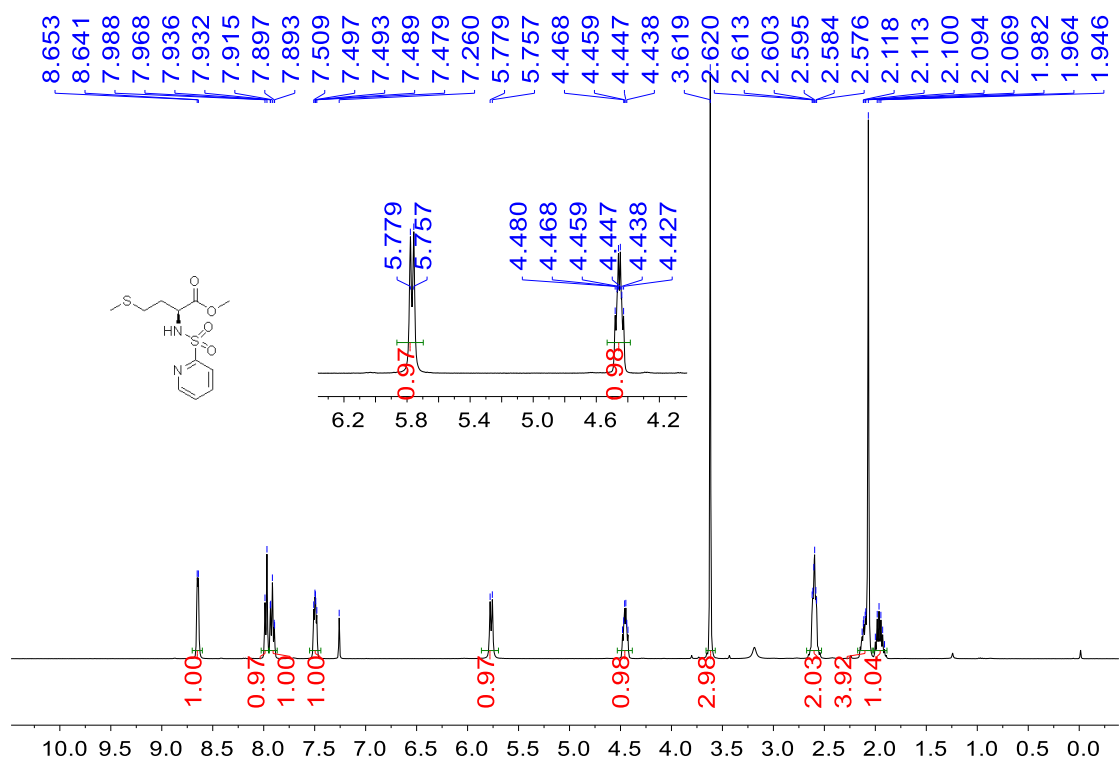


XD-20191120-POS-1 S1 (0.222) Cm (44.81)

1: TOF MS ES+
6.52e7

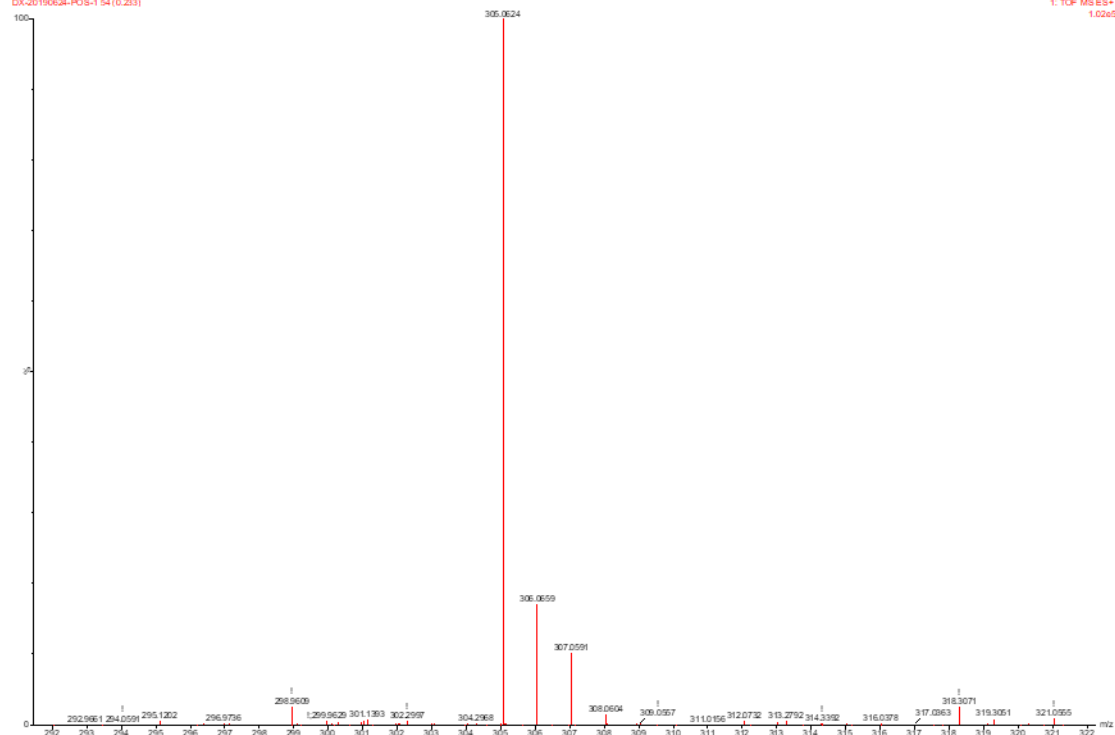


Methyl (pyridin-2-ylsulfonyl)-L-Methioninate(4ab)

