

Supplementary Material

Exploration of Pyrido[3,4-*d*]pyrimidines as Antagonists of the Human Chemokine Receptor CXCR2

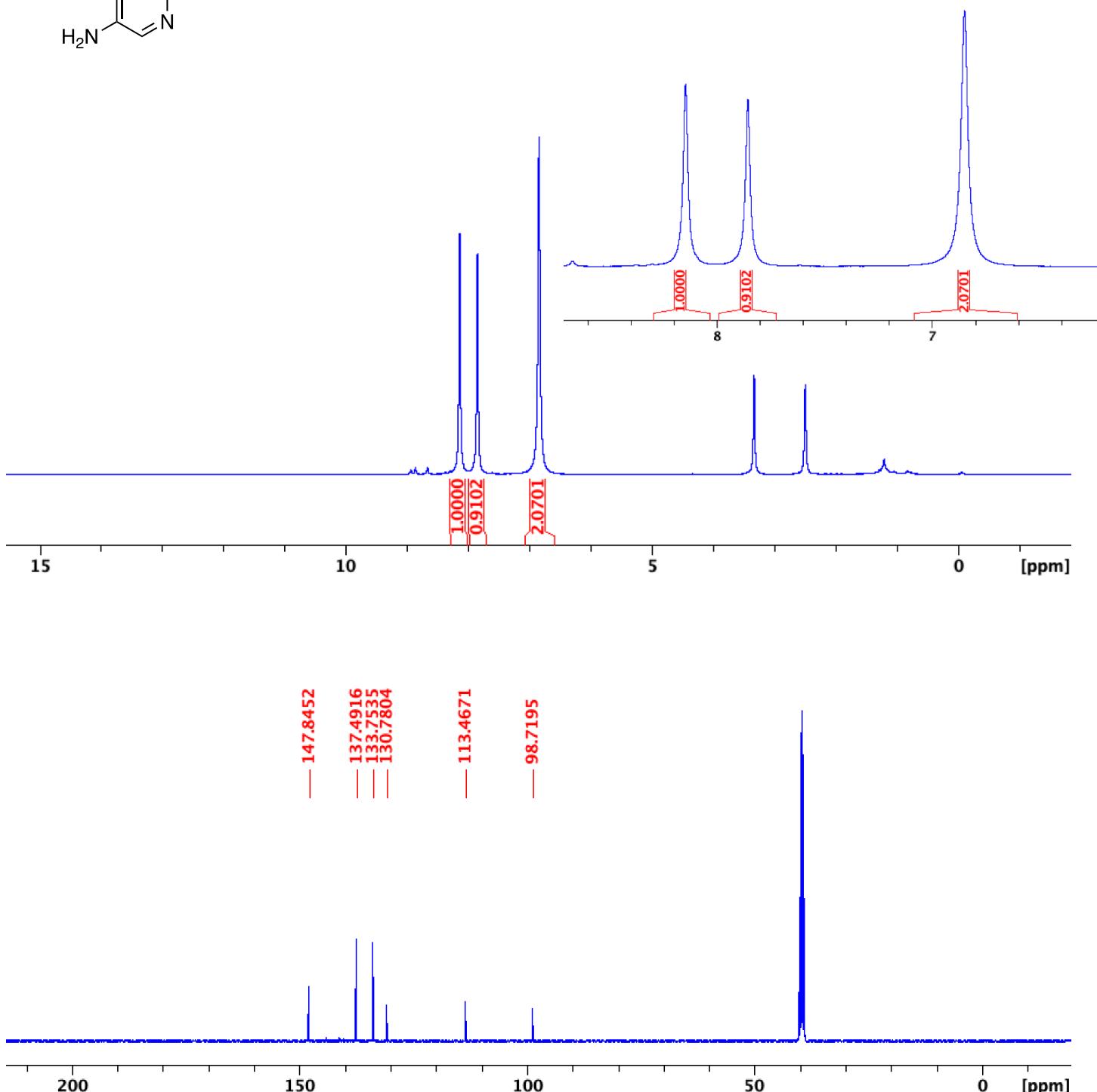
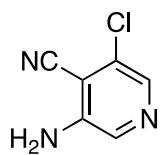
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¹ Molecular Design and Synthesis, Department of Chemistry, KU Leuven, Celestijnenlaan 200F, B-3001 Leuven, Belgium

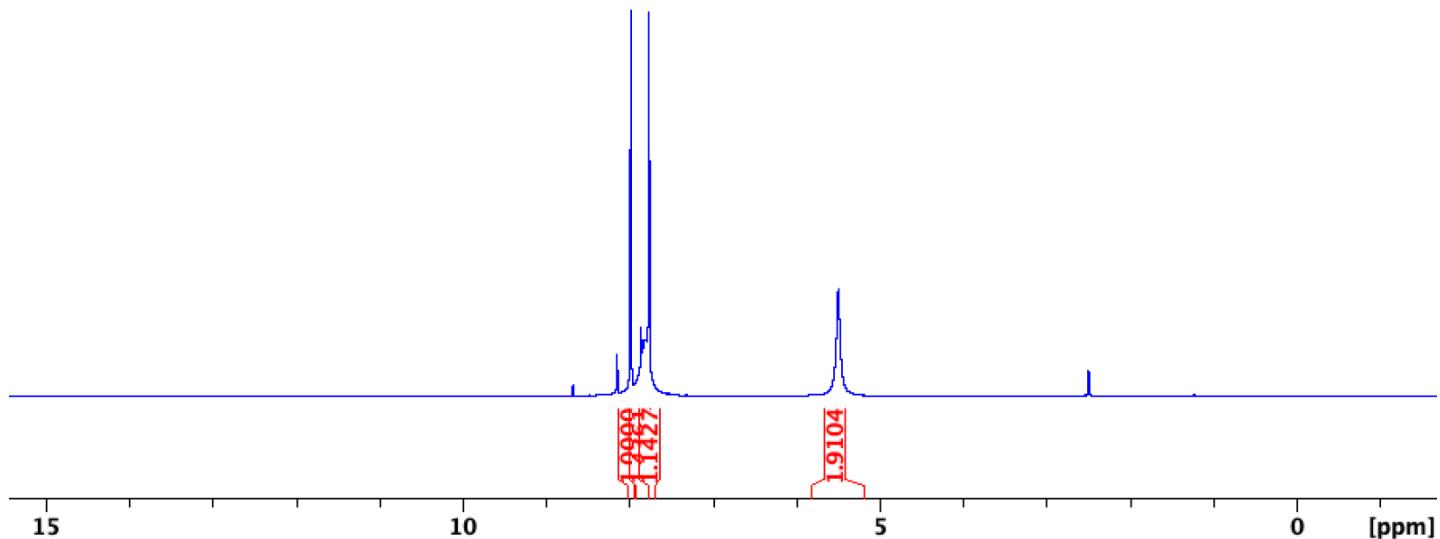
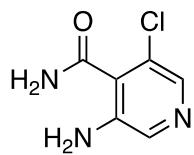
² Department of Microbiology, Immunology and Transplantation, Rega Institute for Medical Research, Laboratory of Virology and Chemotherapy, KU Leuven, Herestraat 49, B-3000 Leuven, Belgium

NMR Spectra

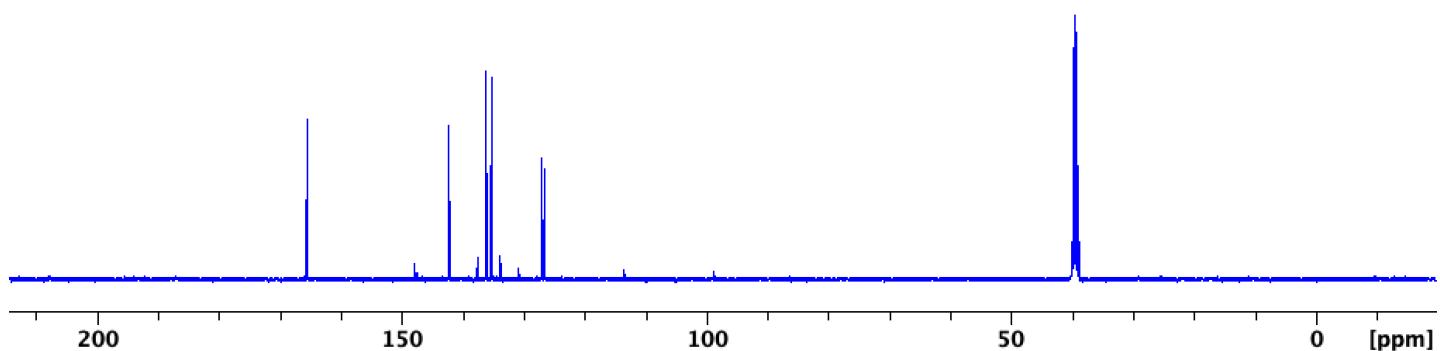
3-Amino-5-chloropyridine-4-carbonitrile (5)



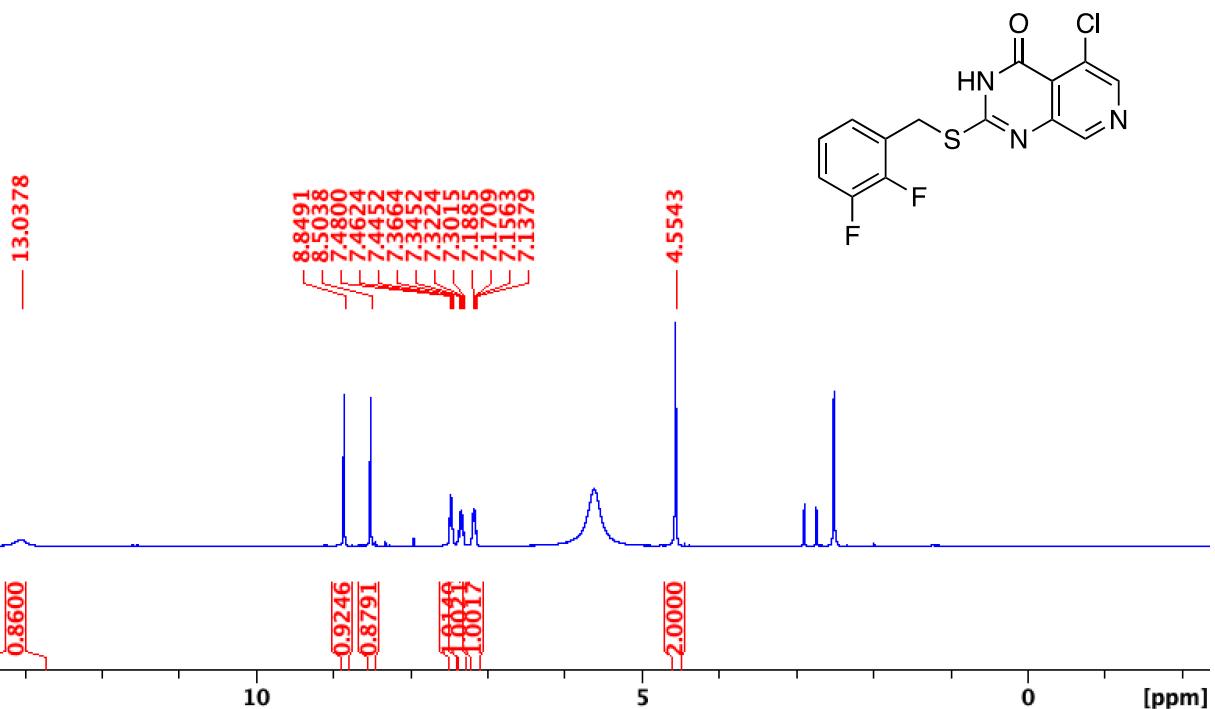
3-Amino-5-chloropyridine-4-carboxamide (6)



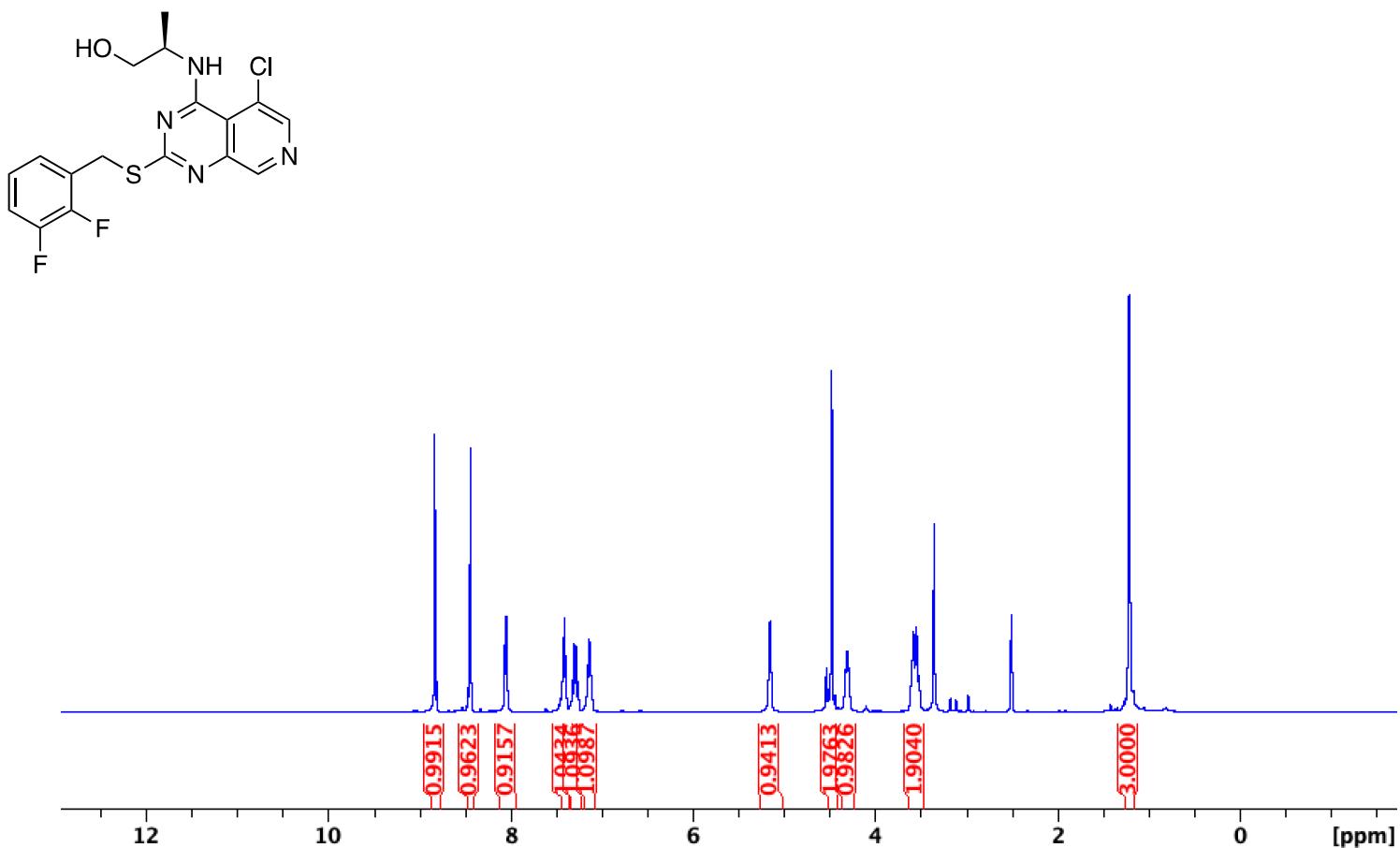
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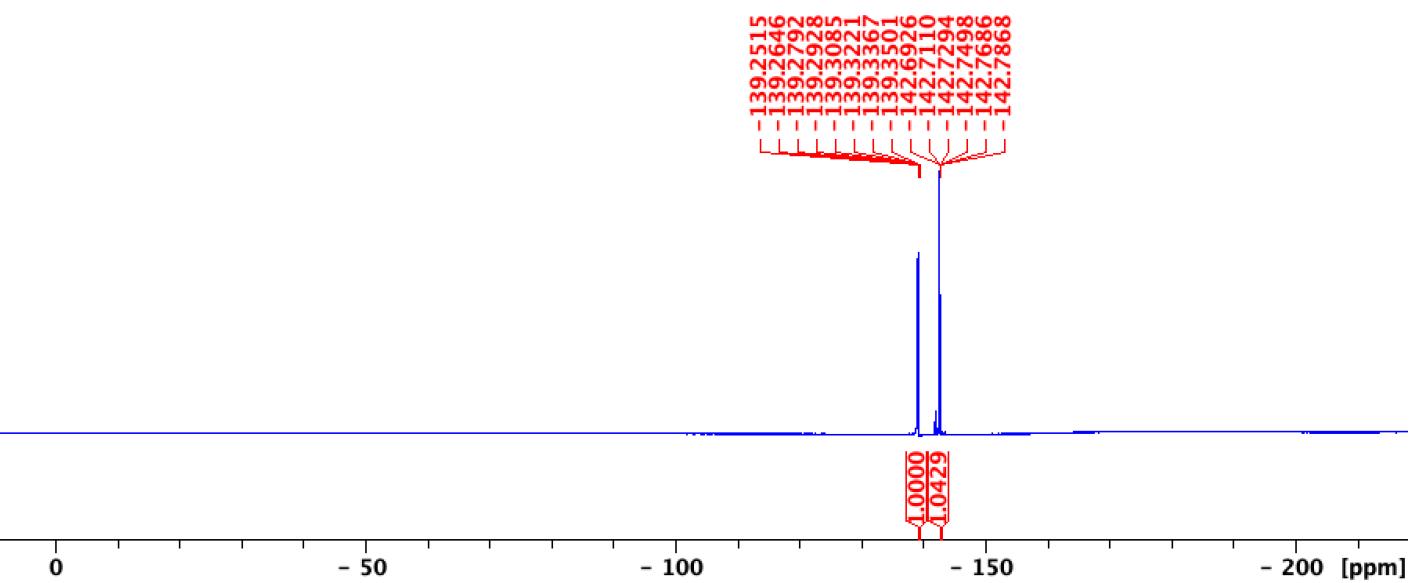
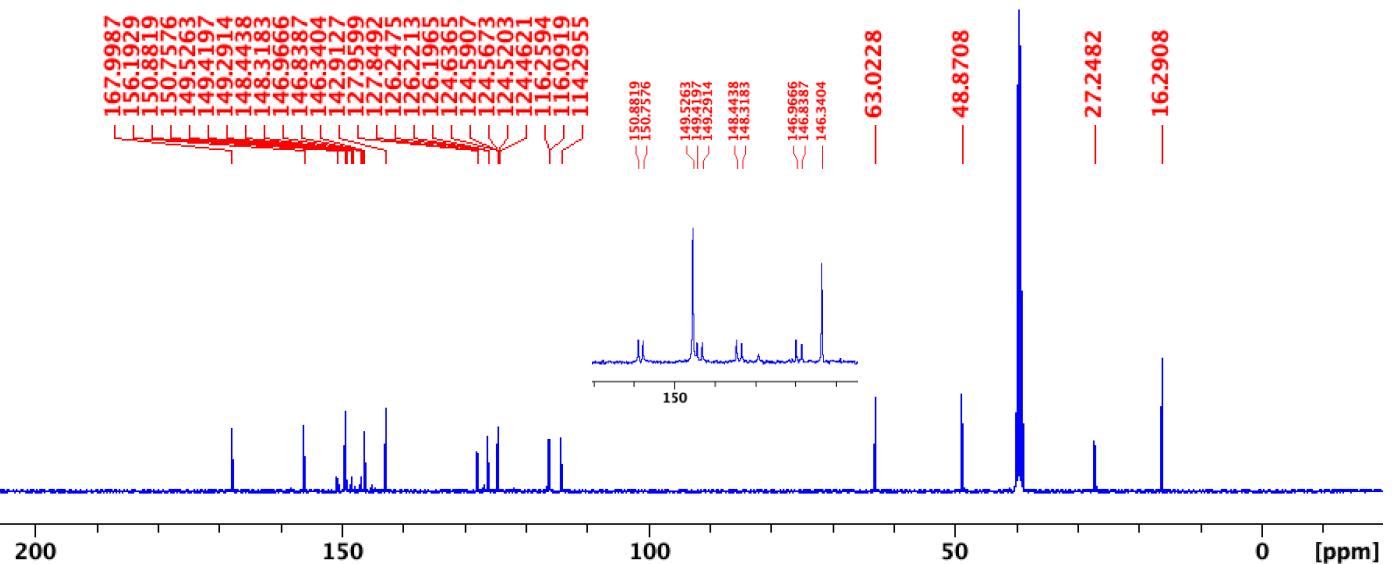


2-(2,3-Difluorobenzylmercapto)-5-chloropyrido[3,4-d]pyrimidine-4-one (8)