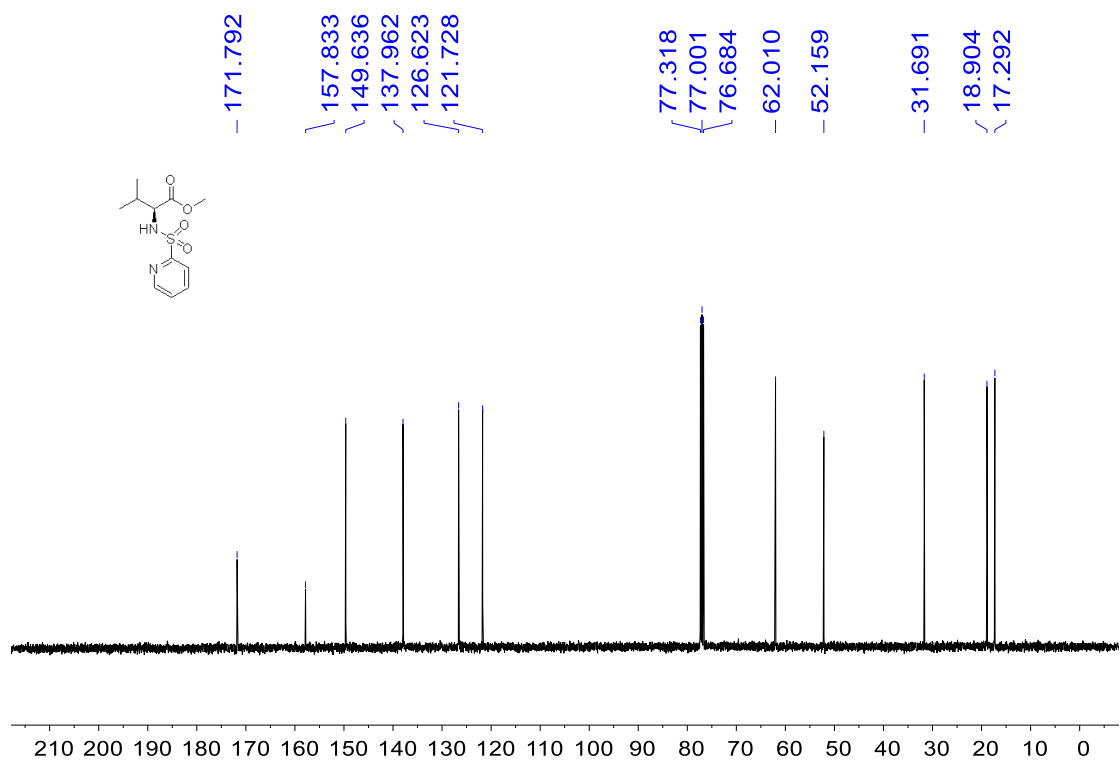
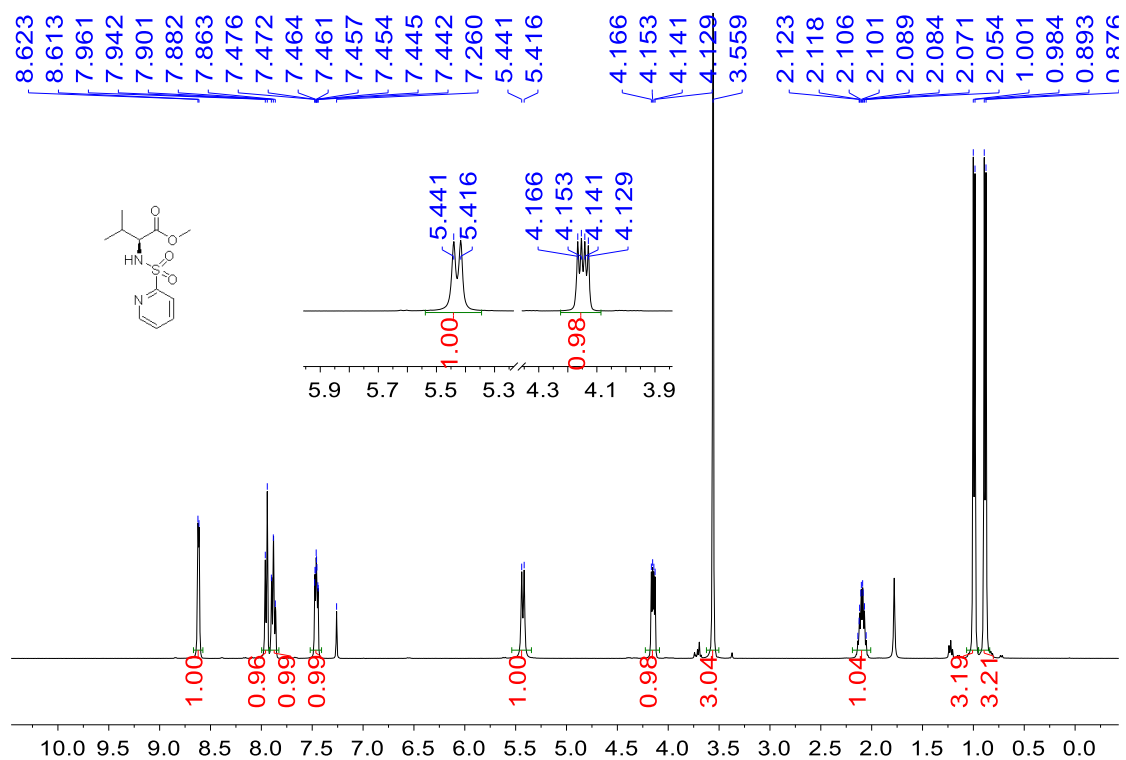


DX-20190624-POS-1 54 (0.233)

1: TOP MS ES+
1.0265

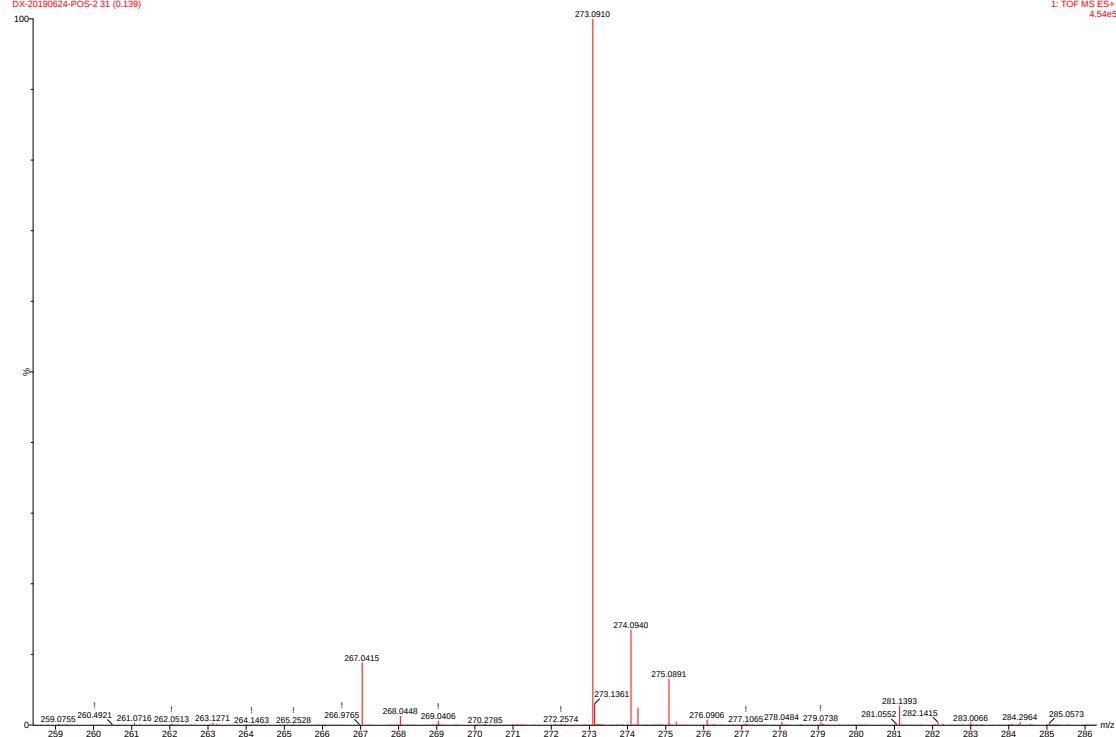


Methyl (pyridin-2-ylsulfonyl)-L-Valinate(4ac)