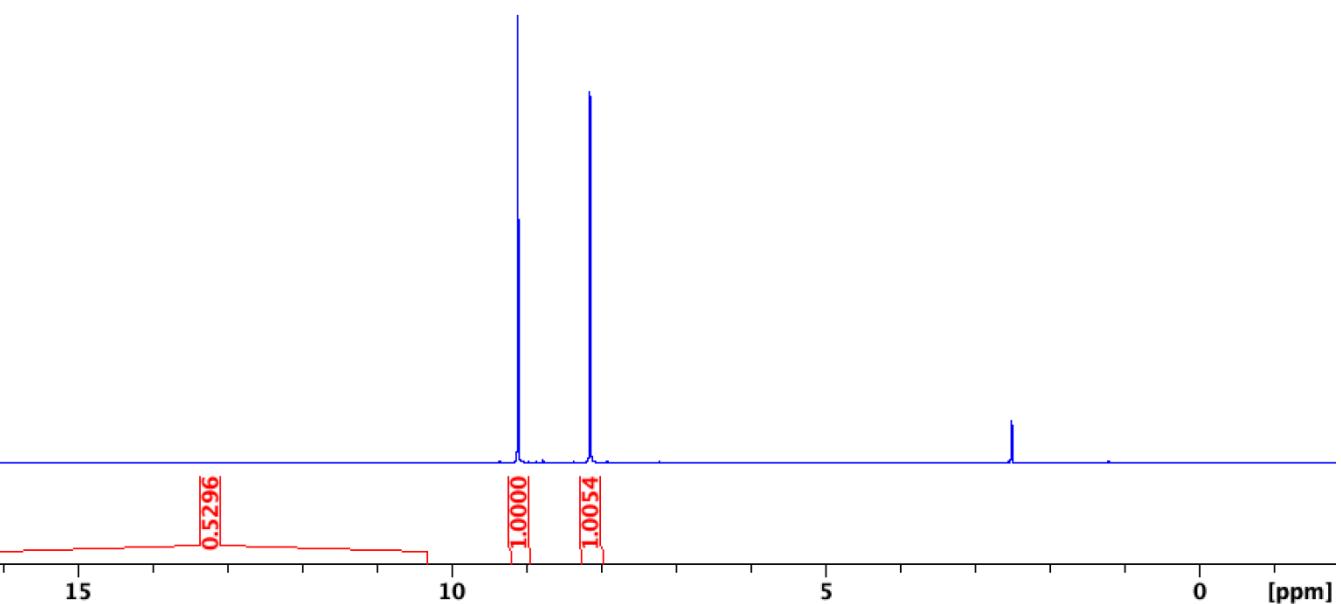
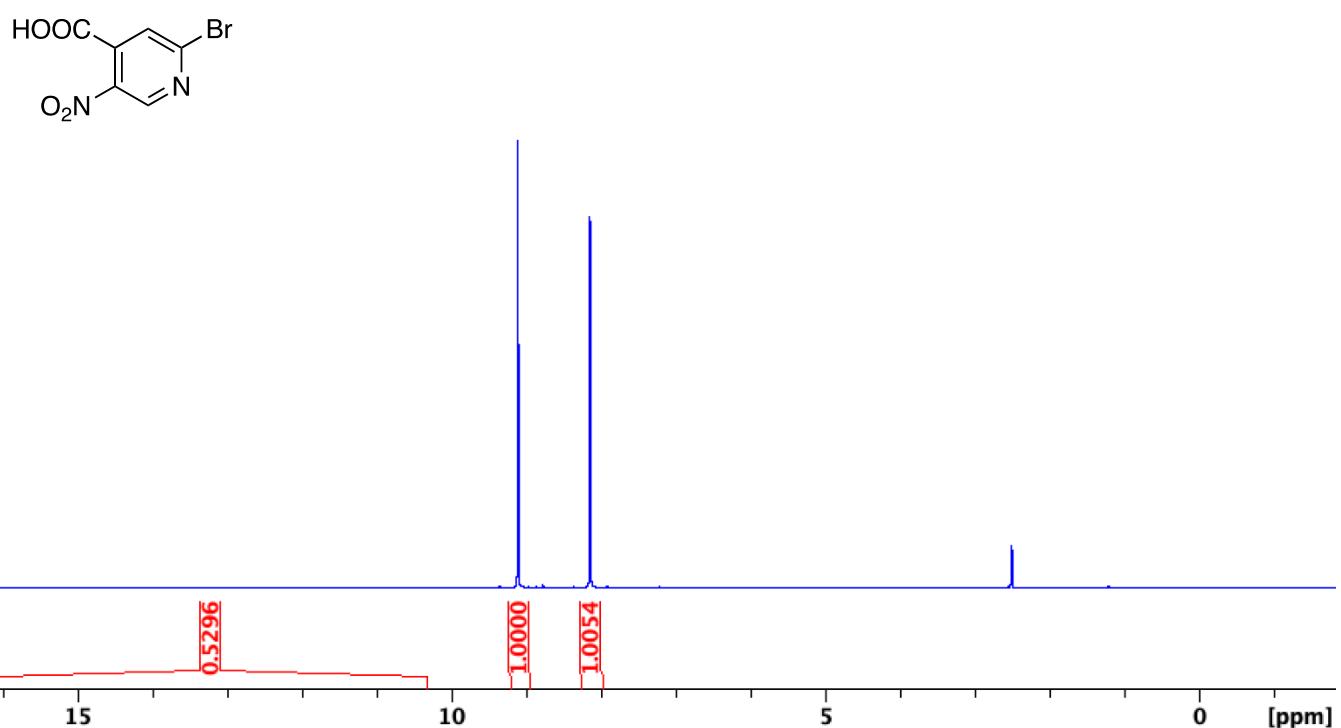


(2*R*)-2-[(5-Chloro-2-(2,3-difluorobenzylmercapto)-pyrido[3,4-d]pyrimidine-4-yl)amino]propanol (9)

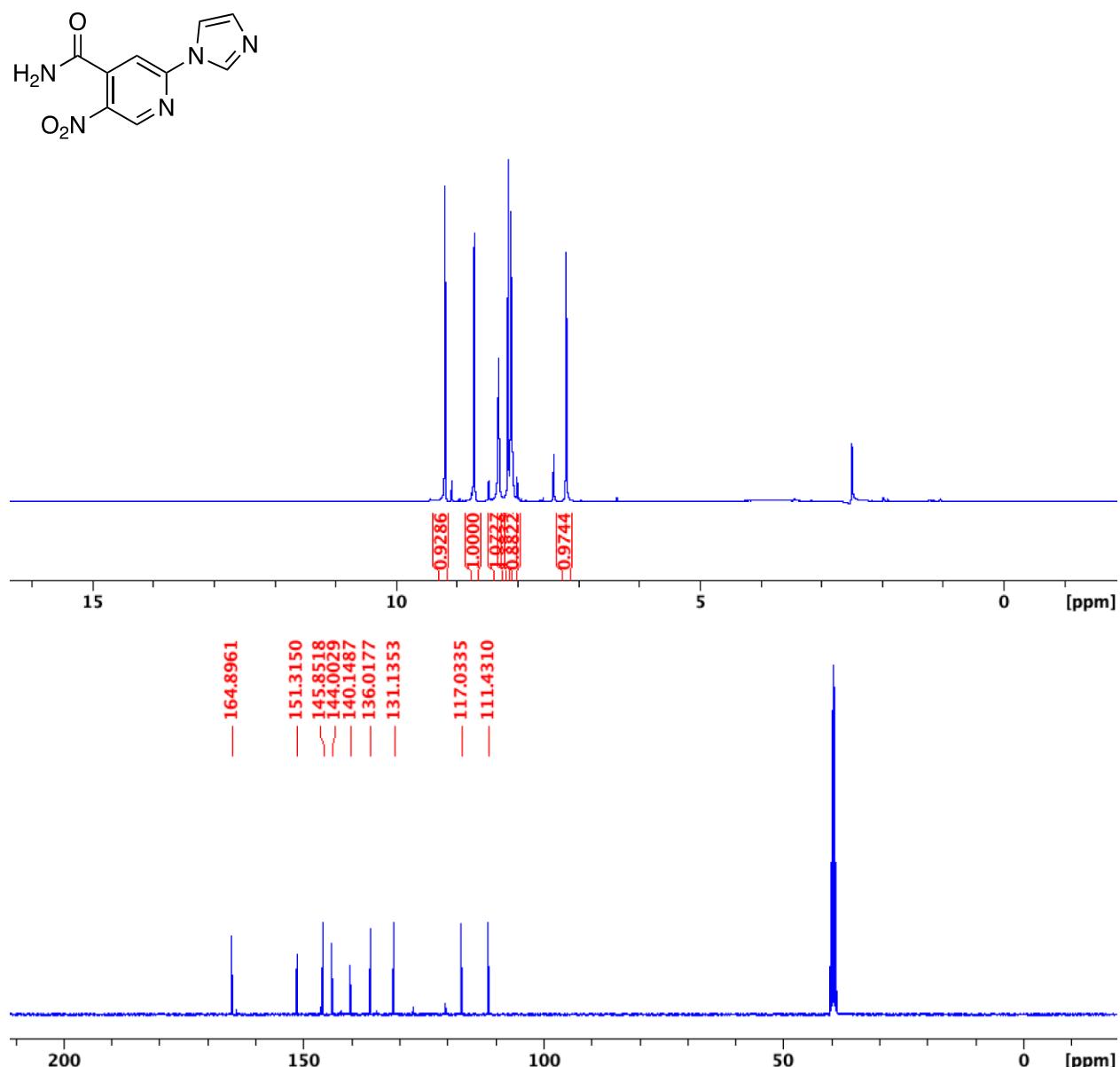




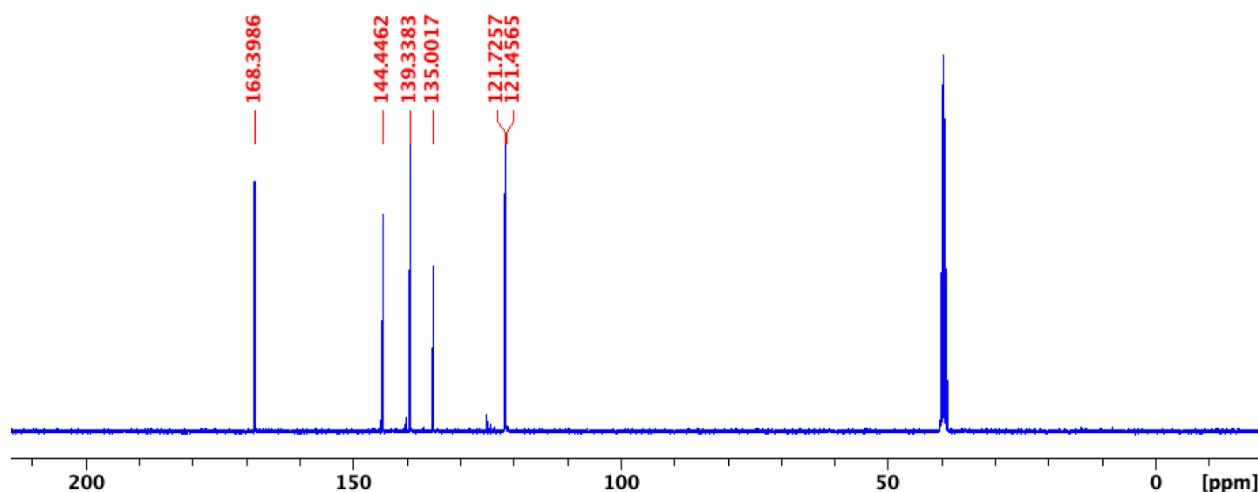
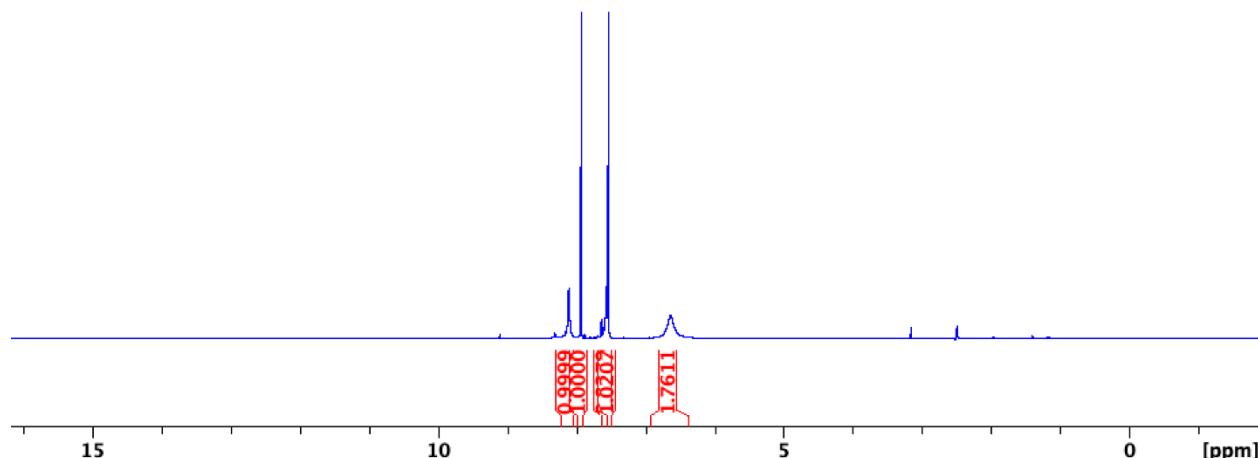
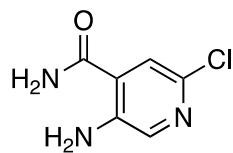
2-Bromo-5-nitropyridine-4-carboxylic acid (11)



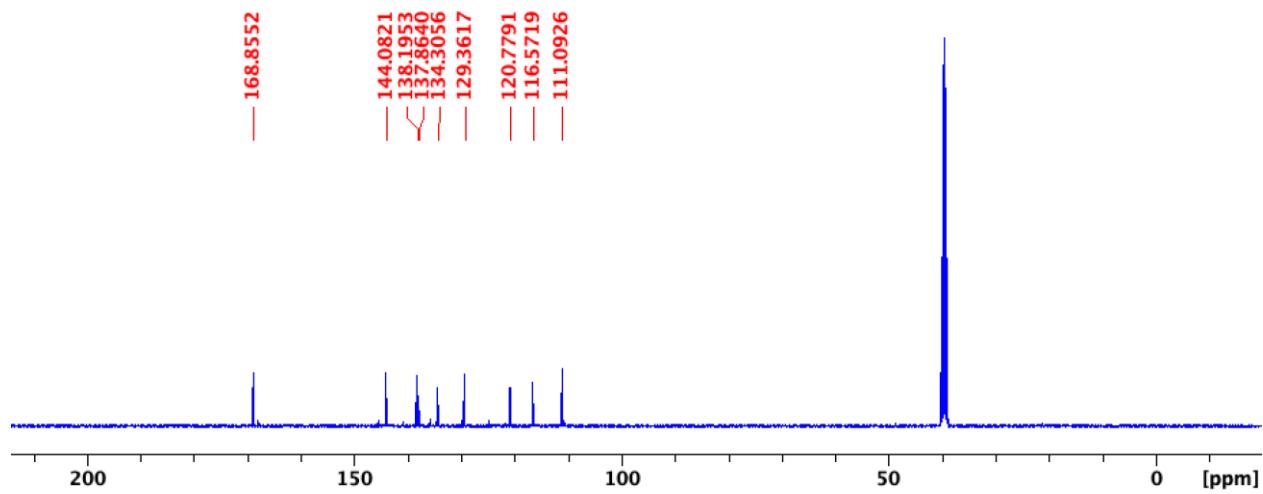
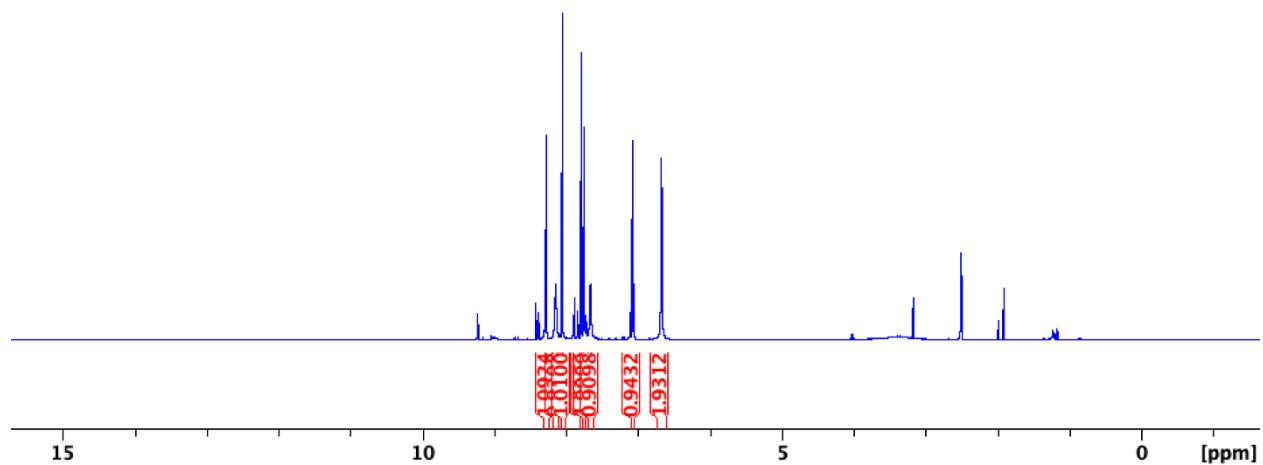
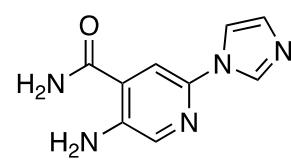
2-Imidazolyl-5-nitropyridine-4-carboxamide (12b)



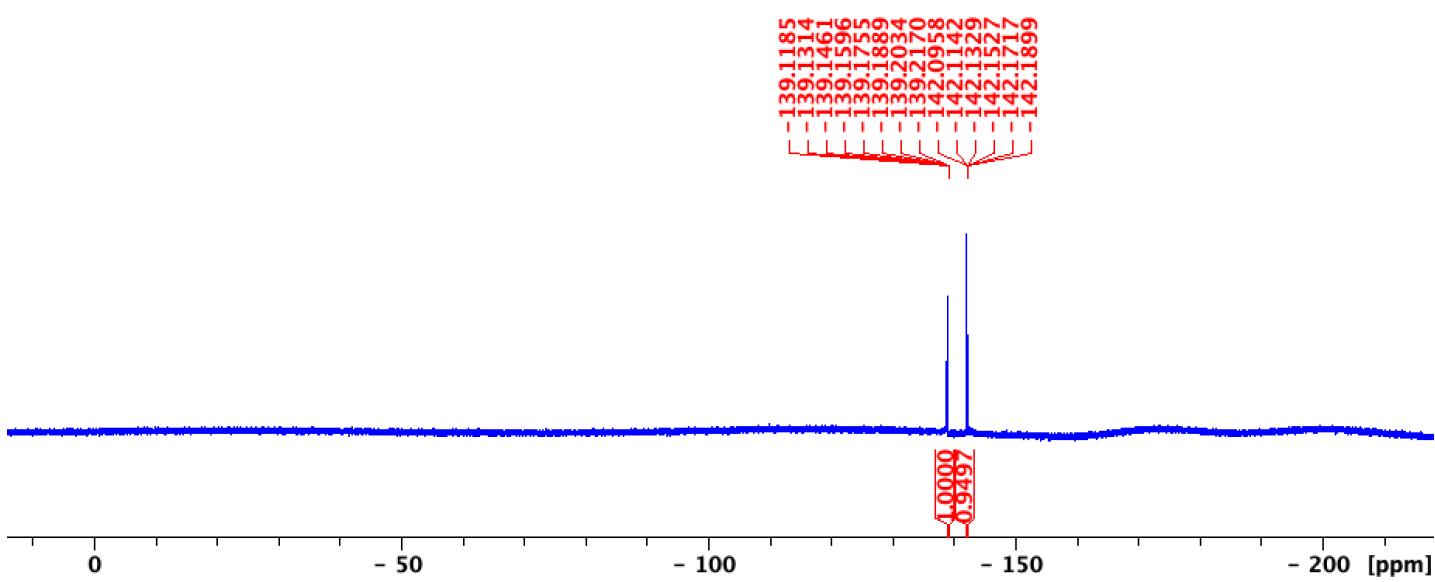
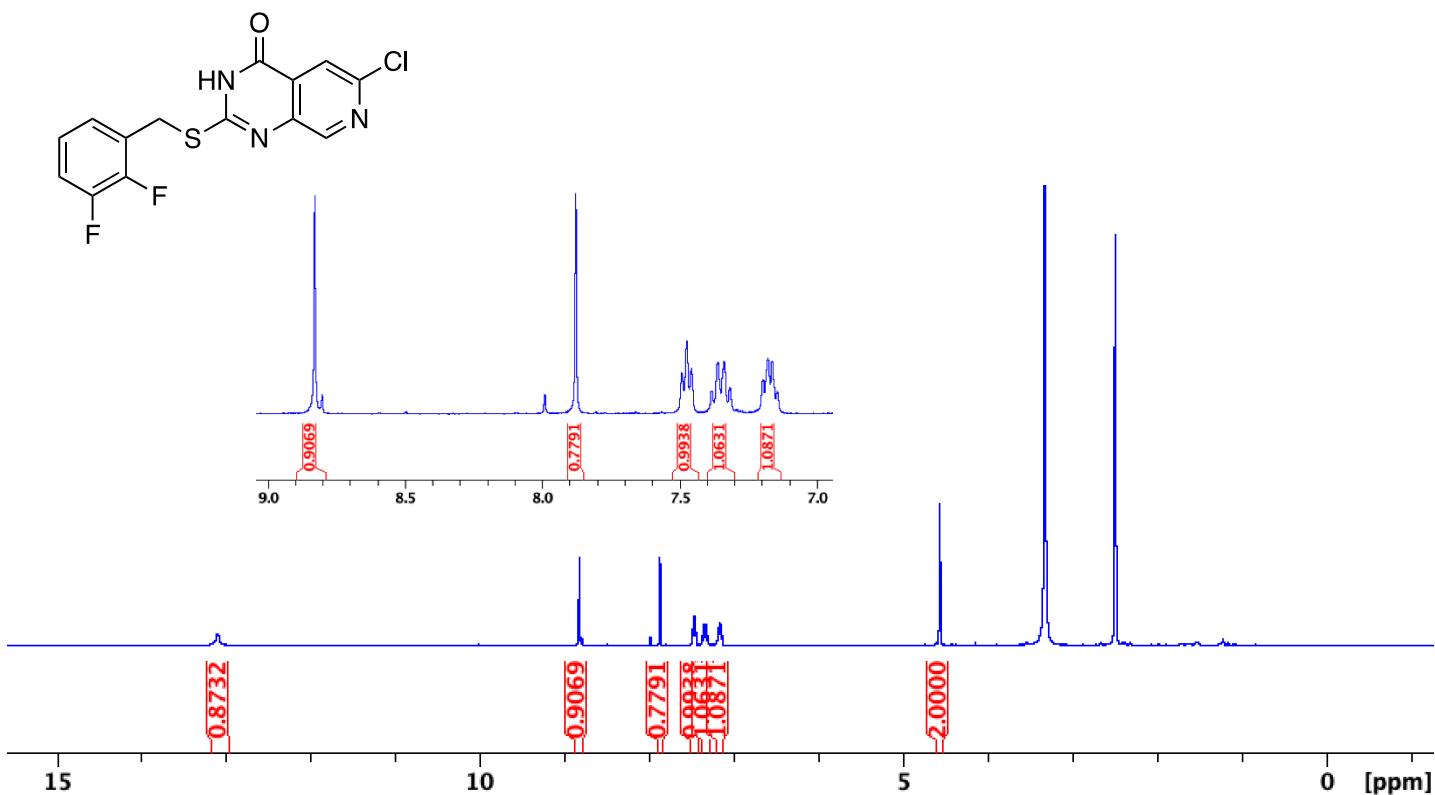
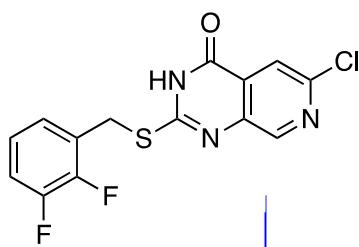
2-Chloro-5-aminopyridine-4-carboxamide (13a)



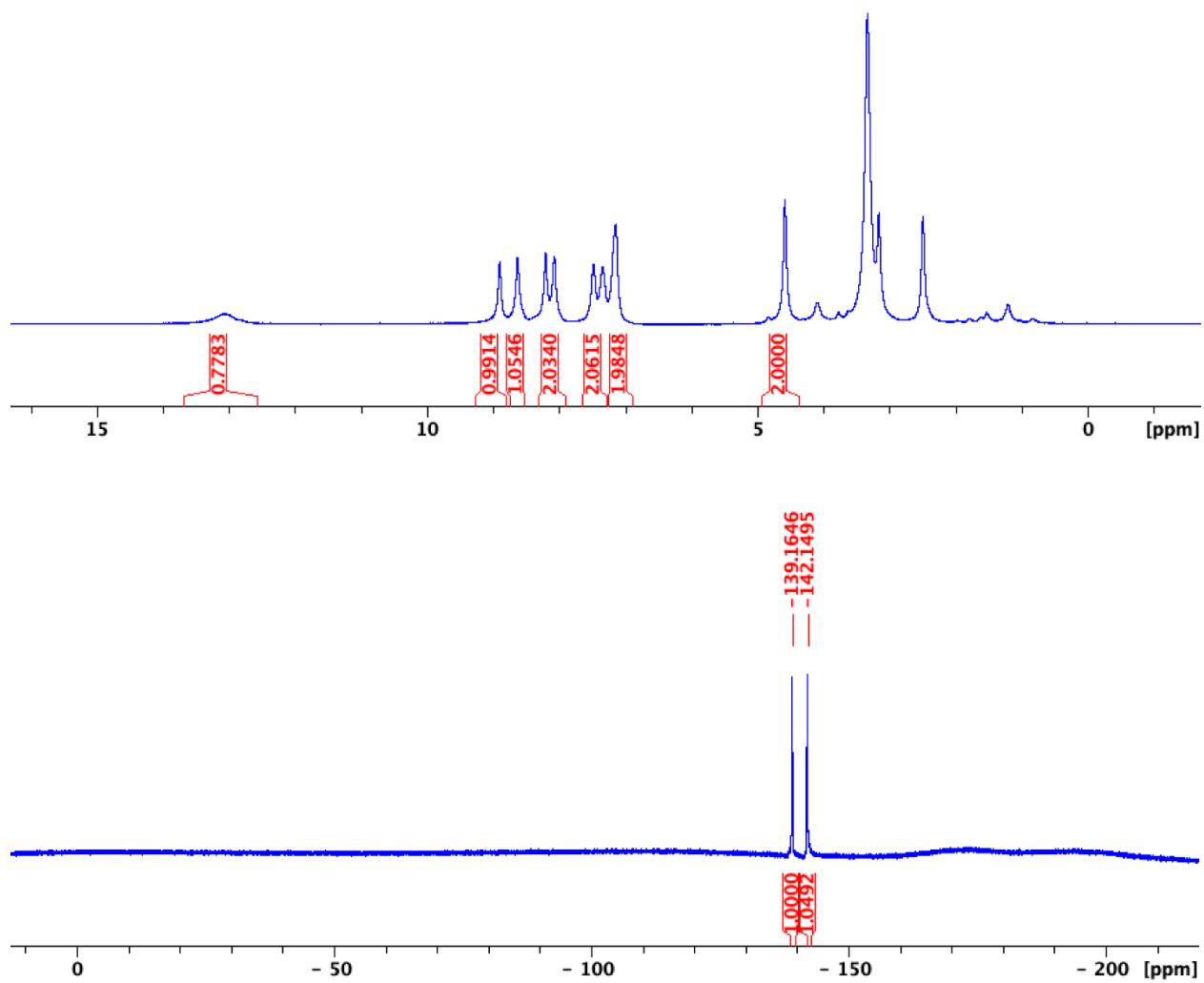
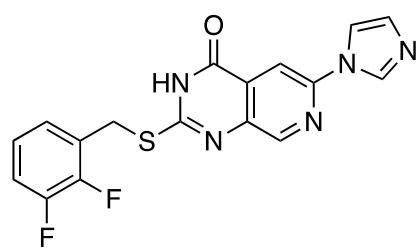
5-Amino-2-imidazolyl-pyridine-4-carboxamide (13b)



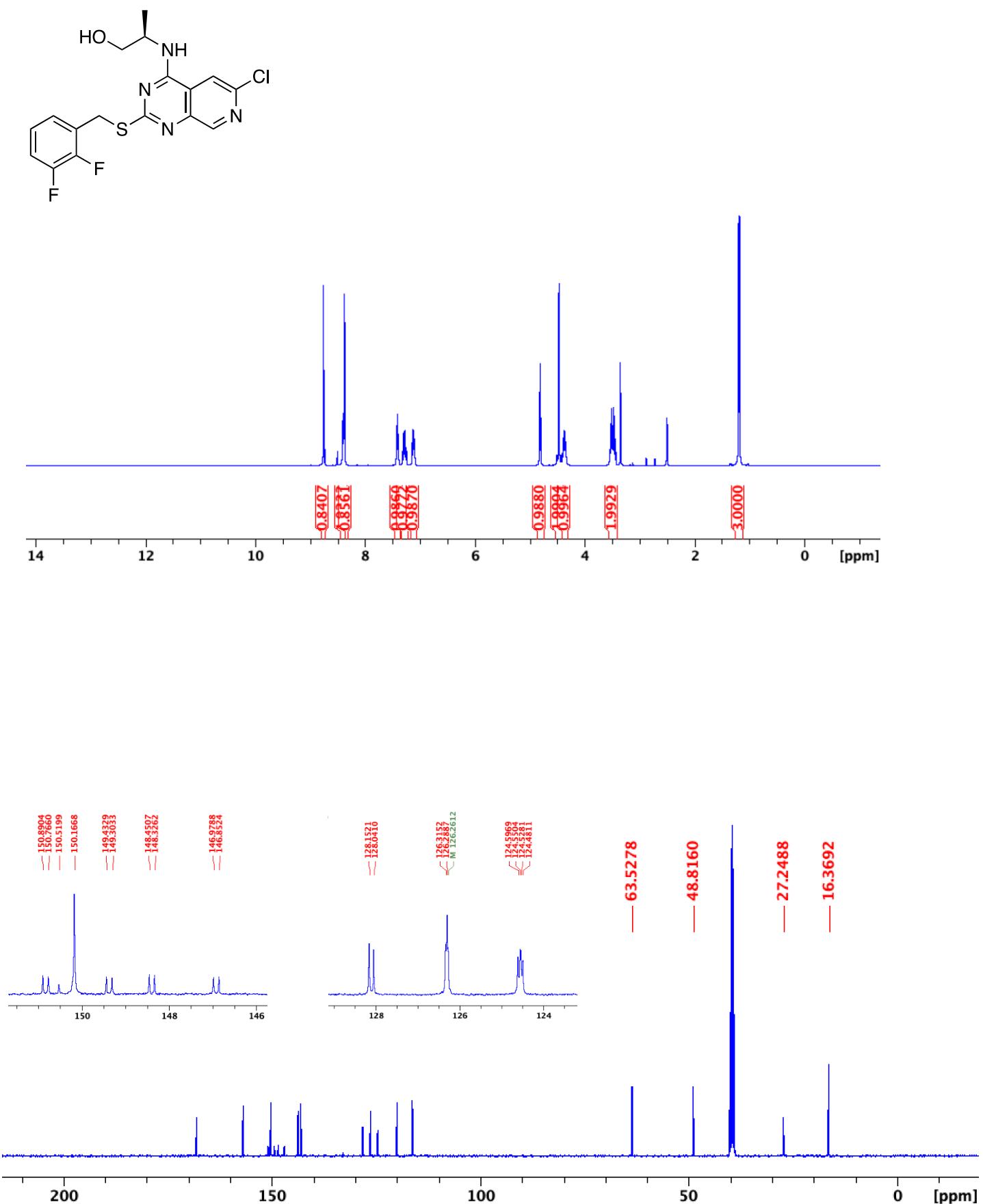
2-(2,3-Difluorobenzylmercapto)-6-chloropyrido[3,4-d]pyrimidine-4-one (15a)

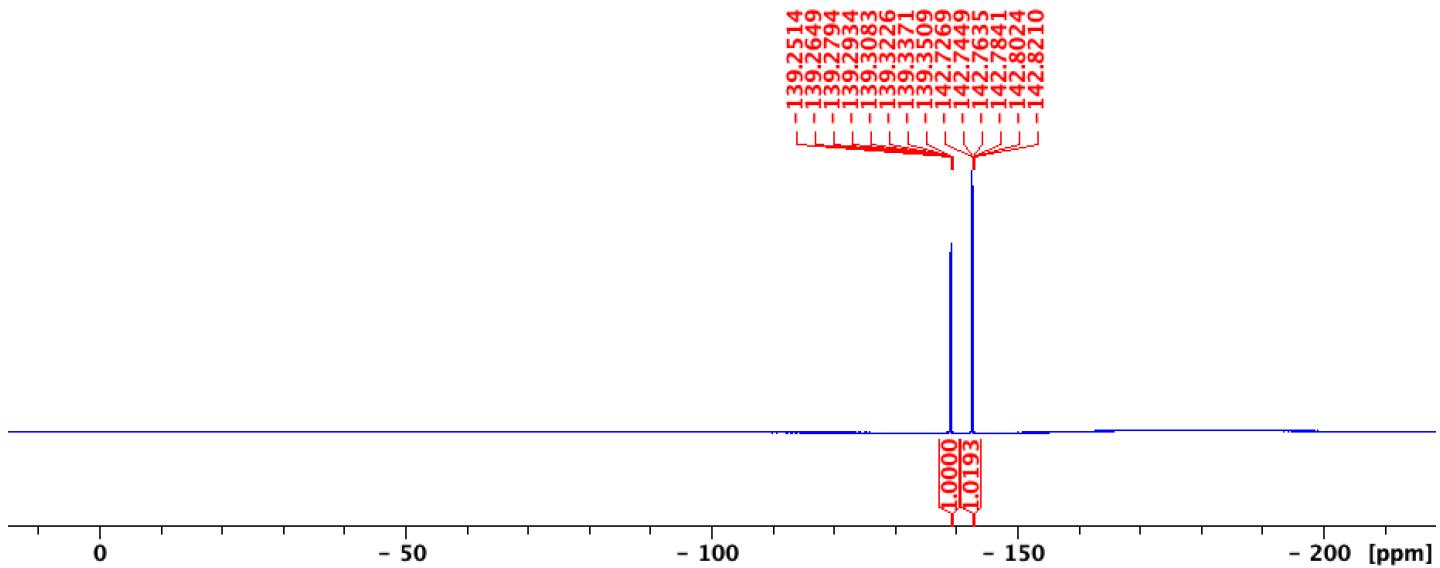


2-(2,3-Difluorobenzylthio)-6-imidazolyl-pyrido[3,4-d]pyrimidine-4-one (15b)

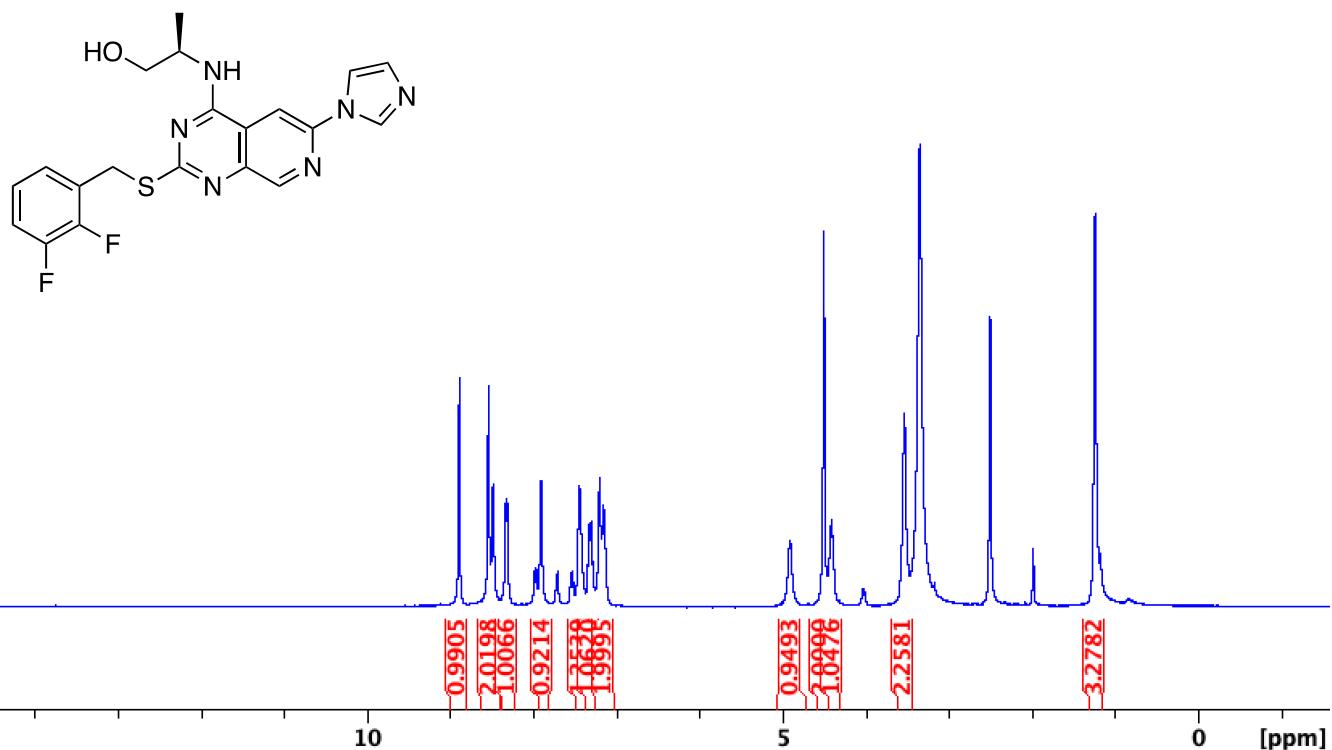


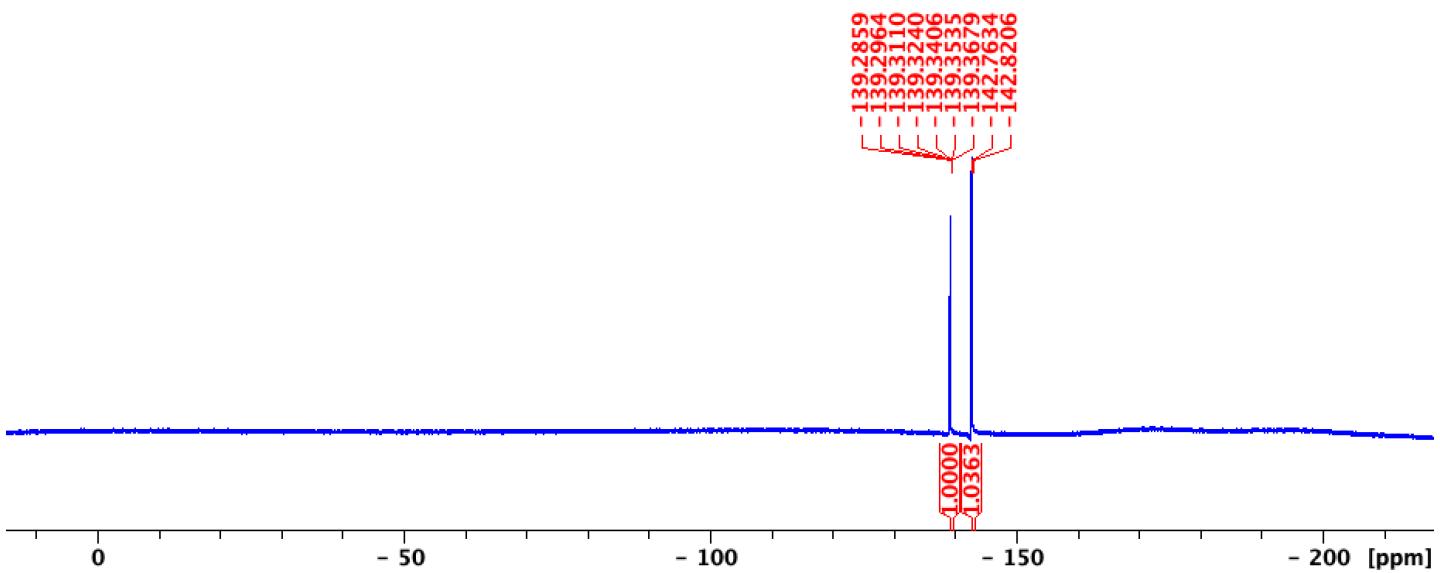
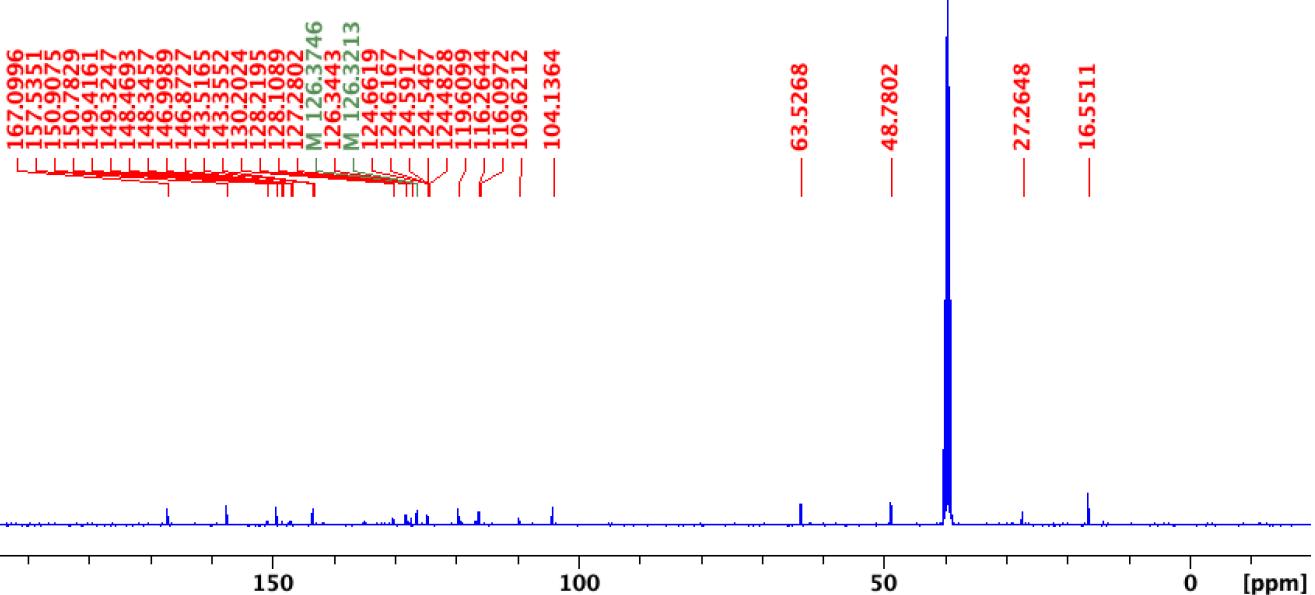
(2*R*)-2-[(6-Chloro-2-(2,3-difluorobenzylmercapto)-pyrido[3,4-*d*]pyrimidine-4-yl)amino]propanol (16a)



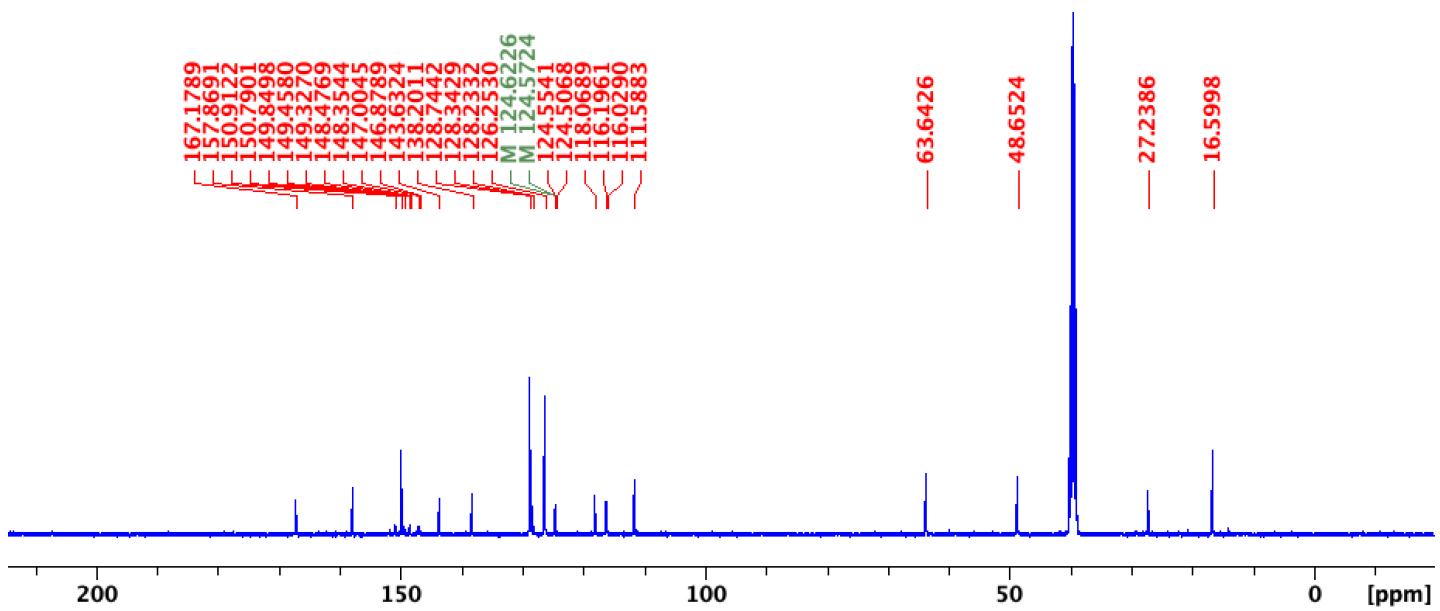
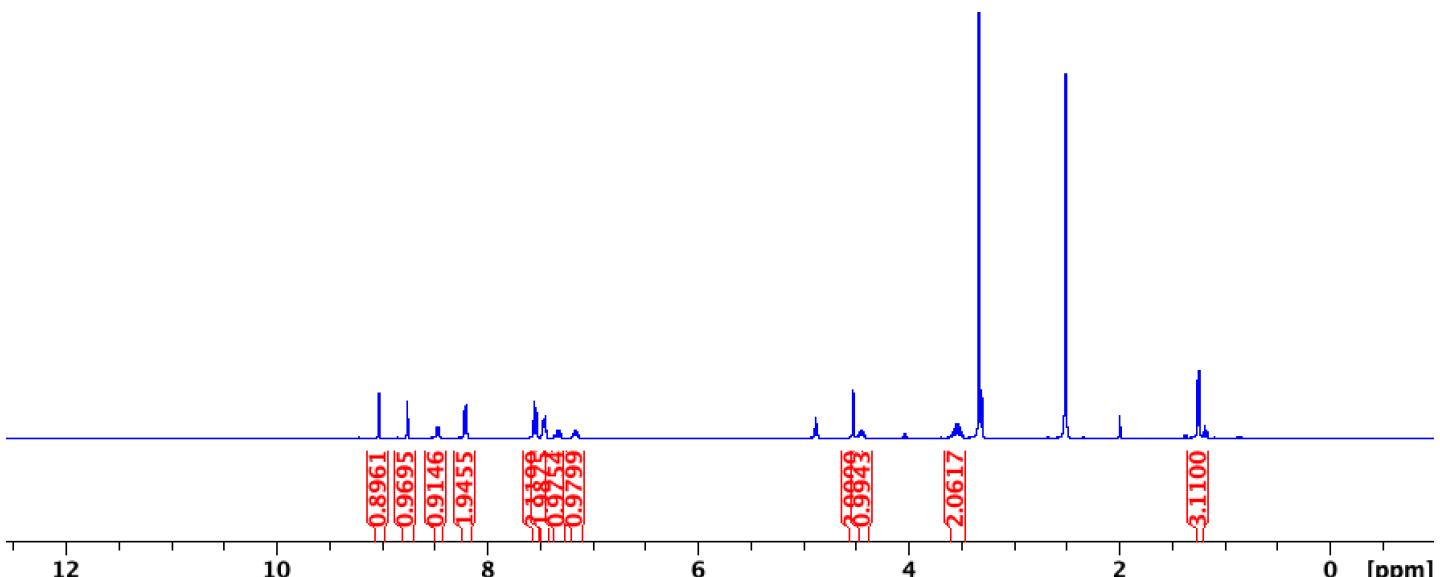
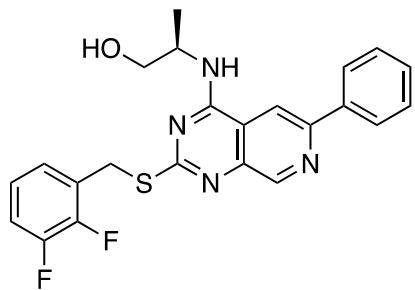