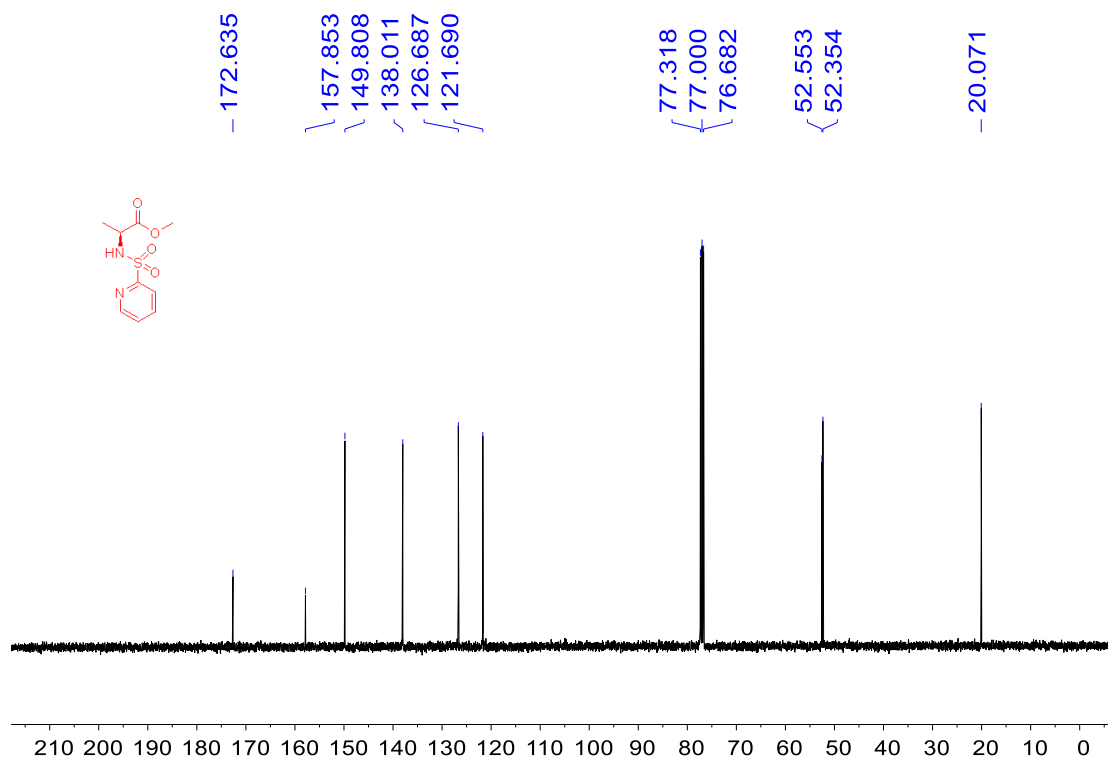
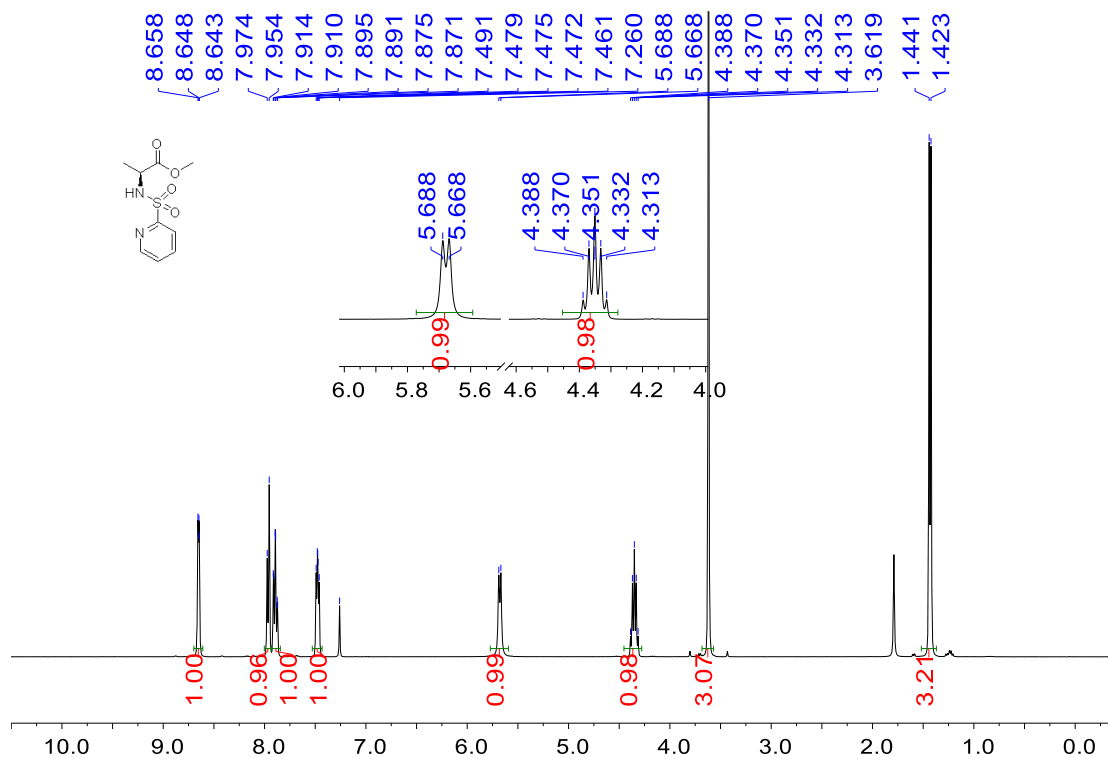


DX-20190624-POS-2 31 (0.139)