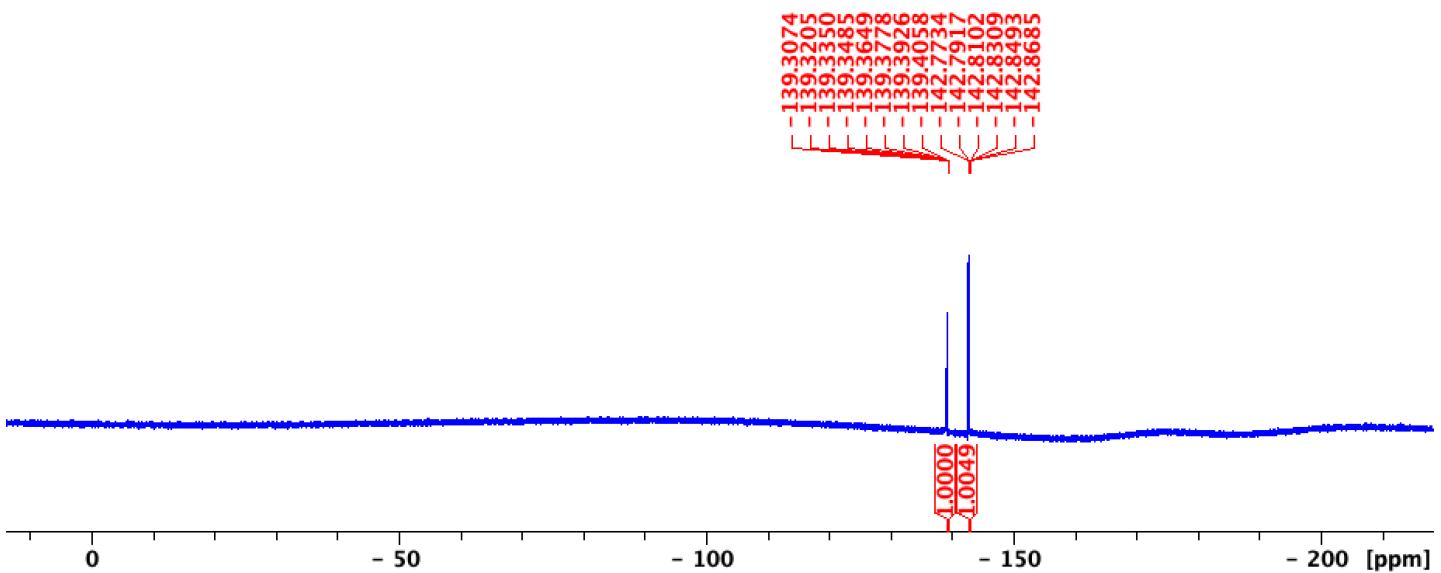
(2*R*)-2-[(6-Imidazolyl-2-(2,3-difluorobenzylmercapto)-pyrido[3,4-*d*]pyrimidine-4-yl)amino]propanol (16b)



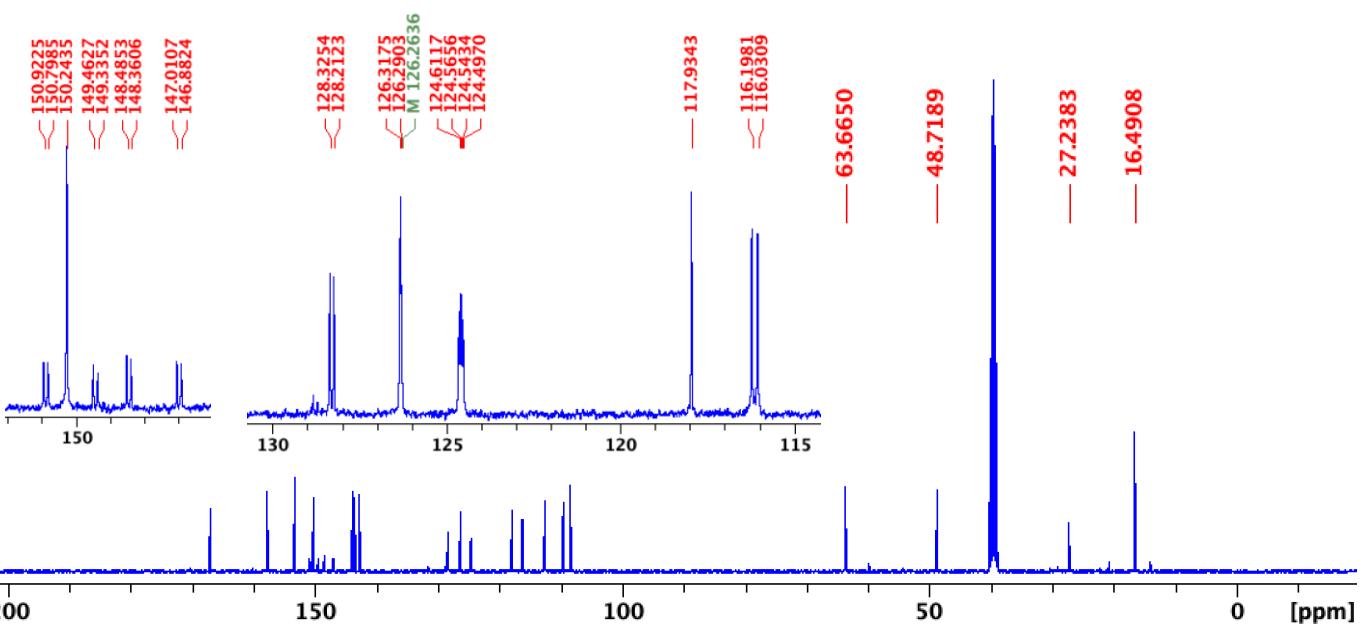
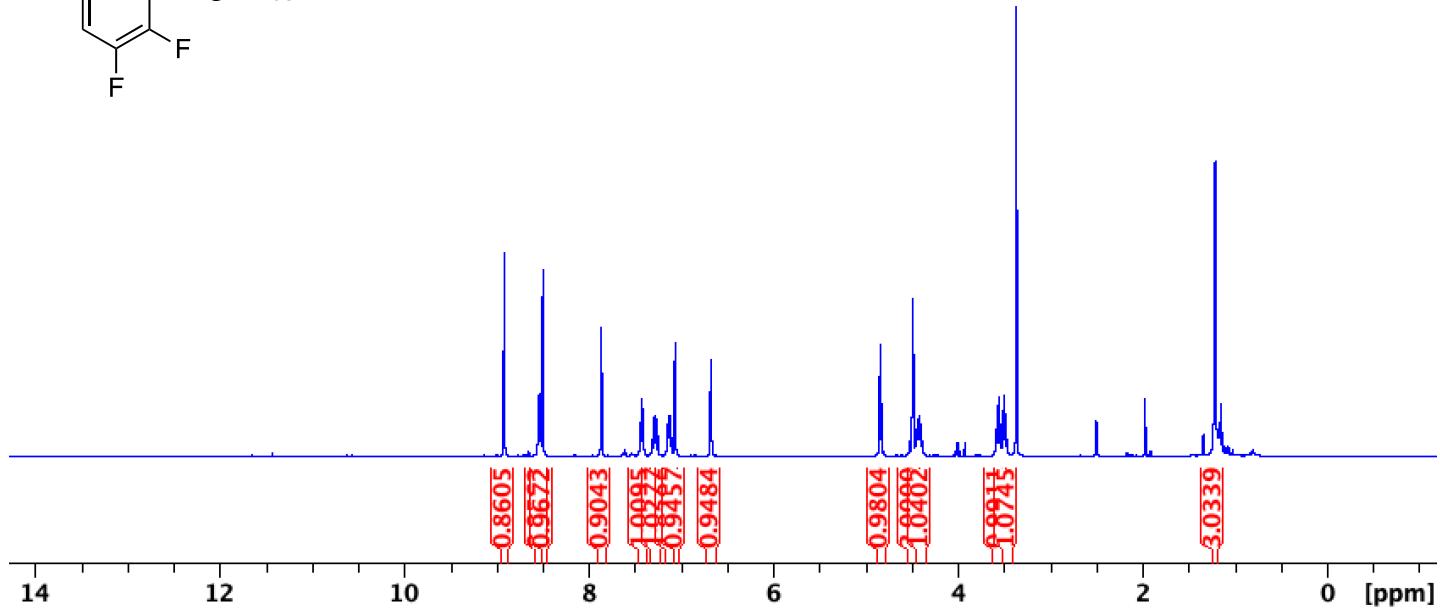
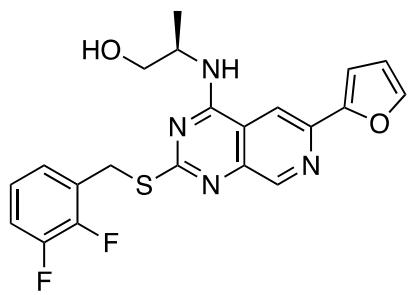


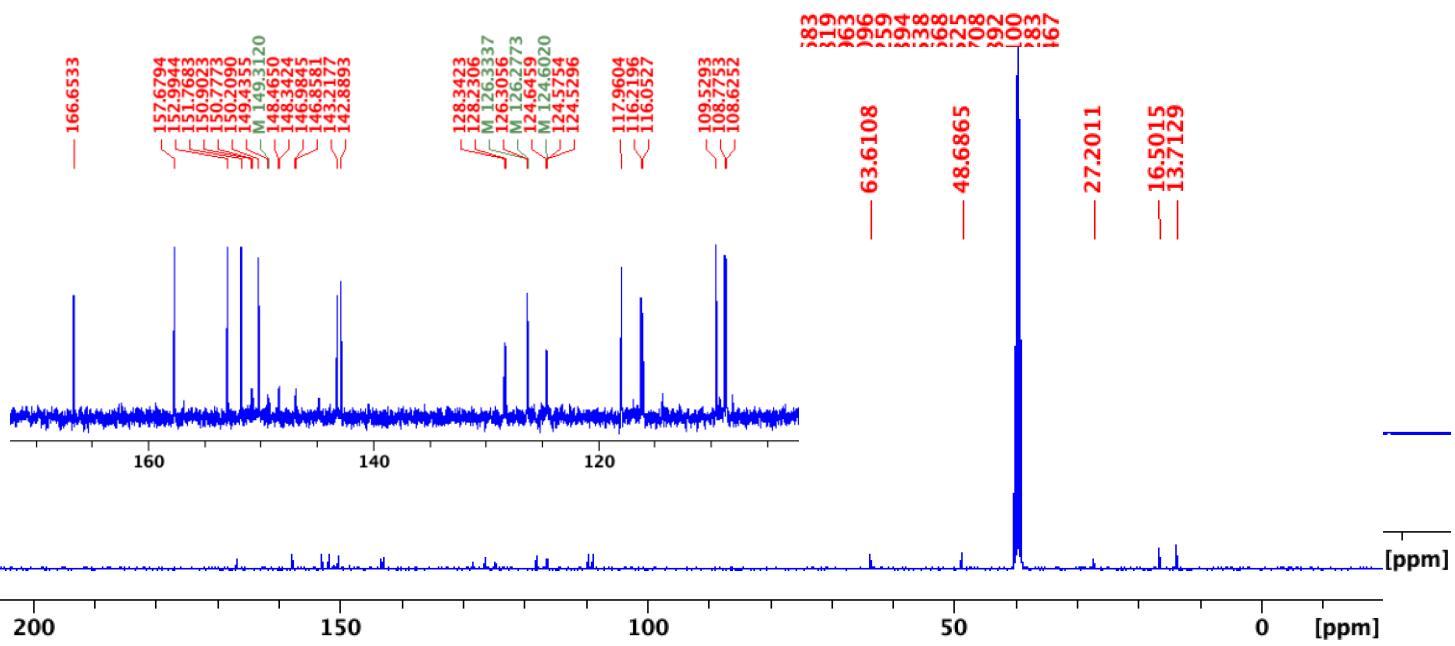
(2*R*)-2-[(2-(2,3-Difluorobenzylmercapto)-6-phenyl-pyrido[3,4-*d*]pyrimidine-4-yl)amino]propanol (17a)



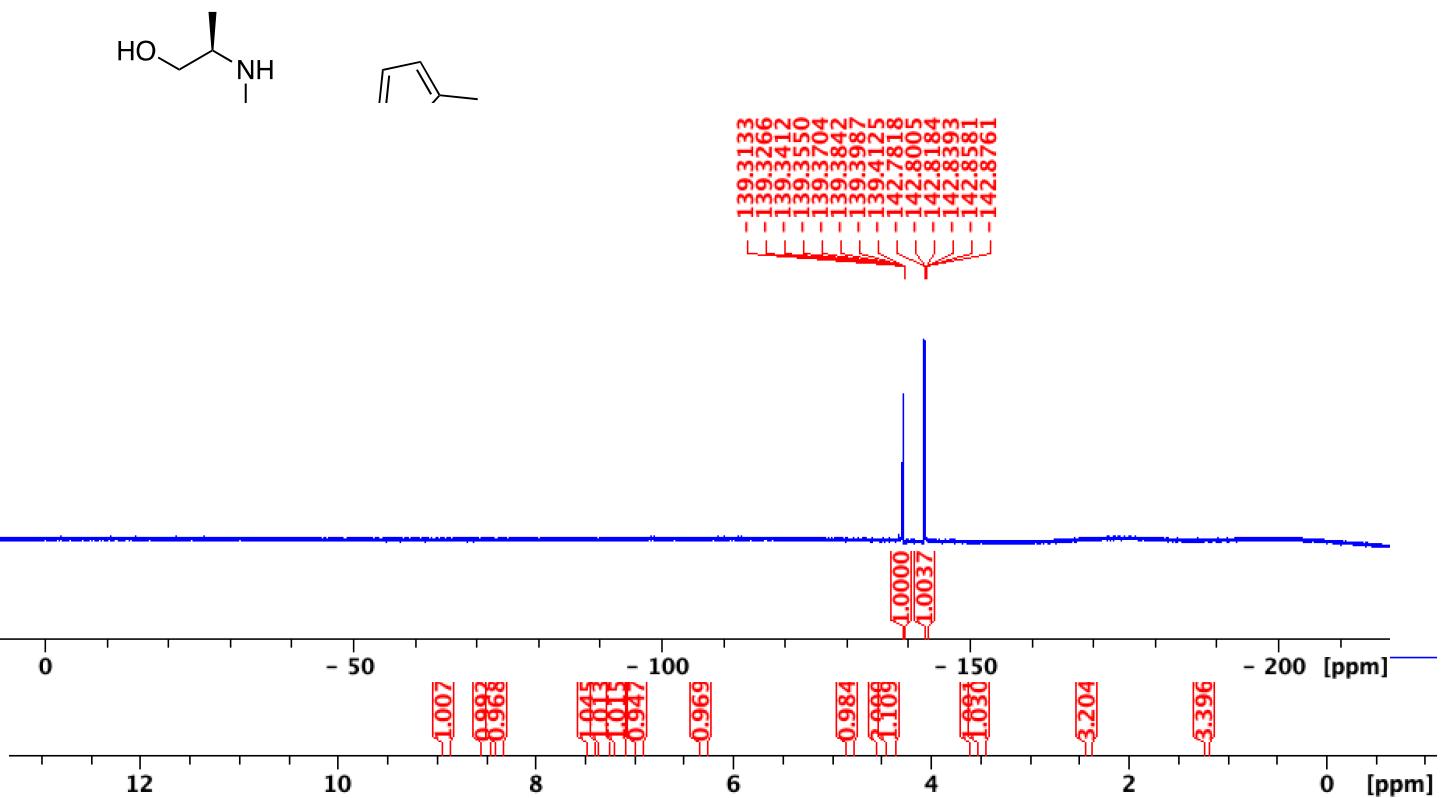


(2R)-2-[(2-(2,3-Difluorobenzylmercapto)-6-(2-furanyl)-pyrido[3,4-d]pyrimidine-4-yl)amino]propanol (17b)

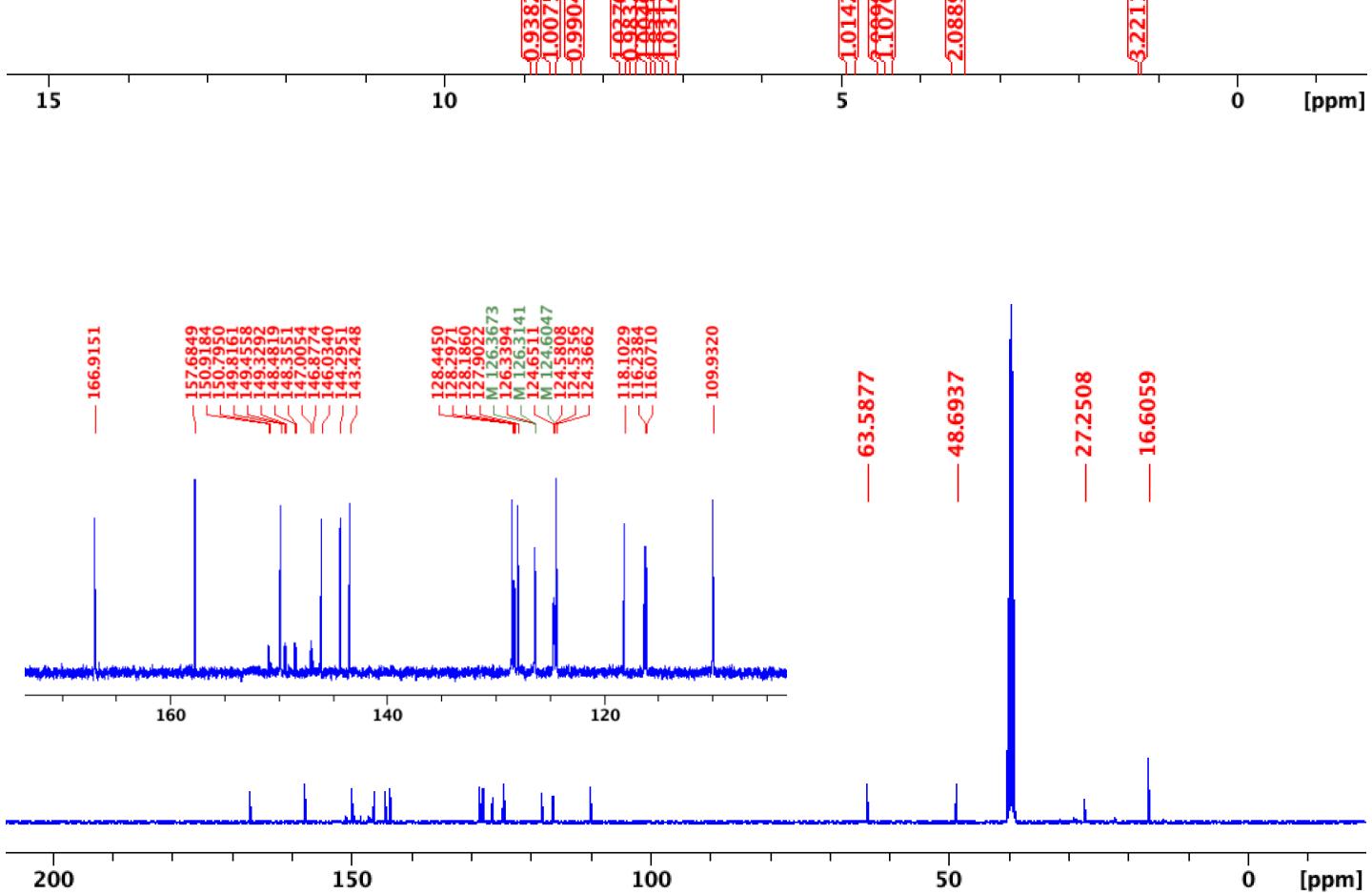
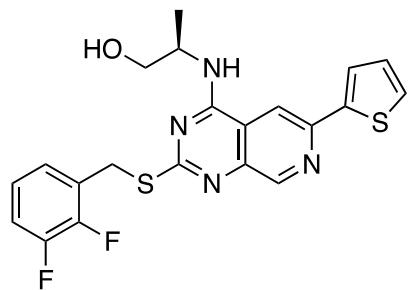


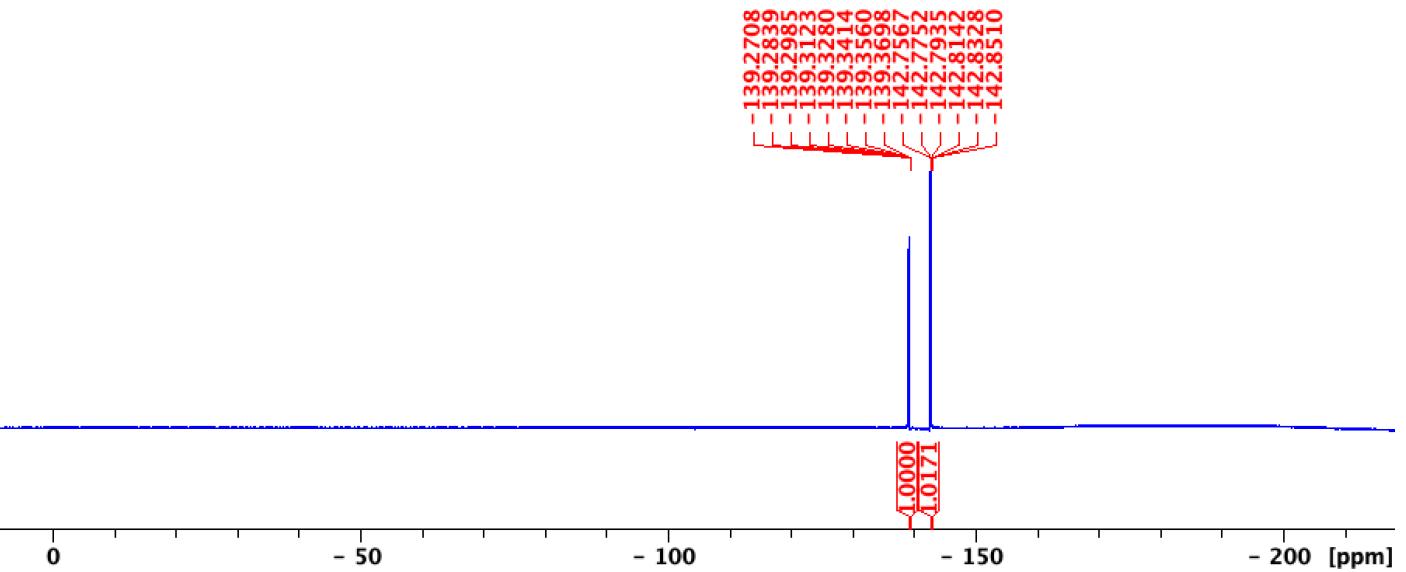


(2*R*)-2-[(2-(2,3-Difluorobenzylmercapto)-6-(5-methylfuran-2-yl)-pyrido[3,4-*d*]pyrimidine-4-yl)amino]propanol (17c)