1: TOF MS ES+
4.54e5

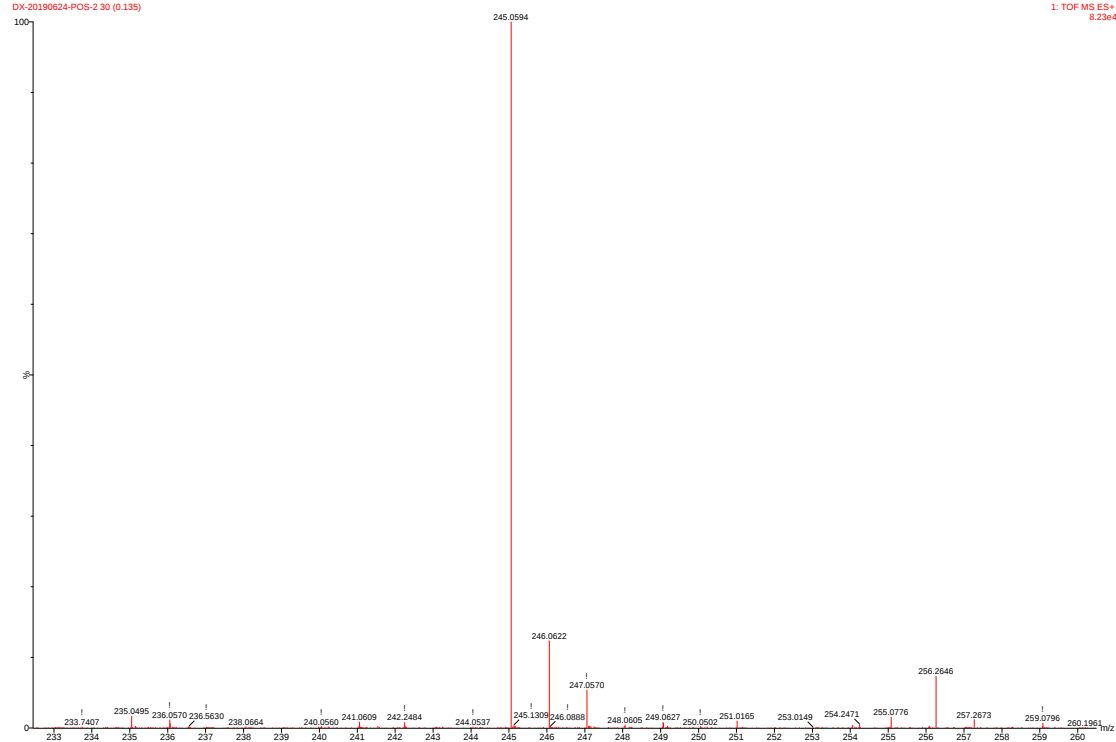


Methyl (pyridin-2-ylsulfonyl)-L-Alaninate (4ad)

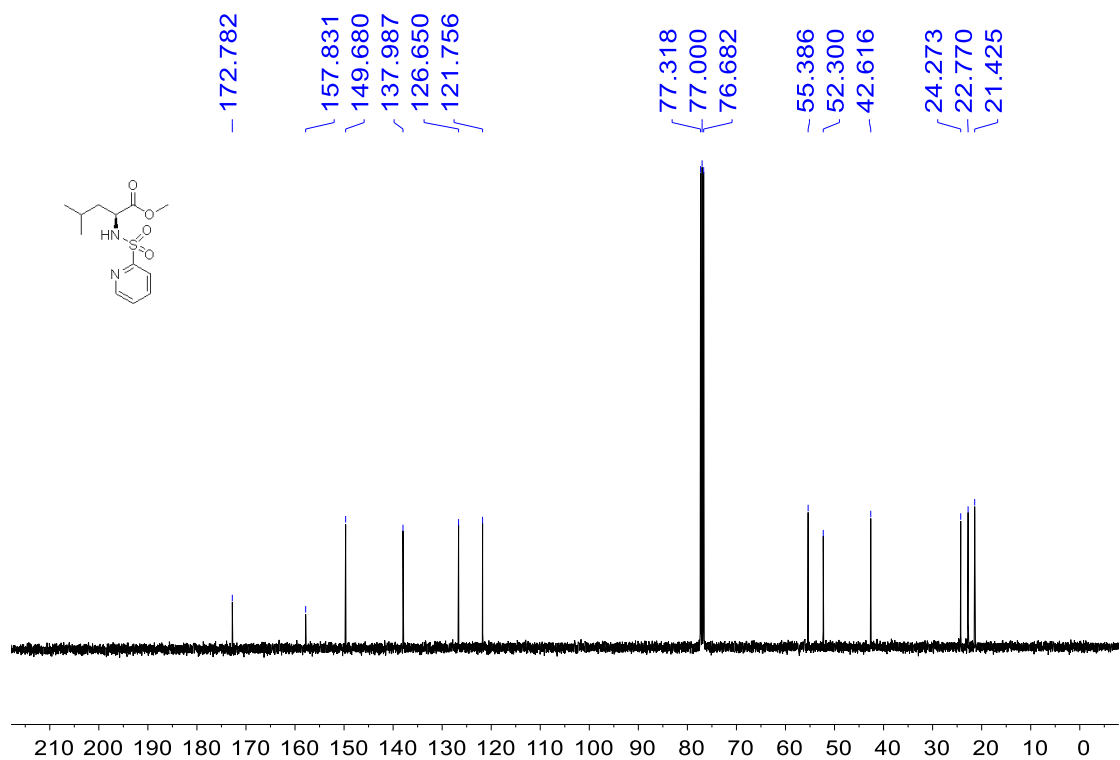
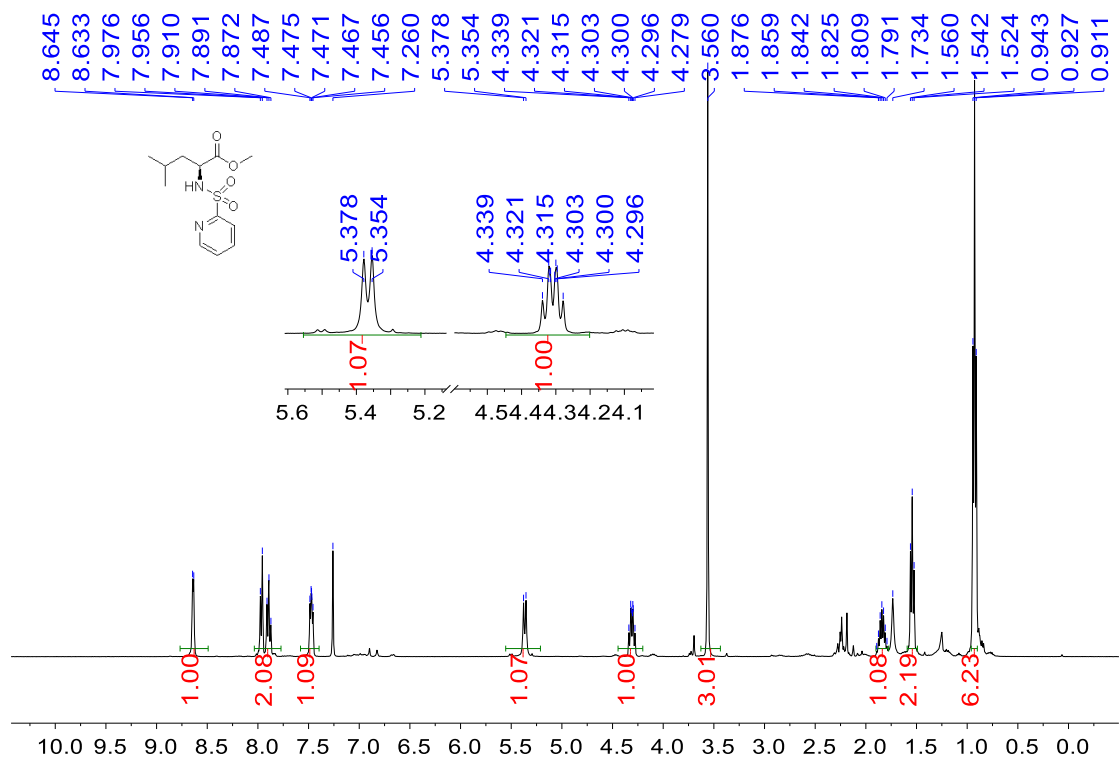


DX-20190624-POS-2 30 (0.135)

1: TOF MS ES+
9.23e4

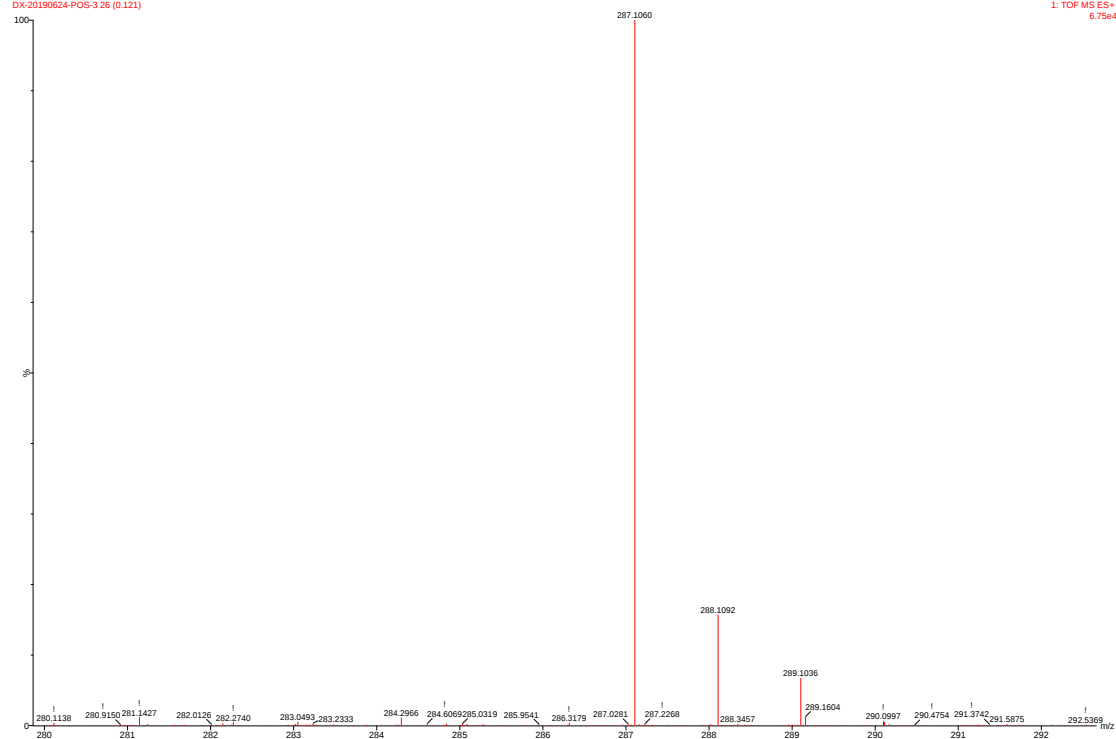


Methyl (pyridin-2-ylsulfonyl)-L-Leucinate(4ae)