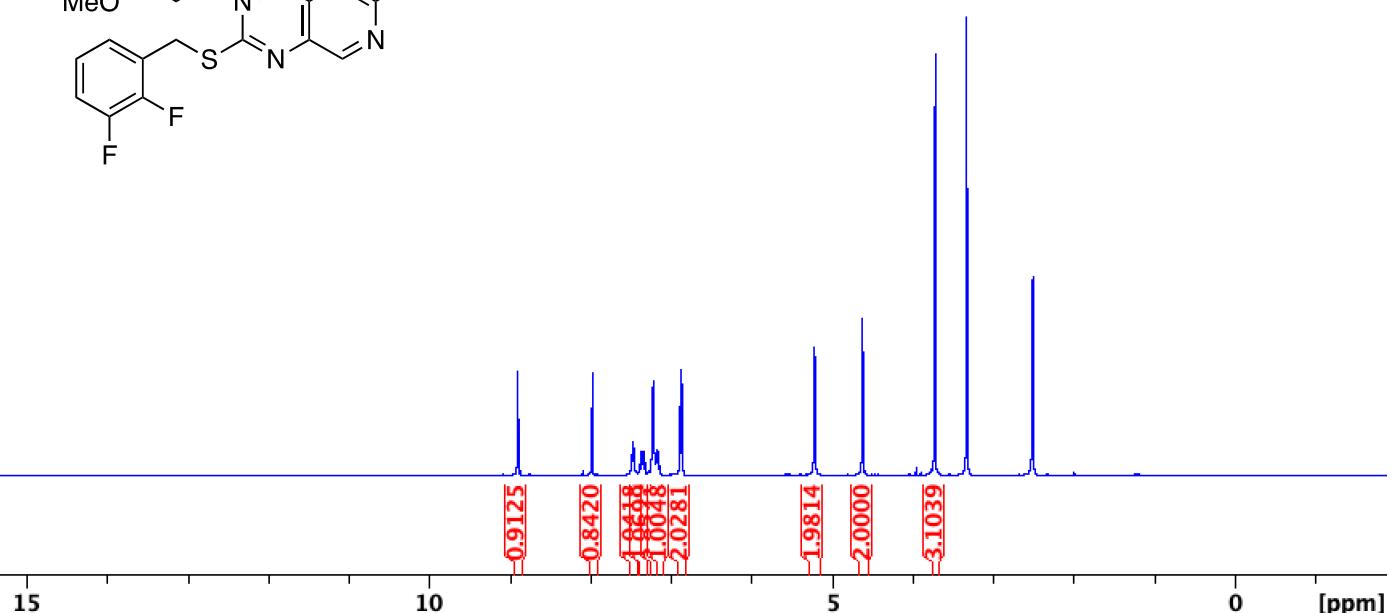
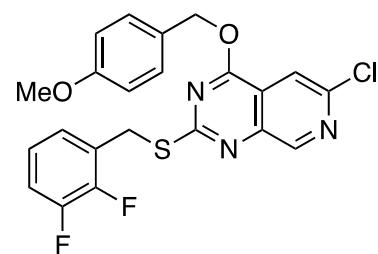


(2*R*)-2-[(2-(2,3-Difluorobenzylmercapto)-6-(2-thienyl)-pyrido[3,4-*d*]pyrimidine-4-yl)amino]propanol (17d)



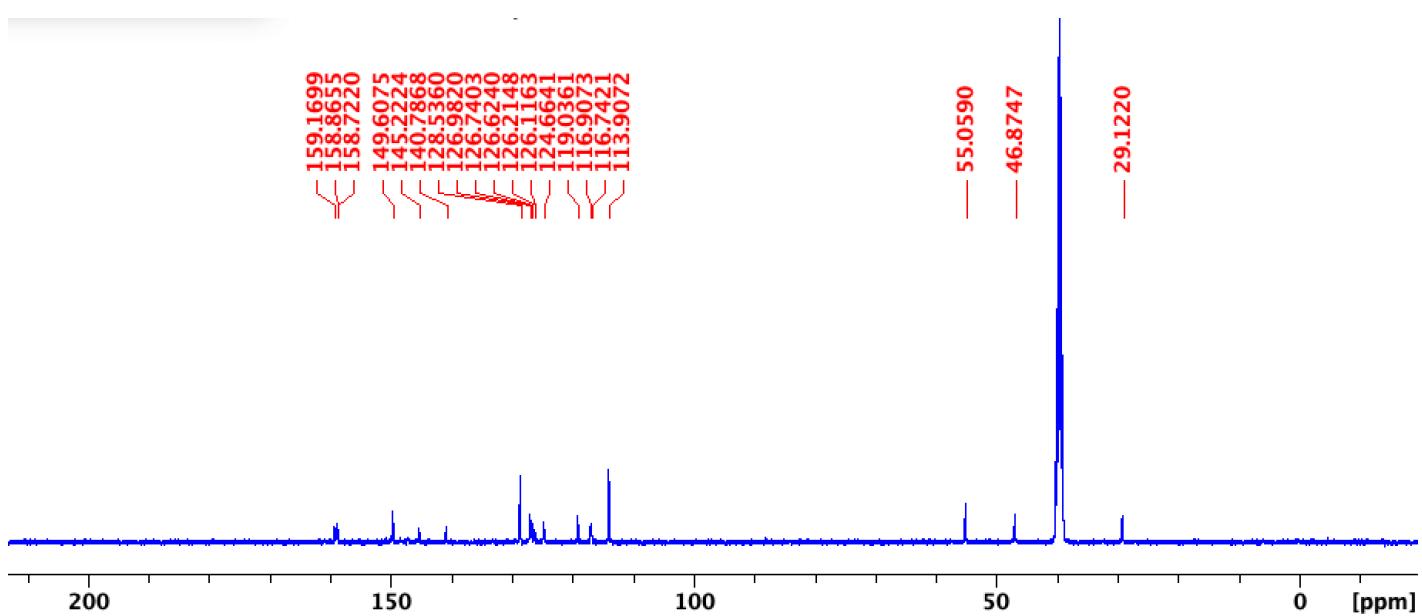


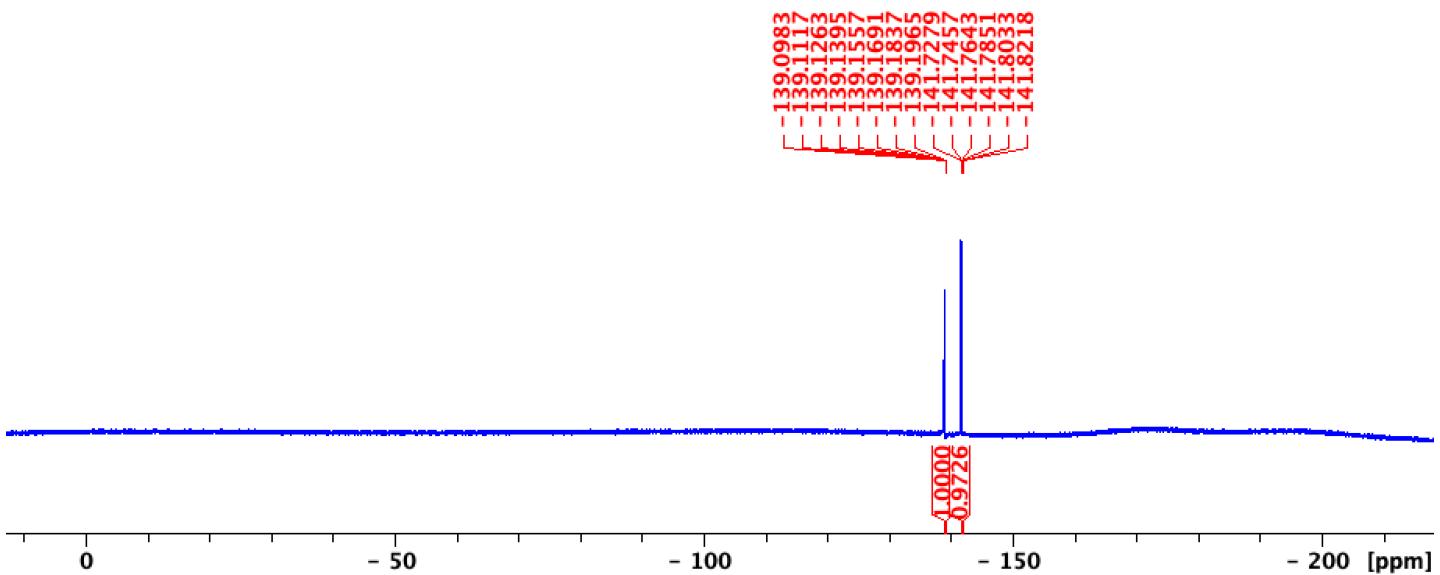
6-Chloro-2-(2,3-difluorobenzylmercapto)-4-(4-methoxybenzyl)-pyrido[3,4-d]pyrimidine (18)



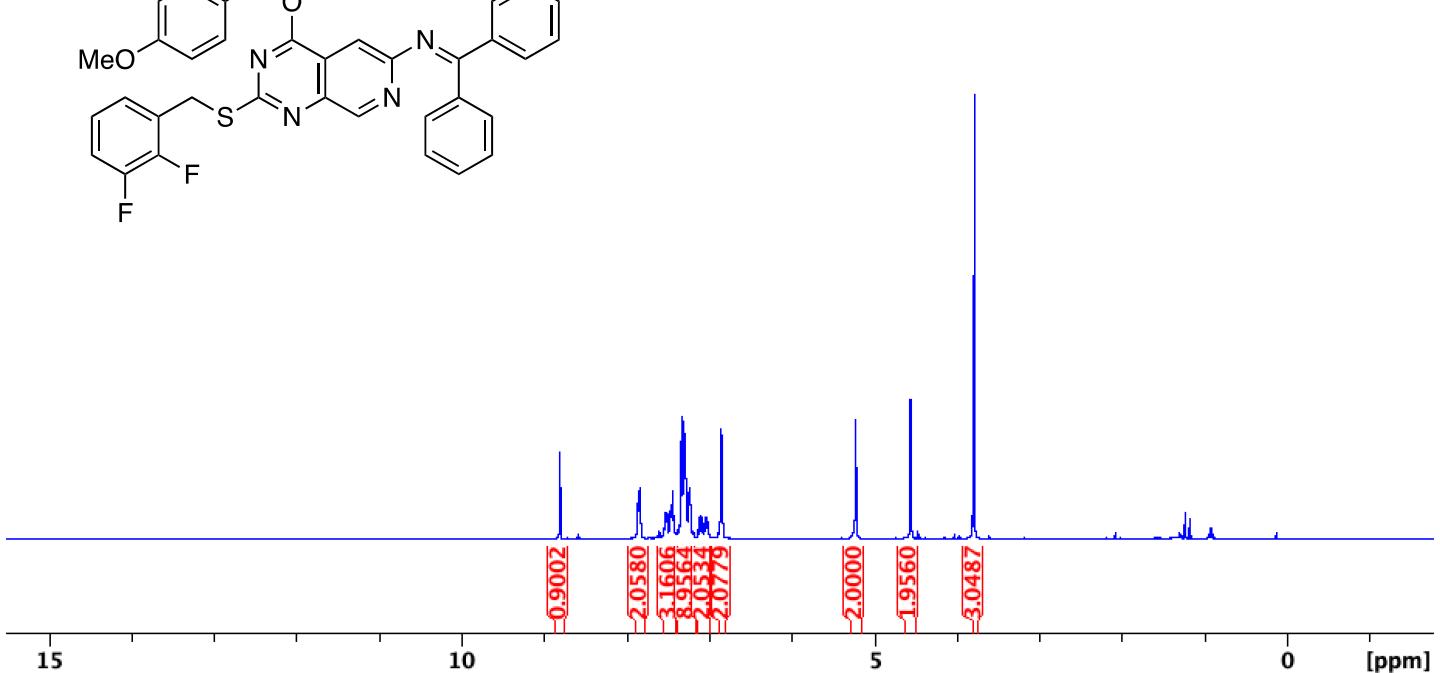
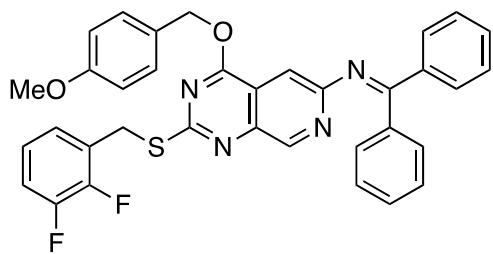
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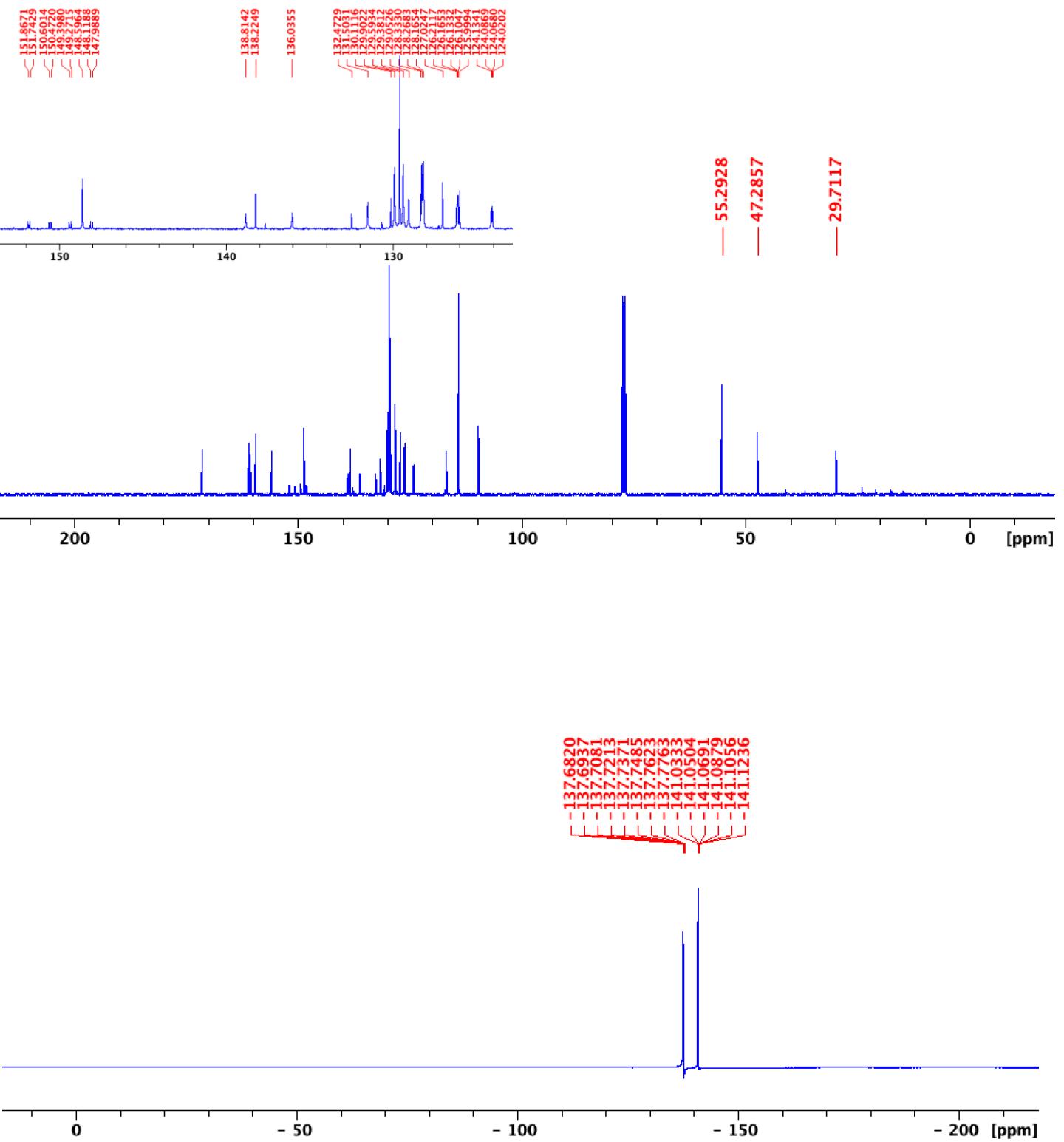
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— 29.1220 —



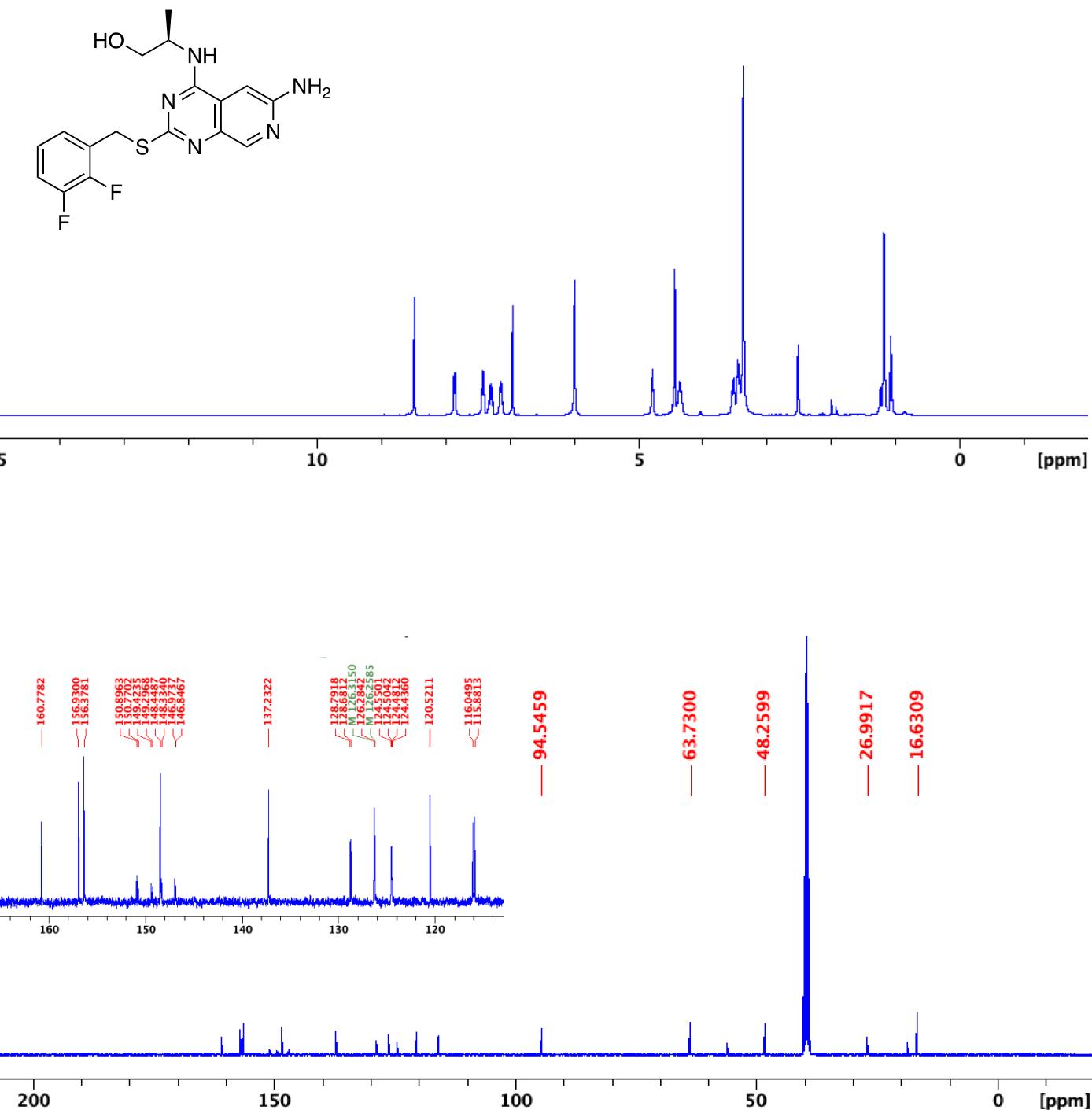


2-(2,3-Difluorobenzylmercapto)-4-(4-methoxybenzyl)-(N-diphenylmethylene)-pyrido[3,4-*d*]pyrimidine-6-amine (**19**)