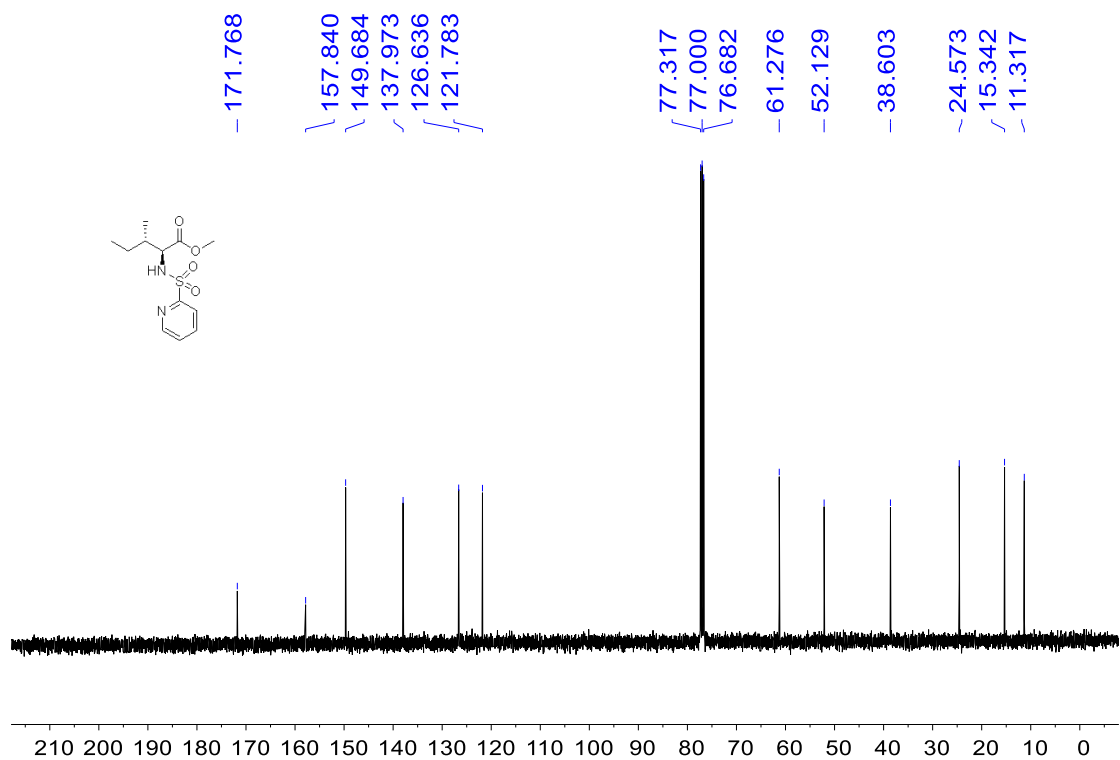
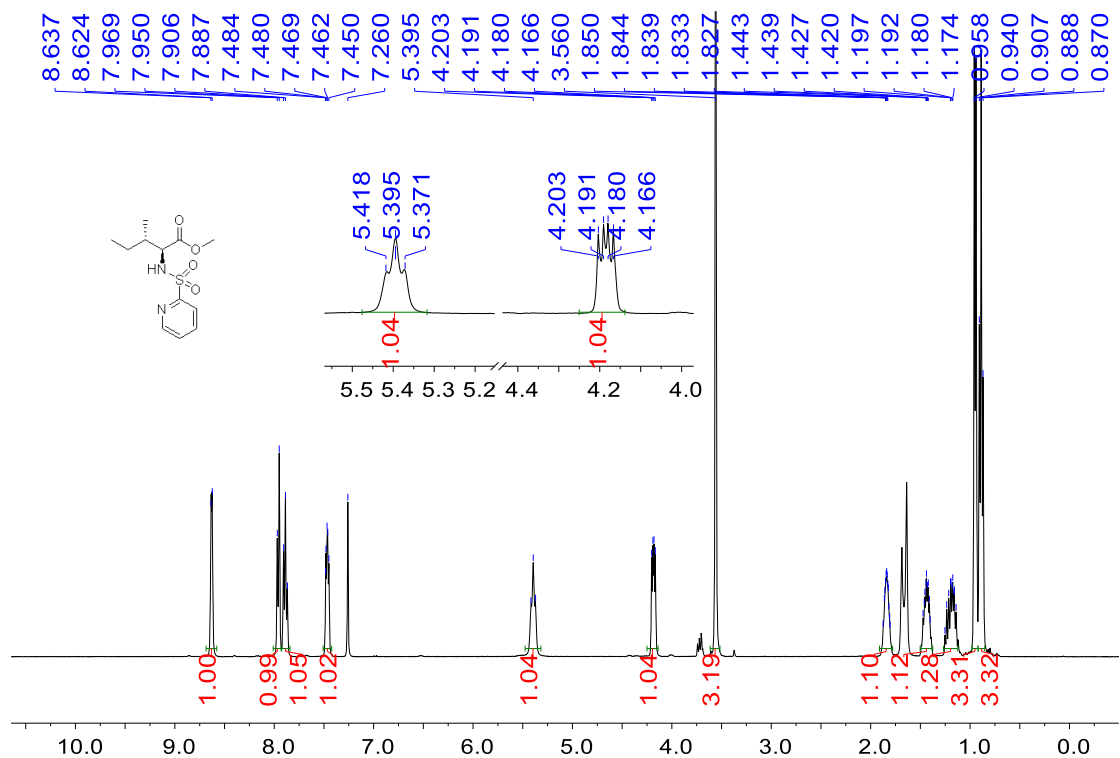


DX-20190624-POS-3 26 (0.121)

1: TOF MS ES+
6.7564

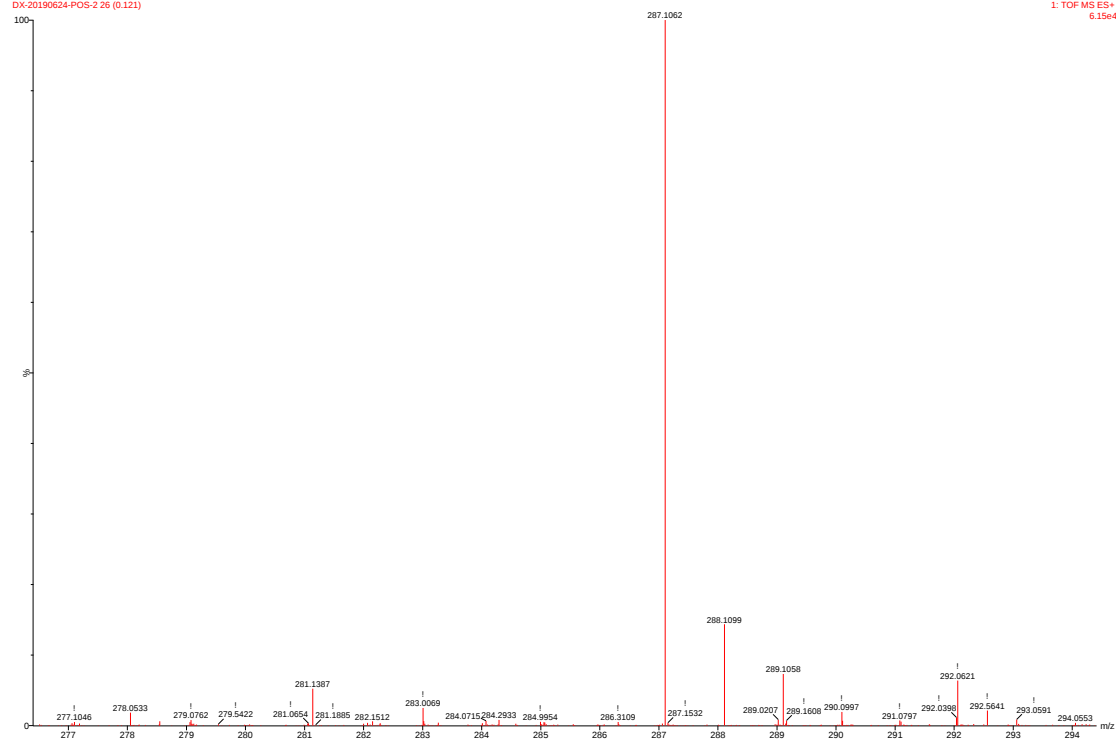


Methyl (pyridin-2-ylsulfonyl)-L-Isoleucinate(4af)