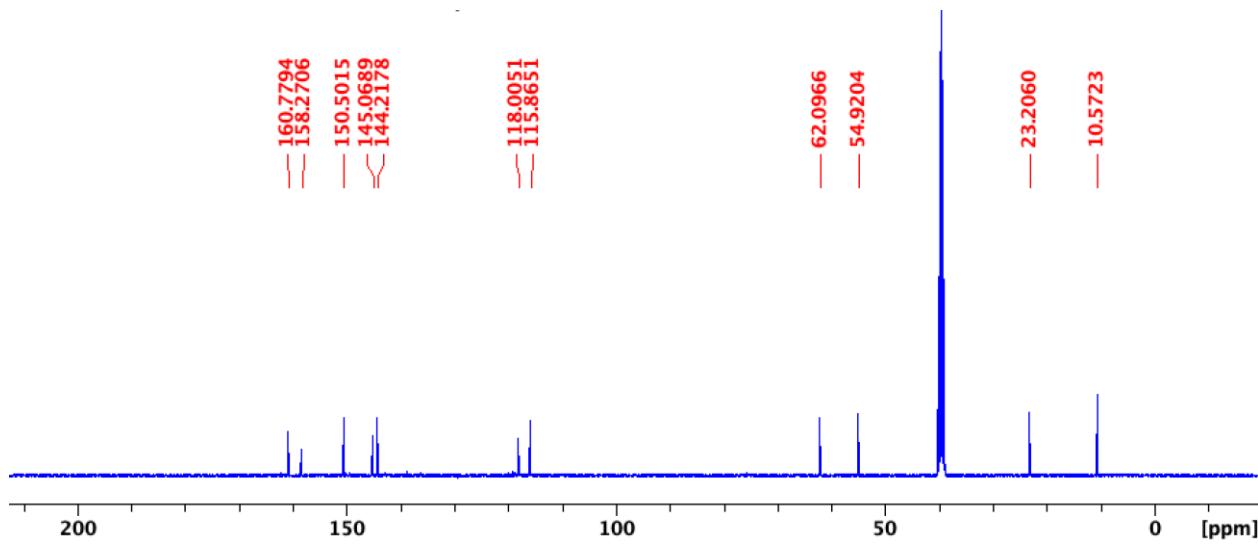
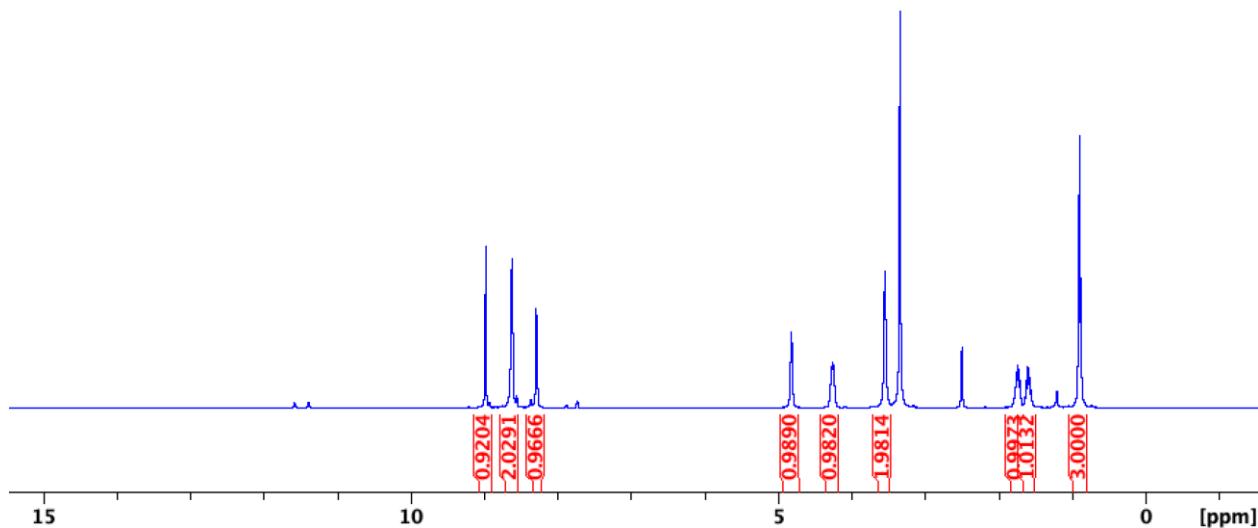
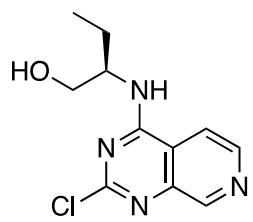




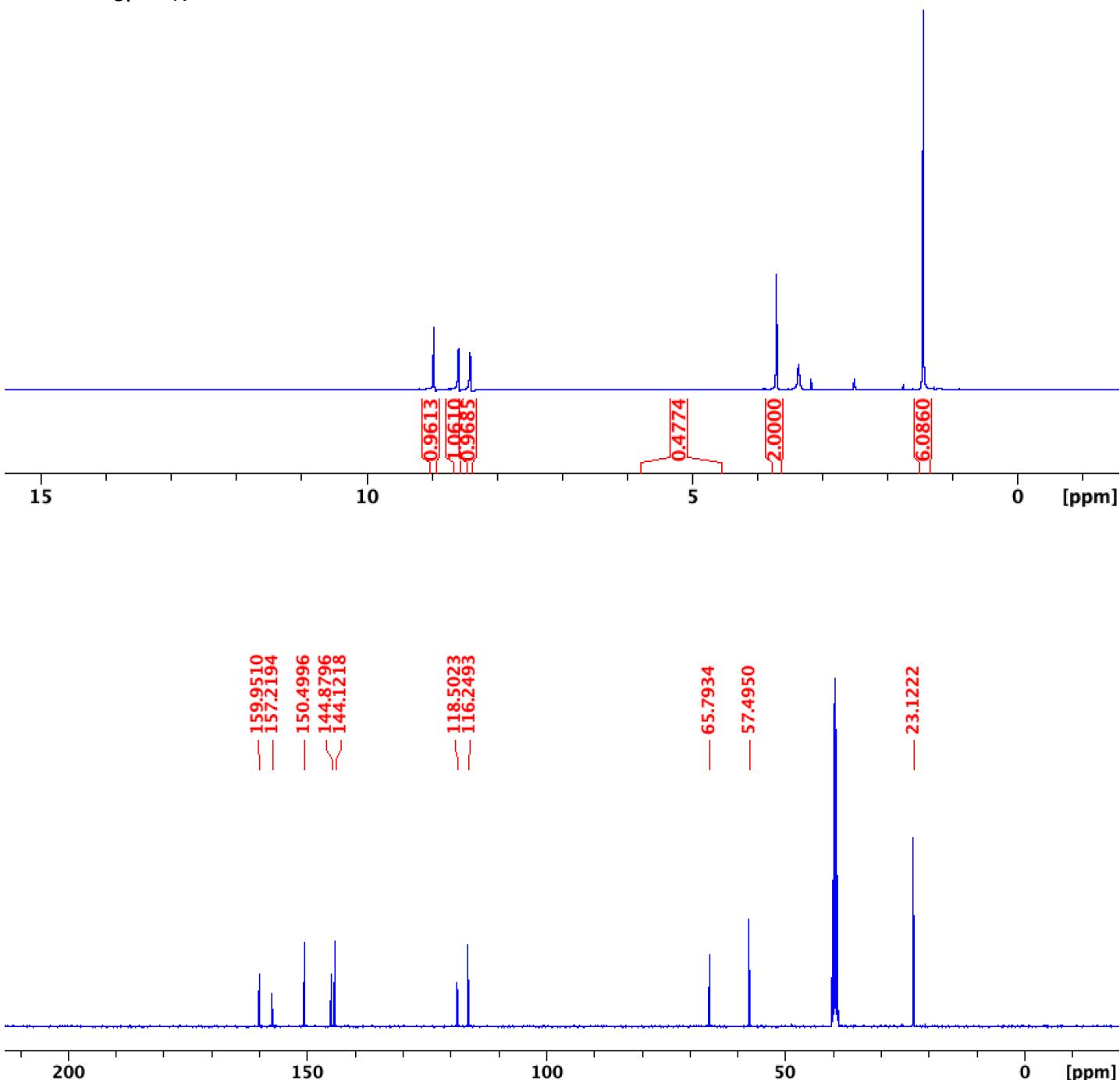
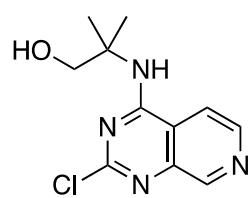
(2*R*)-2-[(6-Amino-2-(2,3-difluorobenzylmercapto)-pyrido[3,4-*d*]pyrimidine-4-yl)amino]propanol (21)



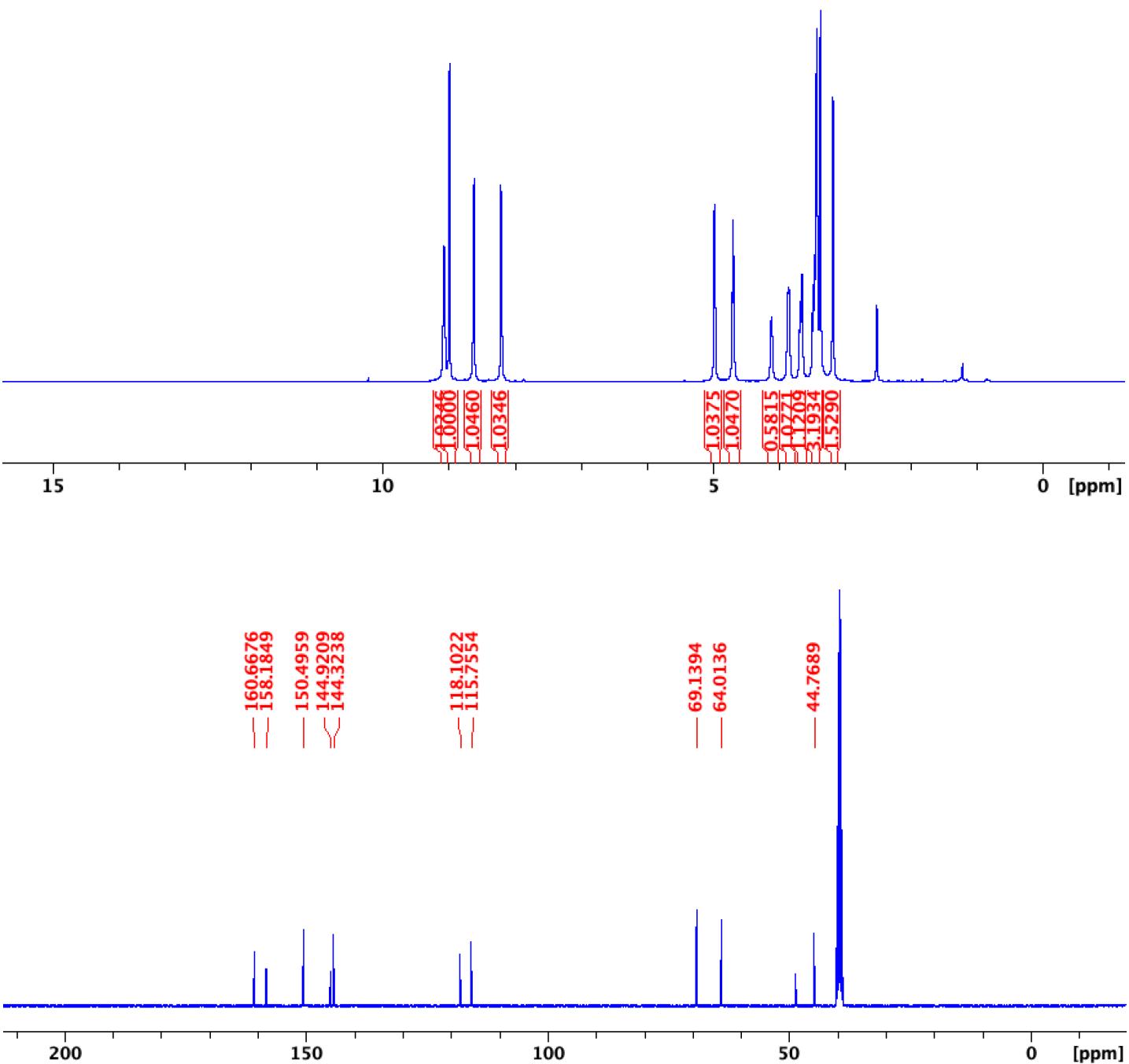
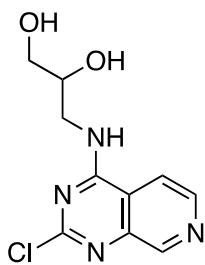
(2*R*)-2-[(6-Chloro-2-pyrido[3,4-*d*]pyrimidine-4-yl)amino]butanol (23a)



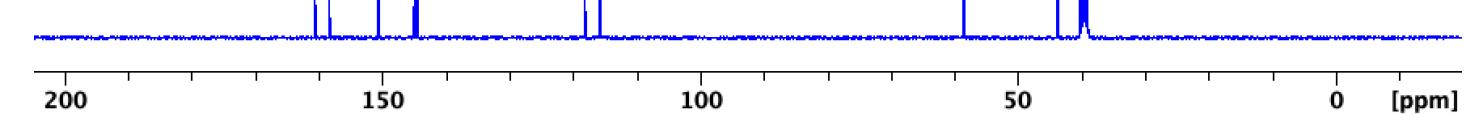
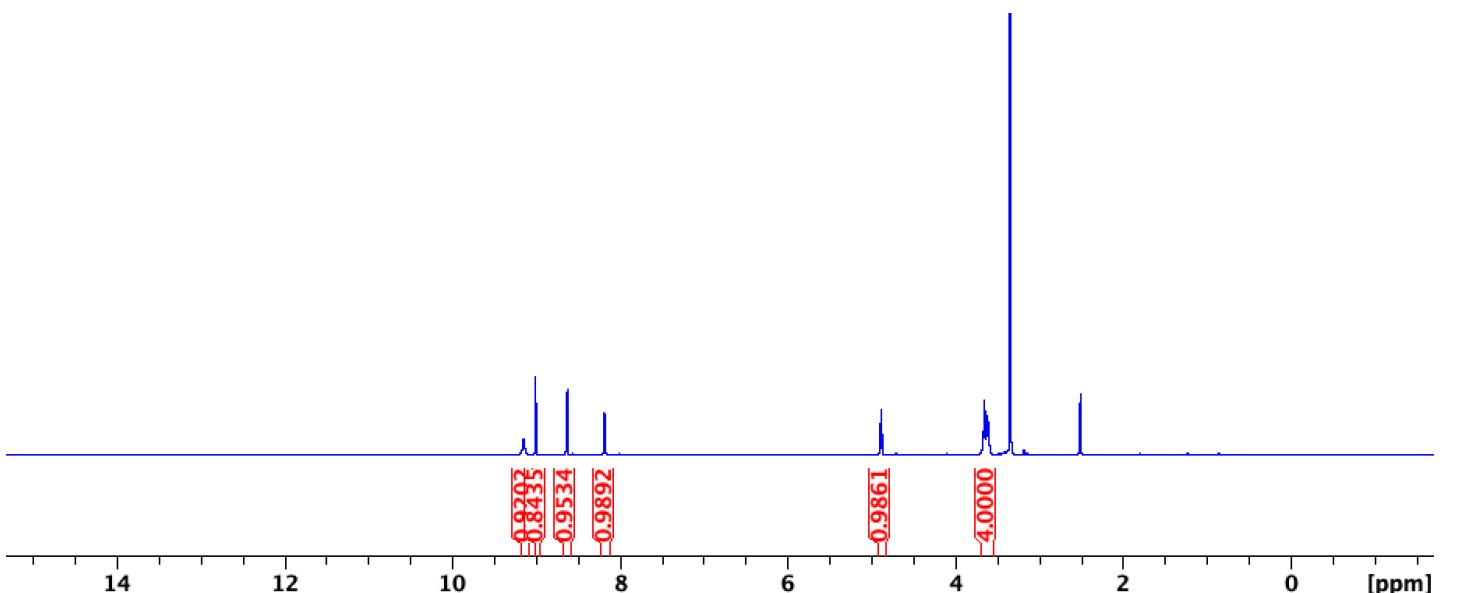
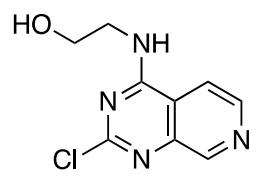
2-[(2-Chloro-pyrido[3,4-d]pyrimidine-4-yl)amino]-2-methyl-propan-1-ol (23b)



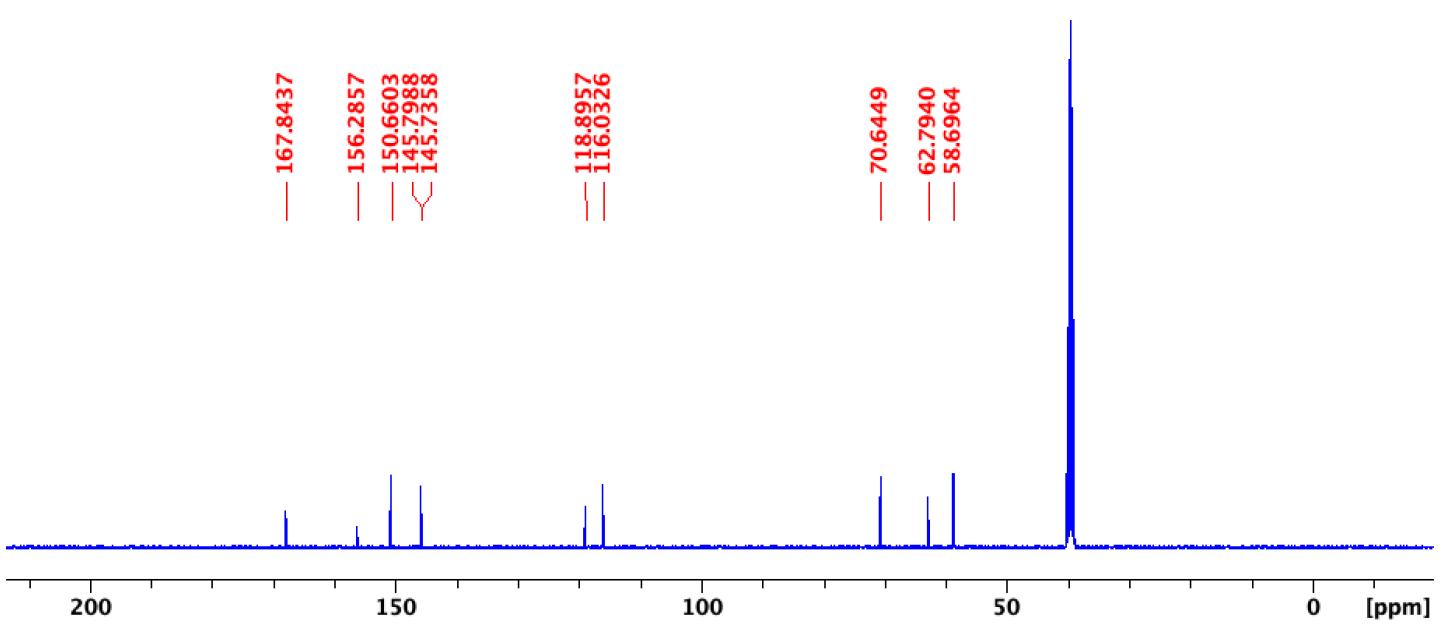
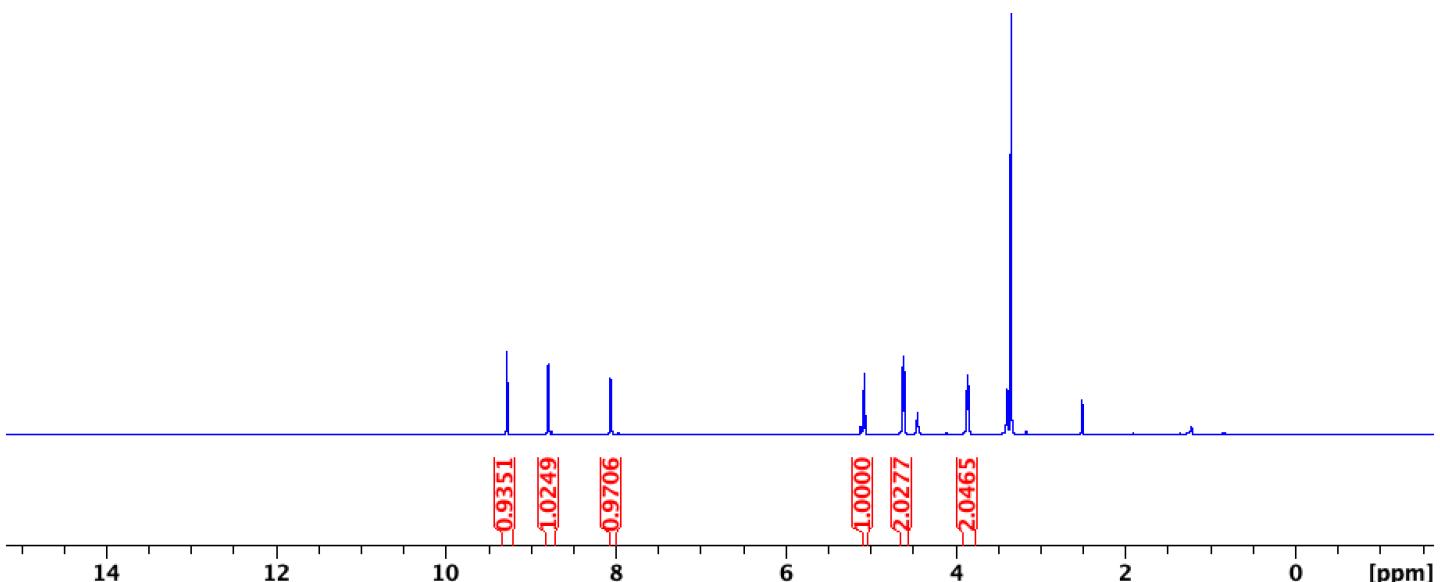
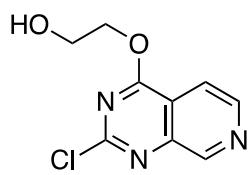
3-[(2-Chloro-pyrido[3,4-d]pyrimidine-4-yl)amino]propan-1,2-diol (23c)



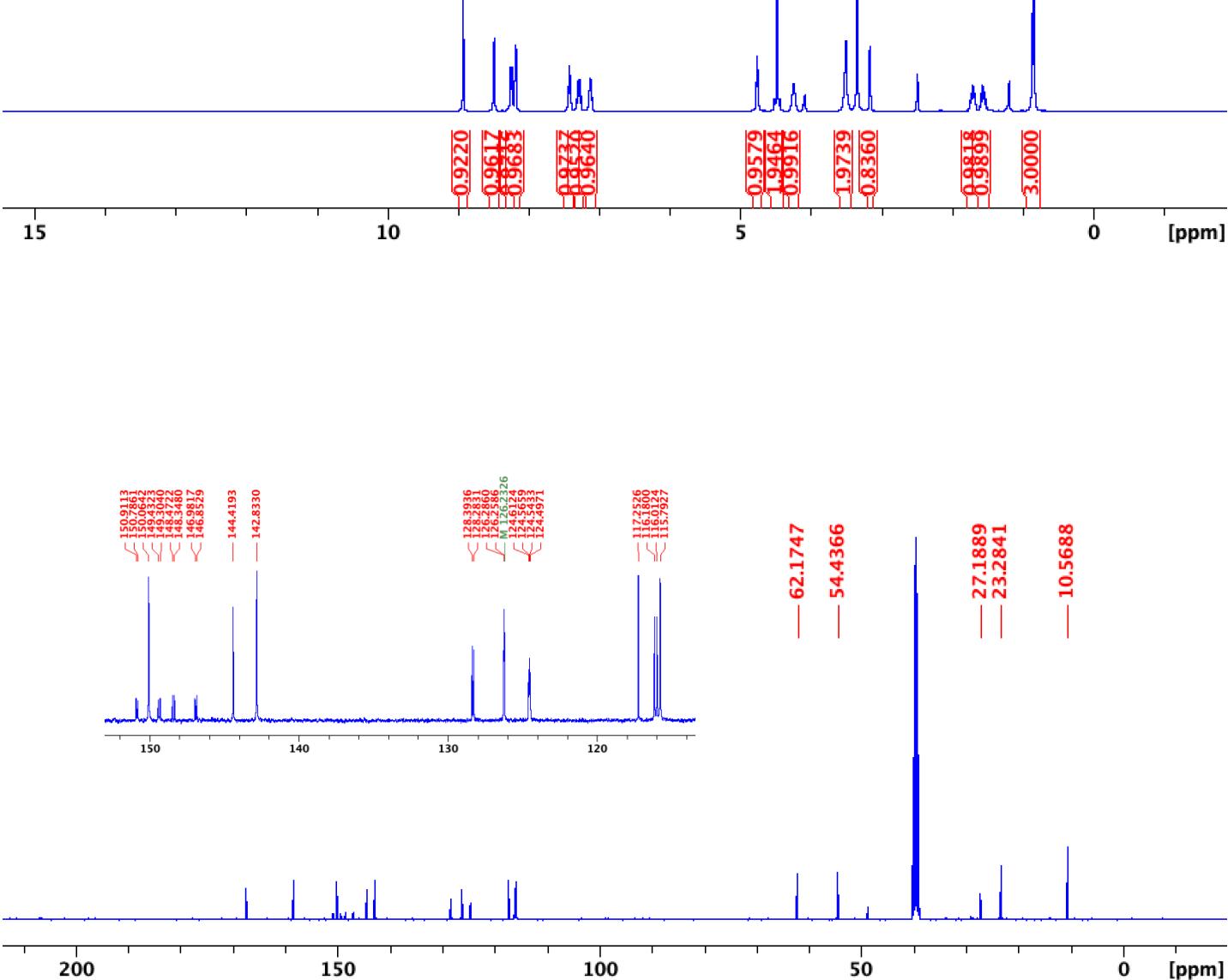
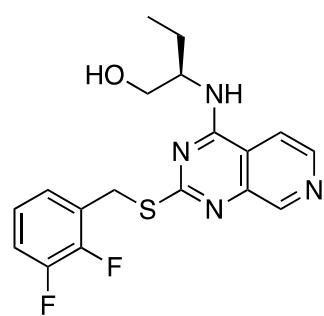
2-[(2-Chloro-pyrido[3,4-d]pyrimidine-4-yl)amino]ethanol (23d)

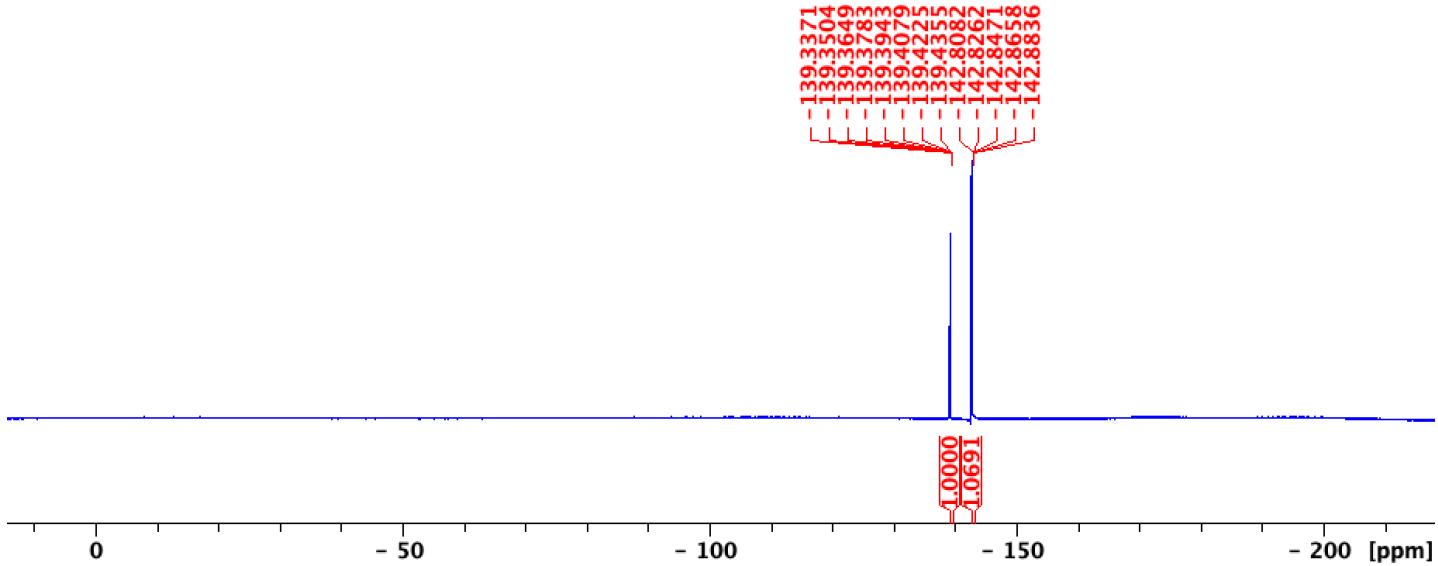


3-[(2-(2,3-Difluorobenzylmercapto)-pyrido[3,4-d]pyrimidine-4-yl)oxy]ethanol (23e)

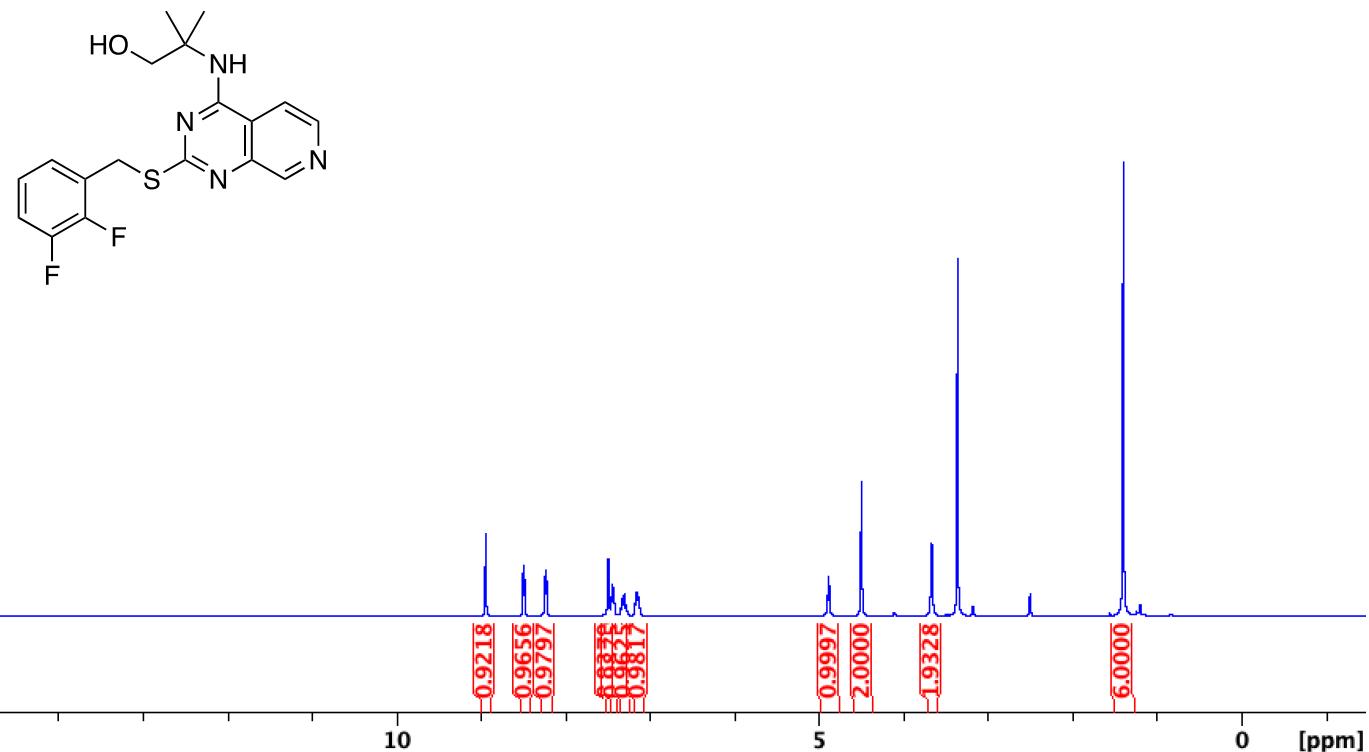


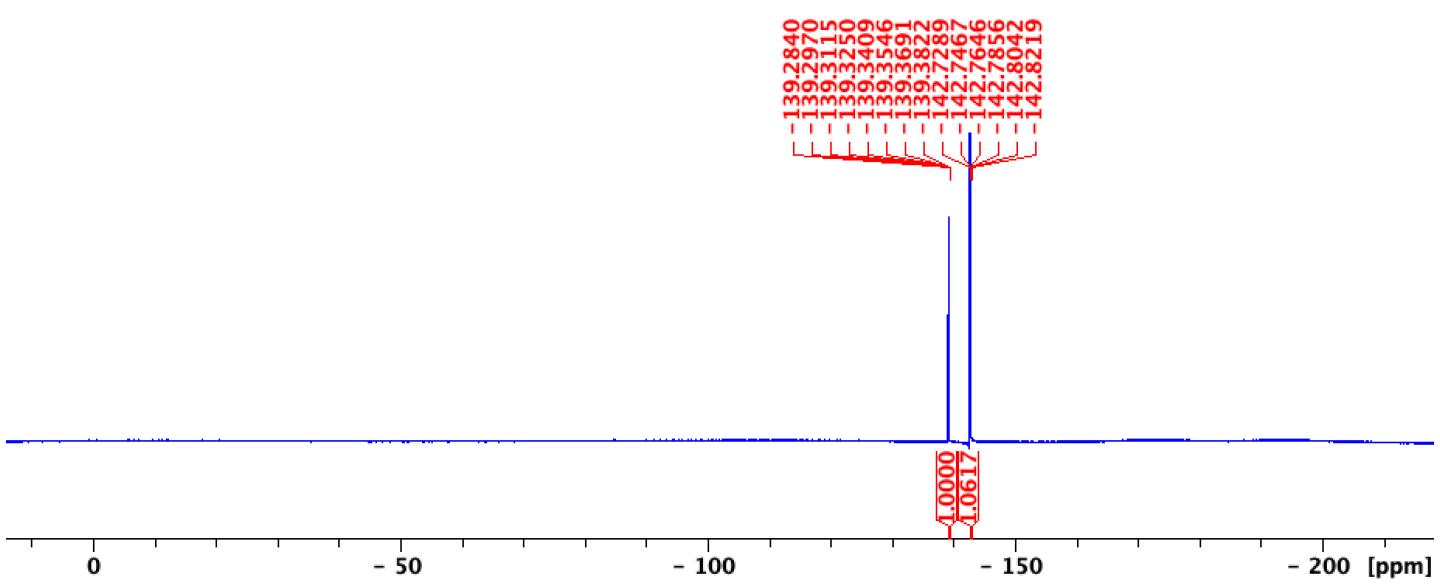
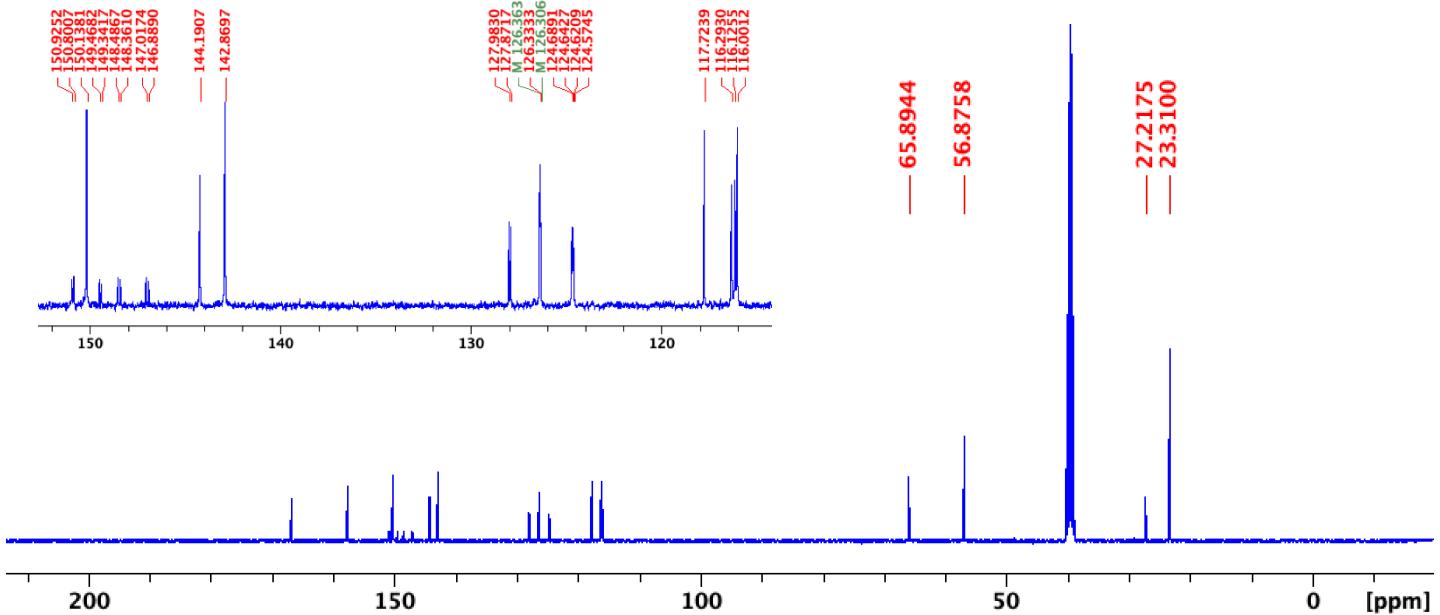
(2*R*)-2-[(2-(2,3-Difluorobenzylmercapto)-pyrido[3,4-*d*]pyrimidine-4-yl)amino]butanol (24a)



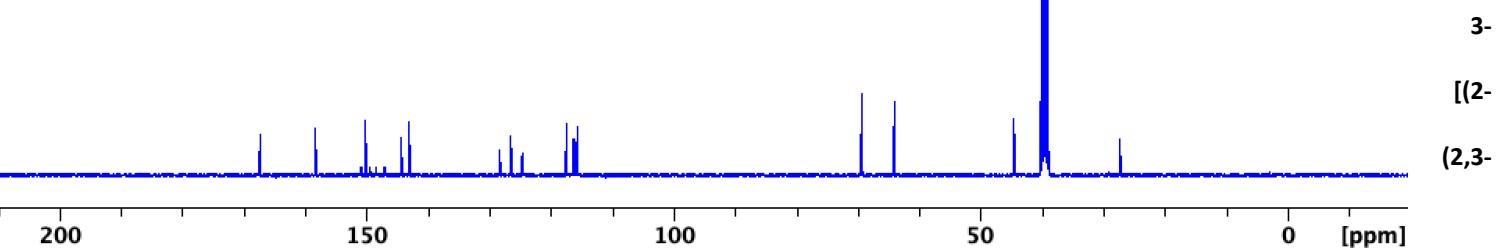
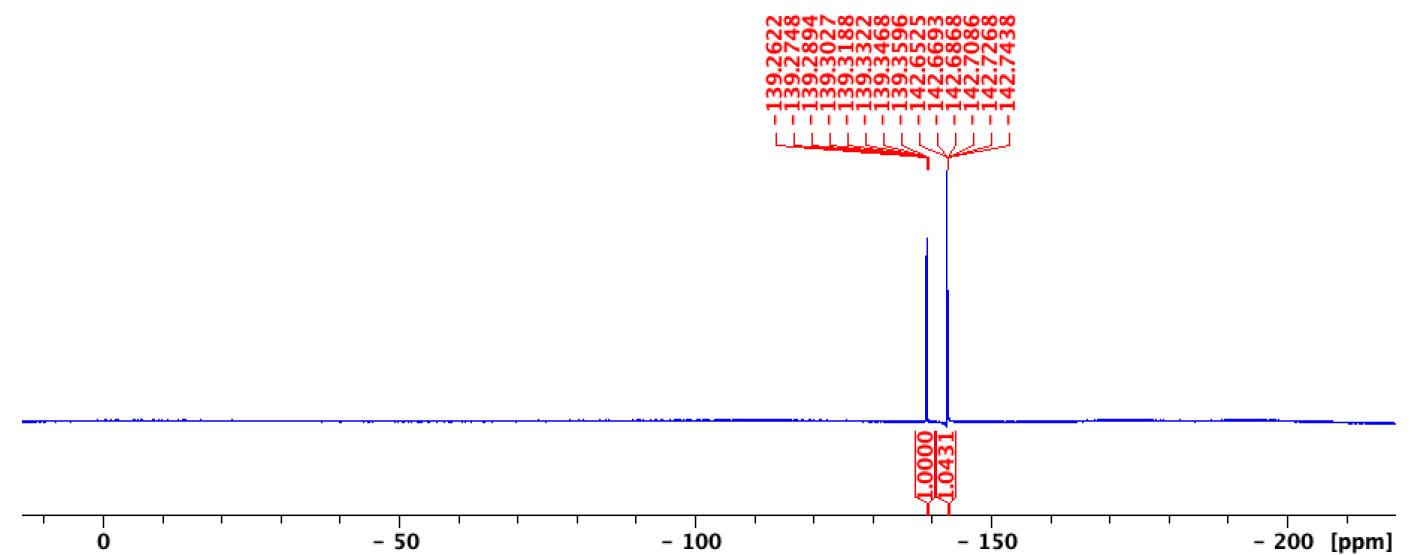


2-[{(2-(2,3-Difluorobenzylmercapto)-pyrido[3,4-d]pyrimidine-4-yl)amino]-2-methyl-propan-1-ol (24b)}

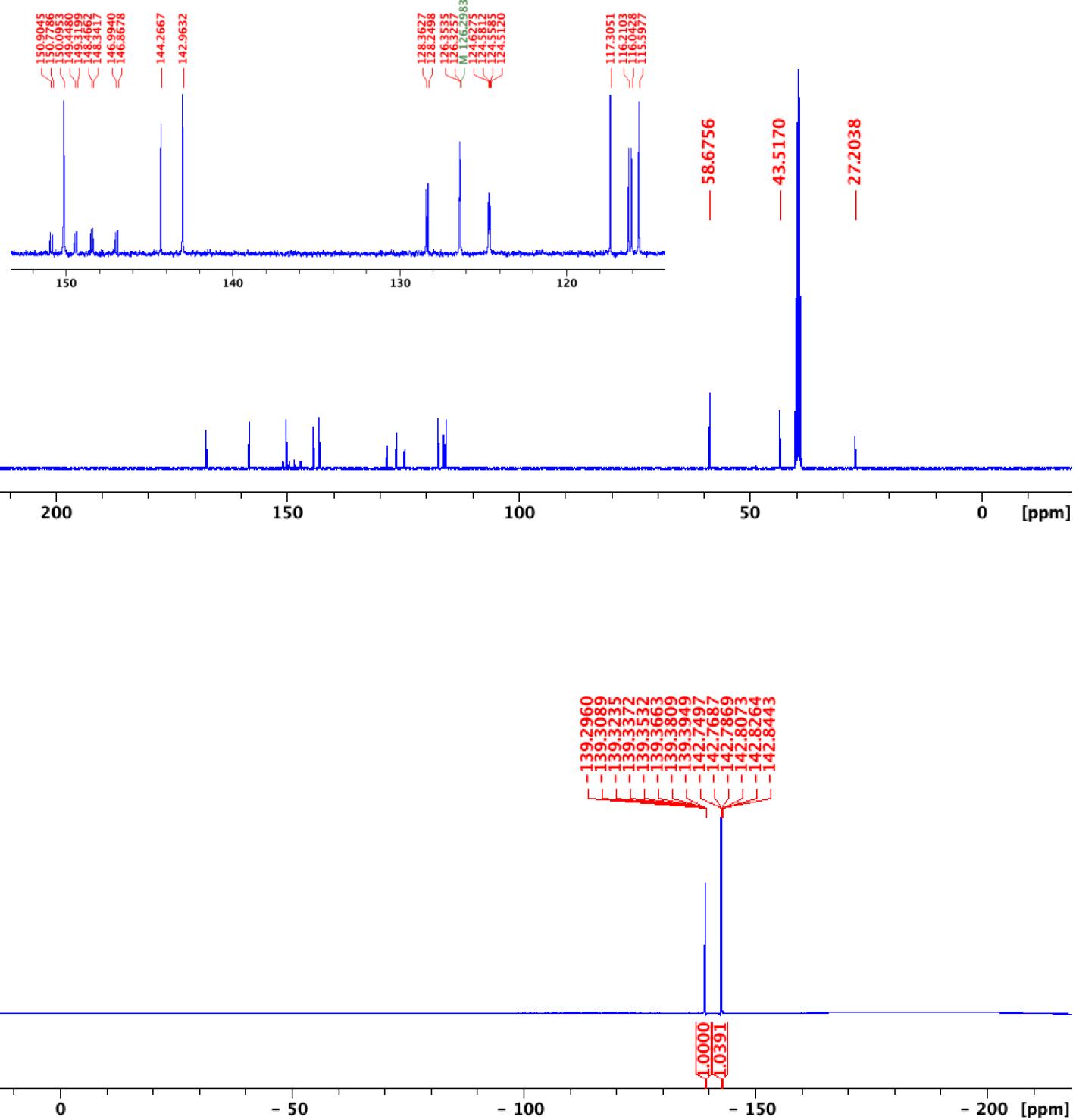




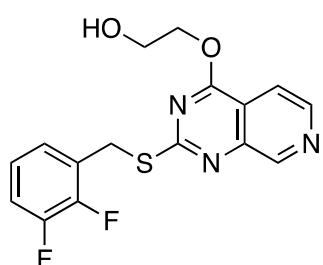
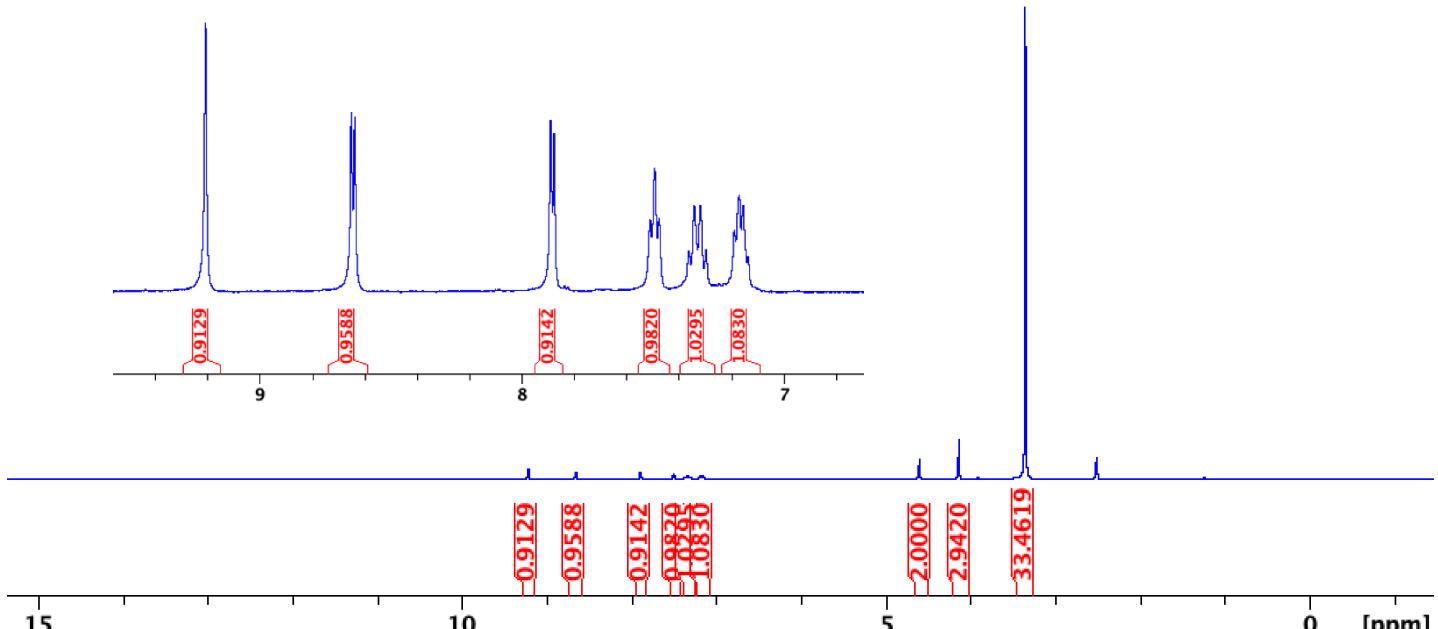
3-[(2-(2,3-Difluorobenzylmercapto)-pyrido[3,4-d]pyrimidine-4-yl)amino]propan-1,2-diol (24c)