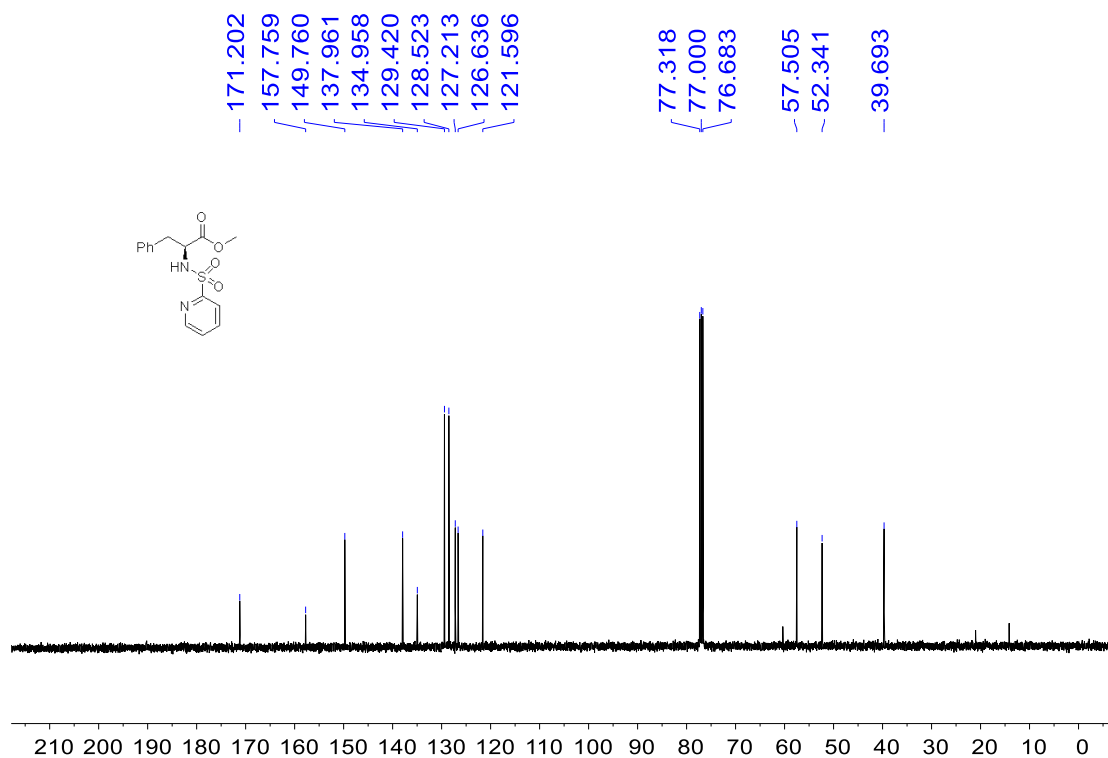
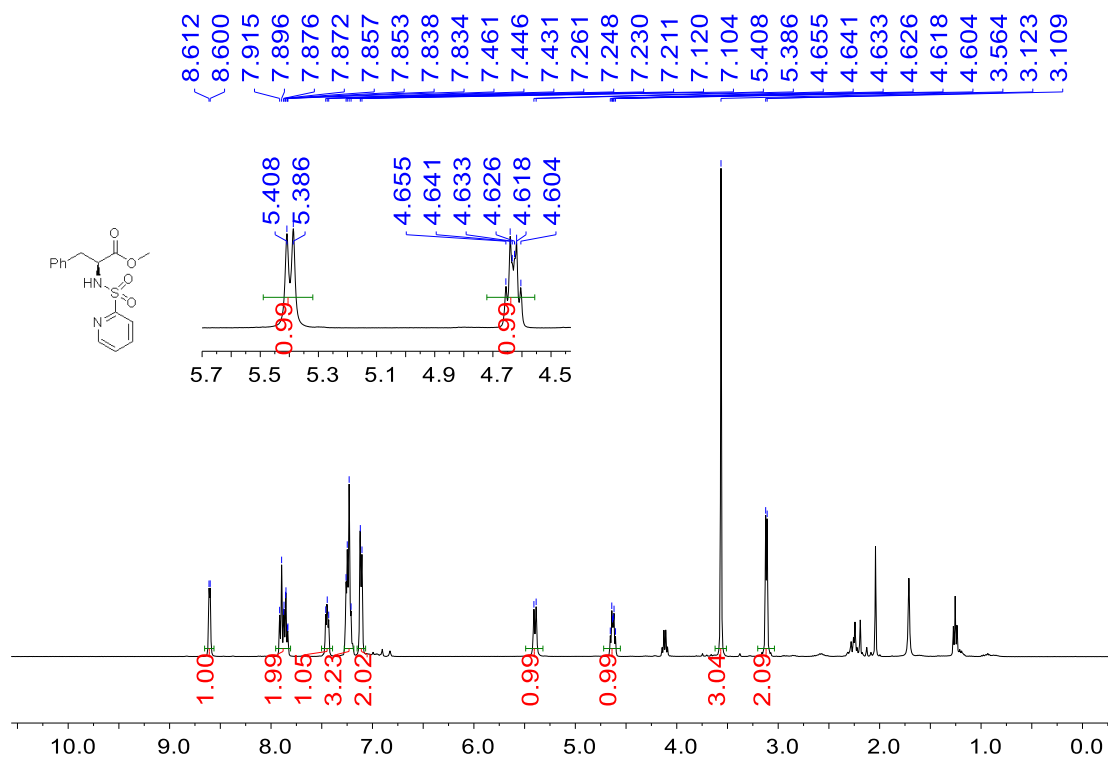
DX-20190624-POS-2 26 (0.121)

1: TOF MS ES+
6.1564



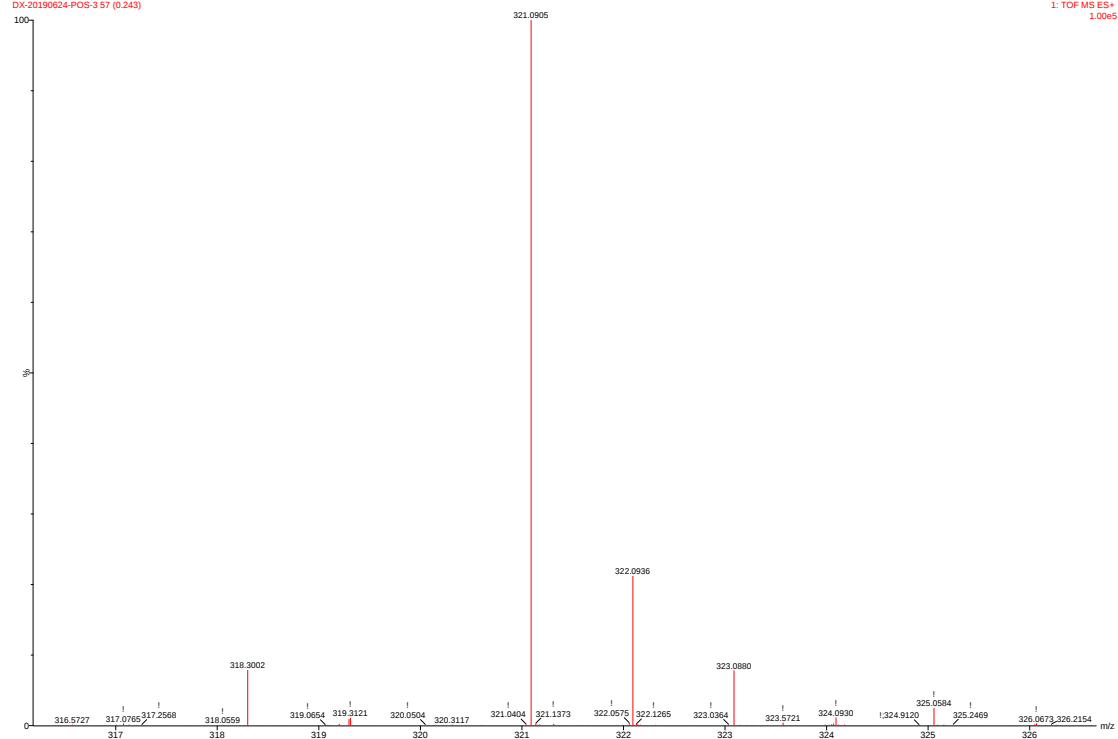
Methyl (pyridin-2-ylsulfonyl)-L-Phenylalaninate(4ag)