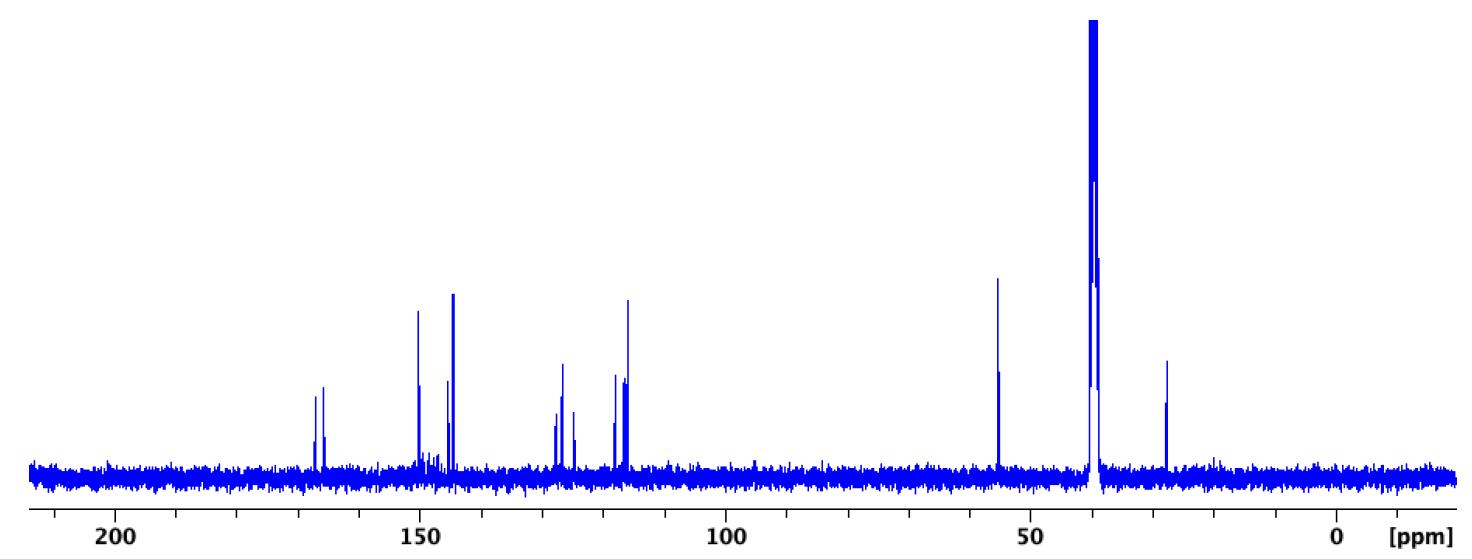


Difluorobenzylmercapto)-pyrido[3,4-d]pyrimidine-4-yl)amino]ethanol (24d)

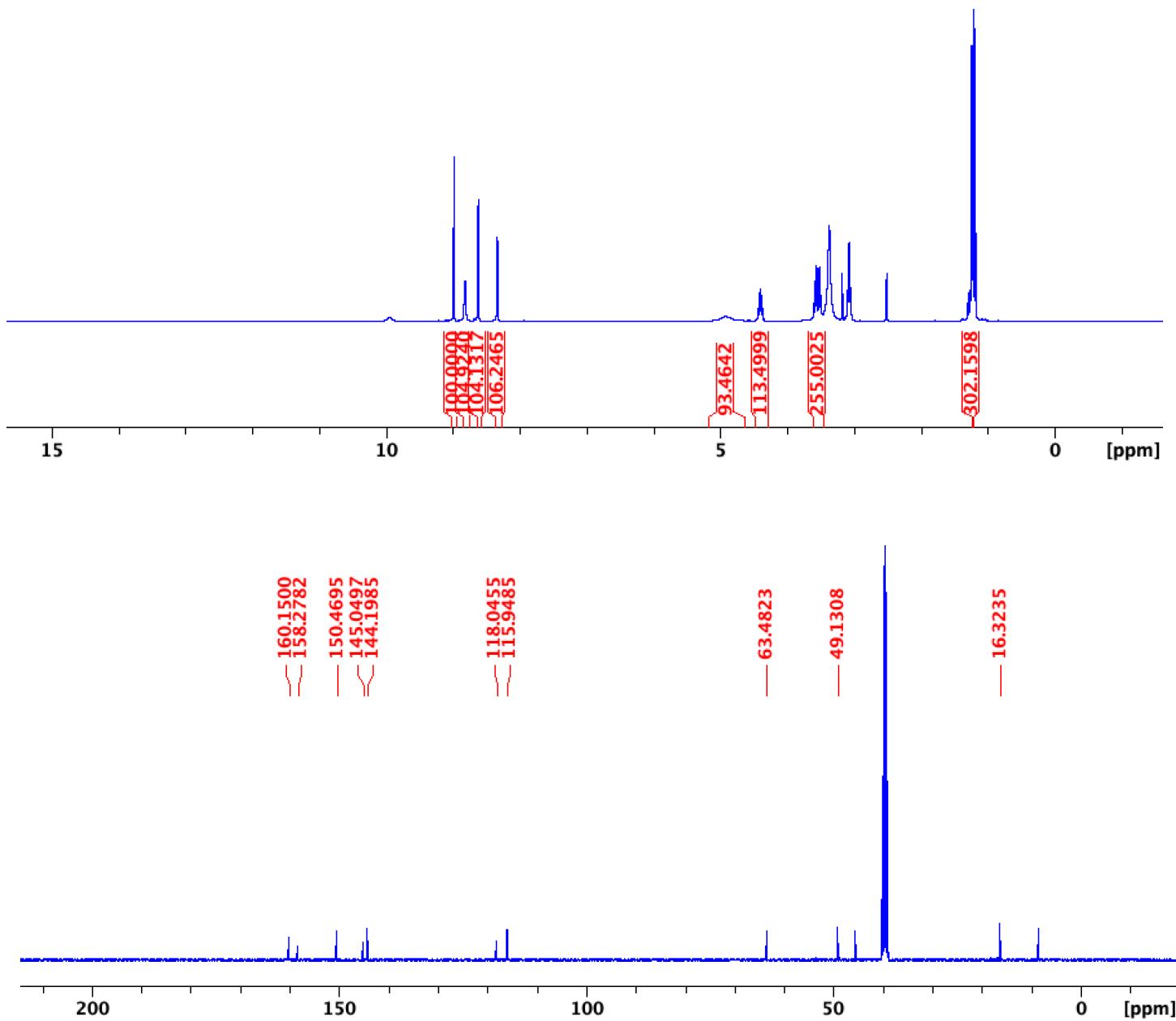
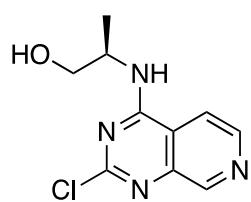


3-[(2-(2,3-Difluorobenzylmercapto)-pyrido[3,4-d]pyrimidine-4-yl)oxy]ethanol (24e)

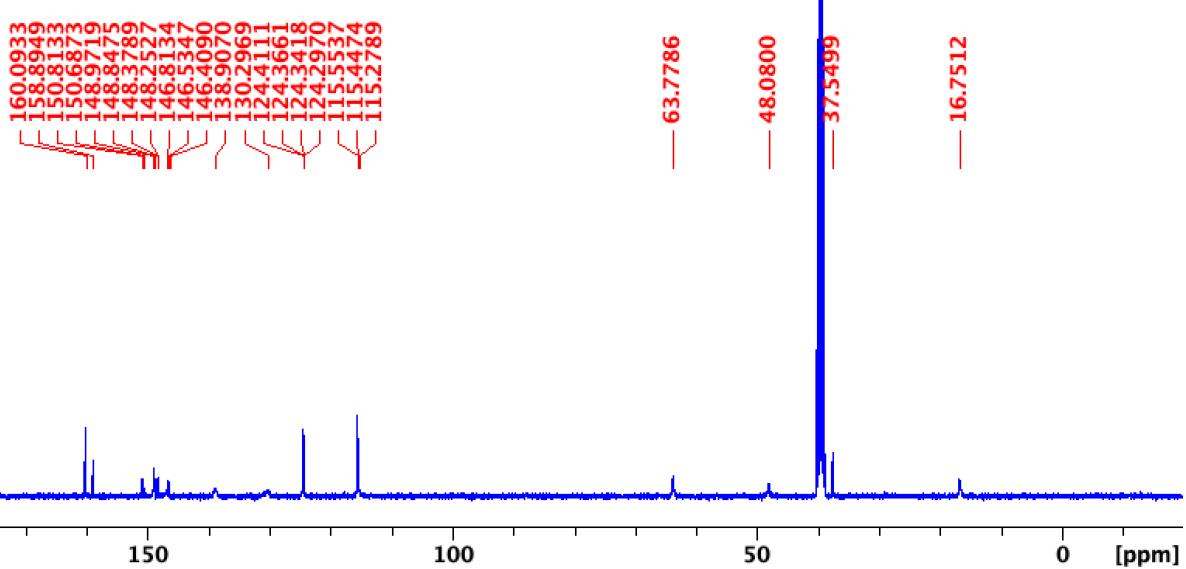
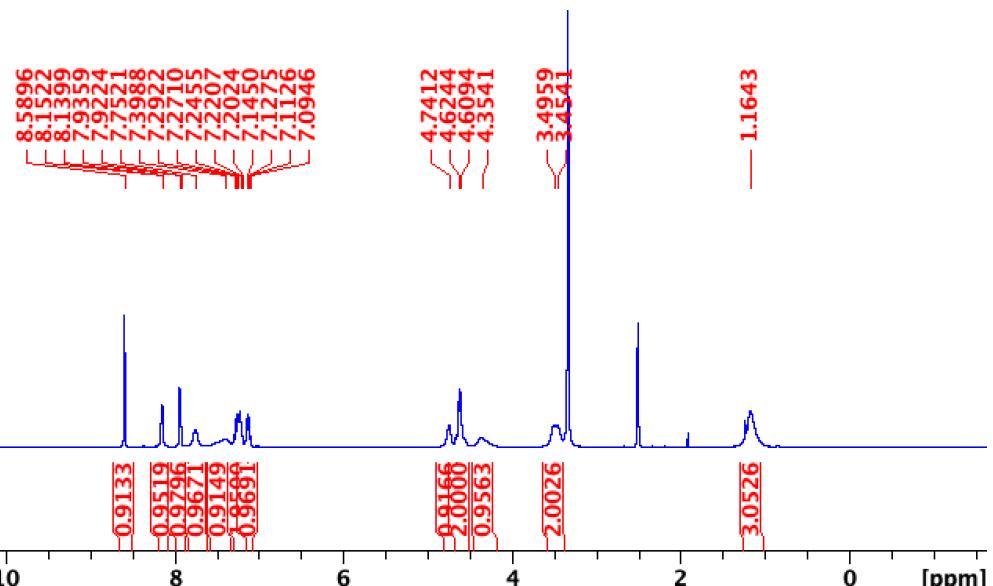
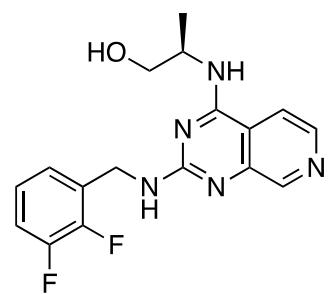


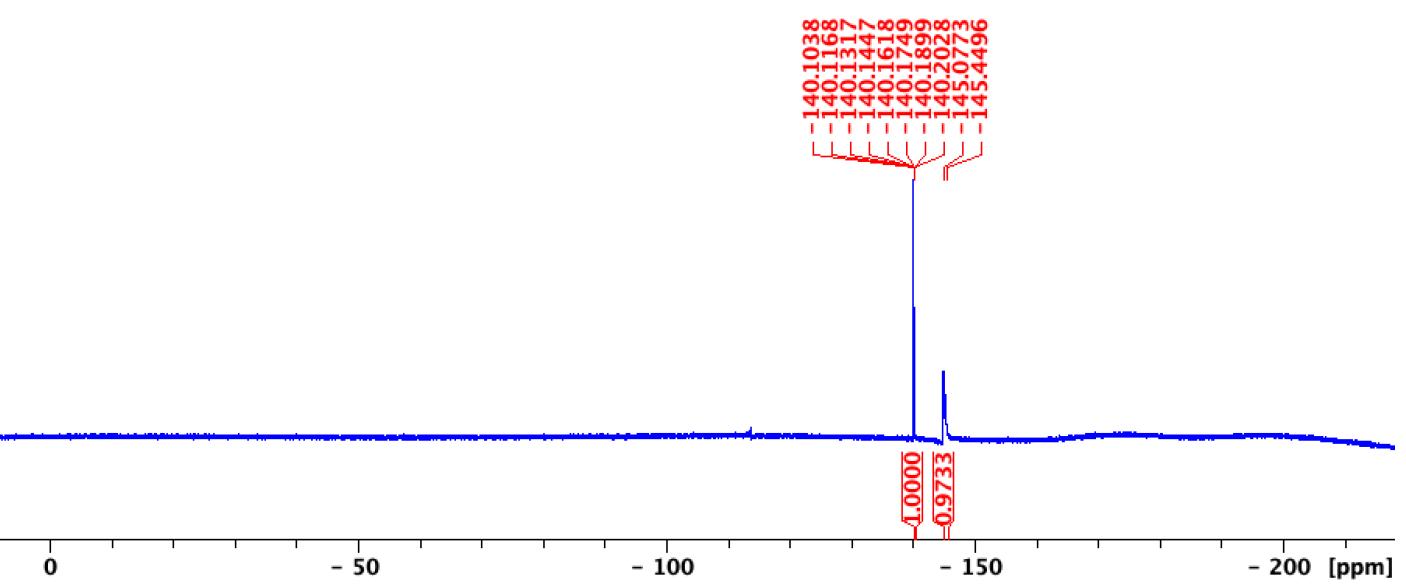


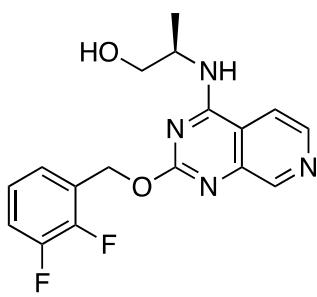
(2*R*)-2-[(6-Chloro-2-pyrido[3,4-*d*]pyrimidine-4-yl)amino]propanol (25)



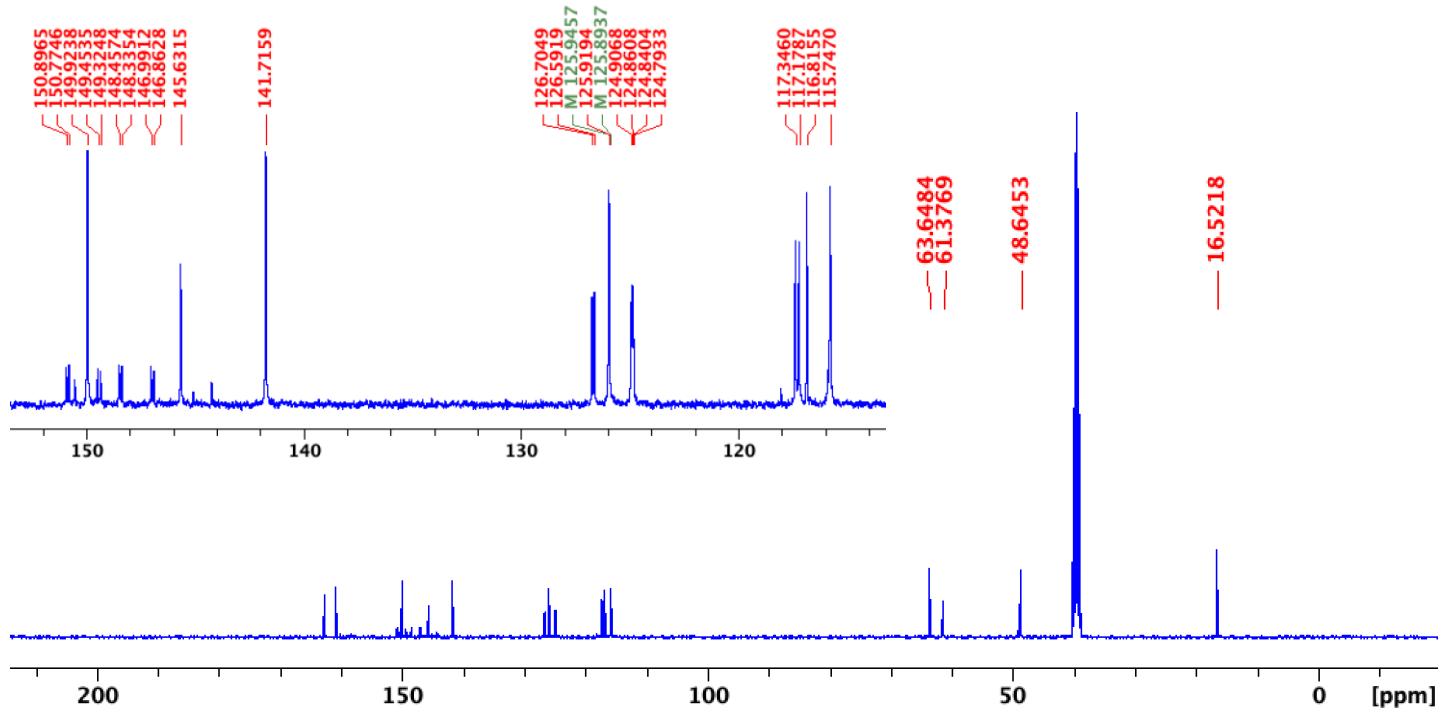
(2*R*)-2-[(2-(2,3-Difluorobenzylamino)-pyrido[3,4-*d*]pyrimidine-4-yl)amino]propanol (26a)



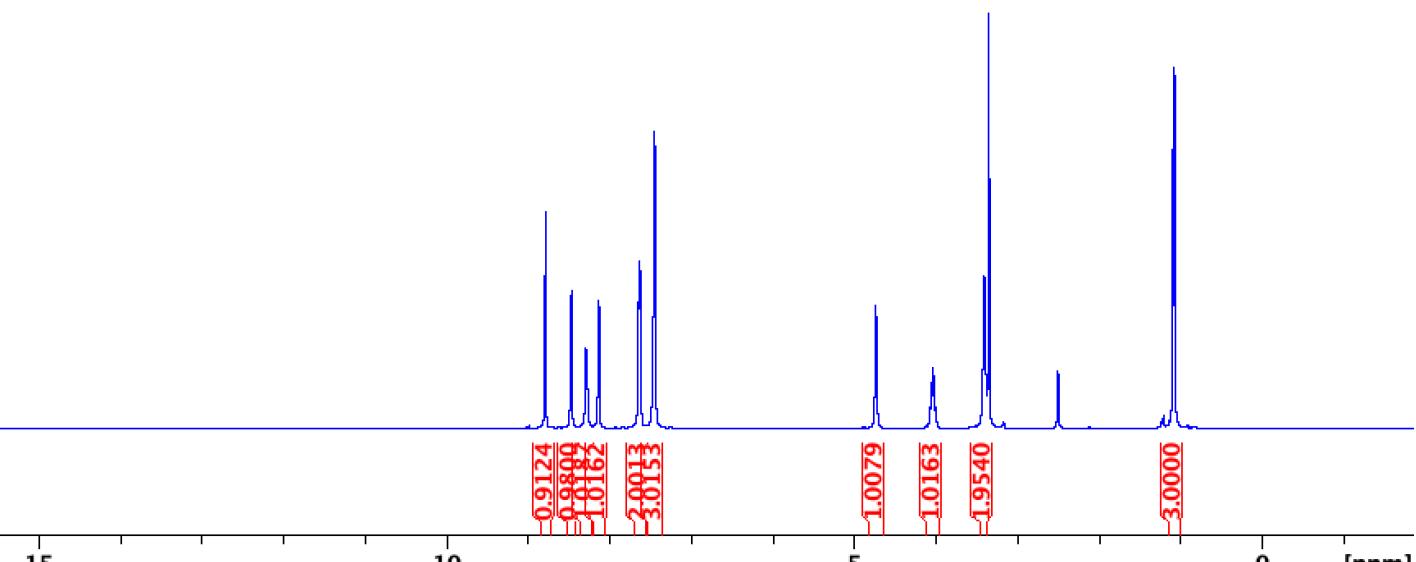
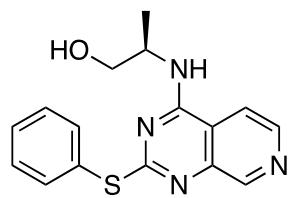




(2R)-2-[(2-(2,3-Difluorobenzyl)oxy)pyrido[3,4-d]pyrimidin-4-yl]amino]propanol (26b)



(2*R*)-2-[(2-(Phenylmercapto)-pyrido[3,4-*d*]pyrimidine-4-yl)amino]propanol (26c)



(2*R*)-2-[(2-(Phenylethylmercapto)-pyrido[3,4-*d*]pyrimidine-4-yl)amino]propanol (26d)

— 168.3988

— 157.7531

— 150.1306

— 144.6829

— 142.7446

— 135.0082

— 129.9411

— 128.8479

— 128.8025

— 117.2923

— 115.7299

— 63.2807

— 48.8178

— 16.3106

200 150 100 50 0 [ppm]