(with trace petroleum ether and ethyl acetate impurities)



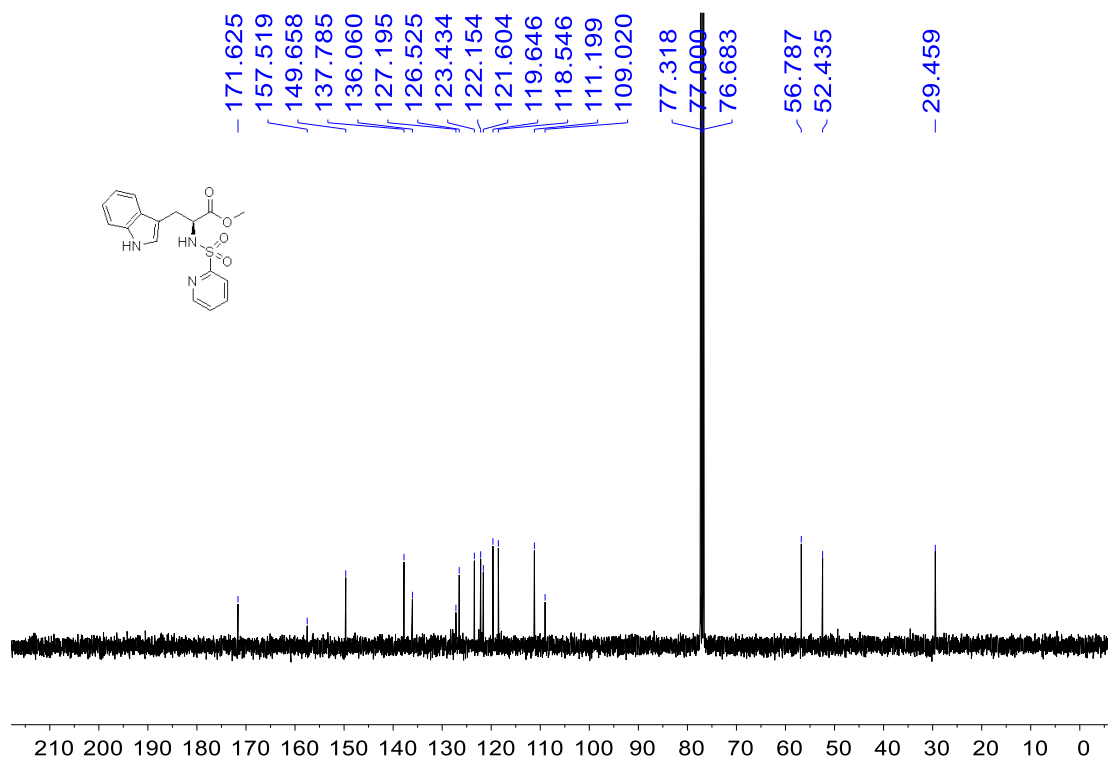
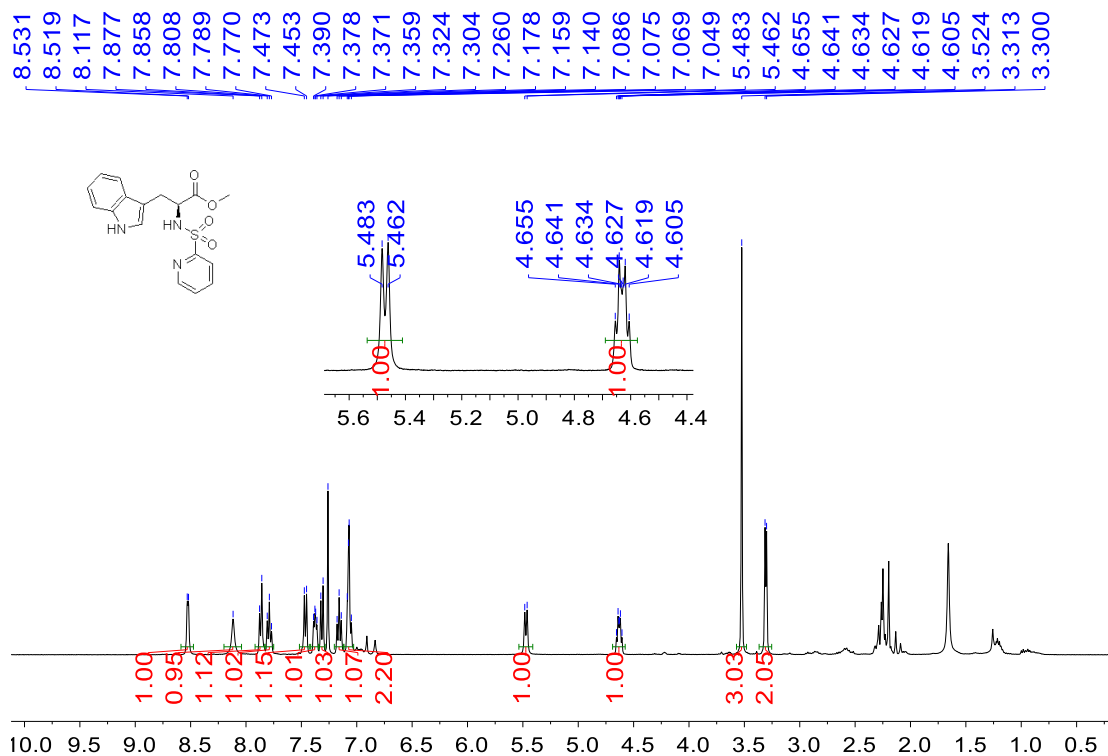
DX-20190624-POS-3 57 (0.243)

1: TOF MS ES+
1.00e5



Methyl (pyridin-2-ylsulfonyl)-L-Tryptophanate(4ah)

(with trace petroleum ether impurity)



DX-20190624-POS-3 50 (0.218)

1: TOF MS ES+
9.91e5

