



Supporting Information

for

Scope of tetrazolo[1,5-*a*]quinoxalines in CuAAC reactions for the synthesis of triazoloquinoxalines, imidazoloquinoxalines, and rhenium complexes thereof

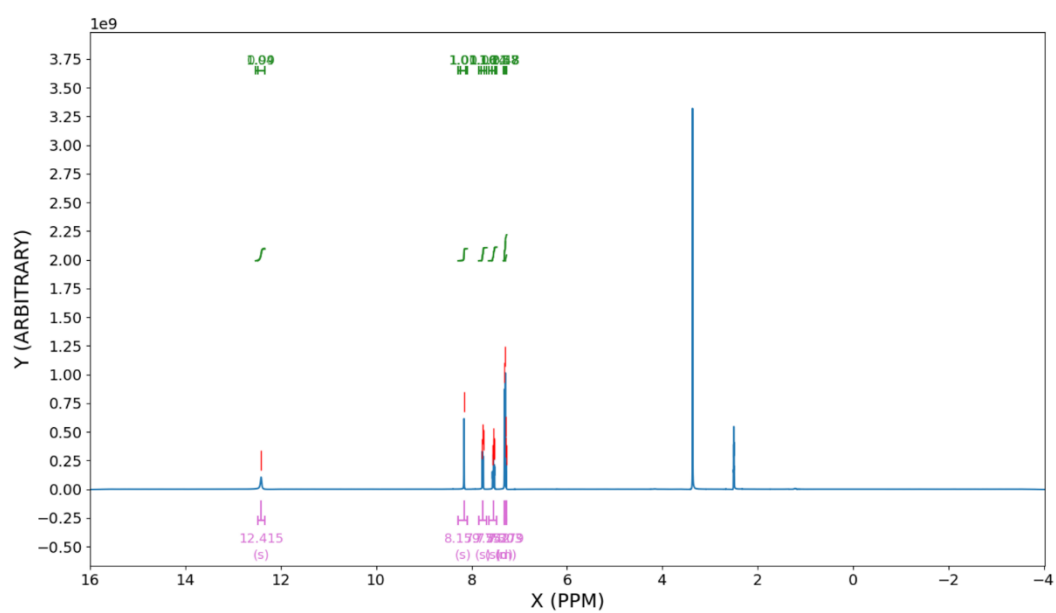
Laura Holzhauer, Chloé Liagre, Olaf Fuhr, Nicole Jung and Stefan Bräse

Beilstein J. Org. Chem. **2022**, *18*, 1088–1099. [doi:10.3762/bjoc.18.111](https://doi.org/10.3762/bjoc.18.111)

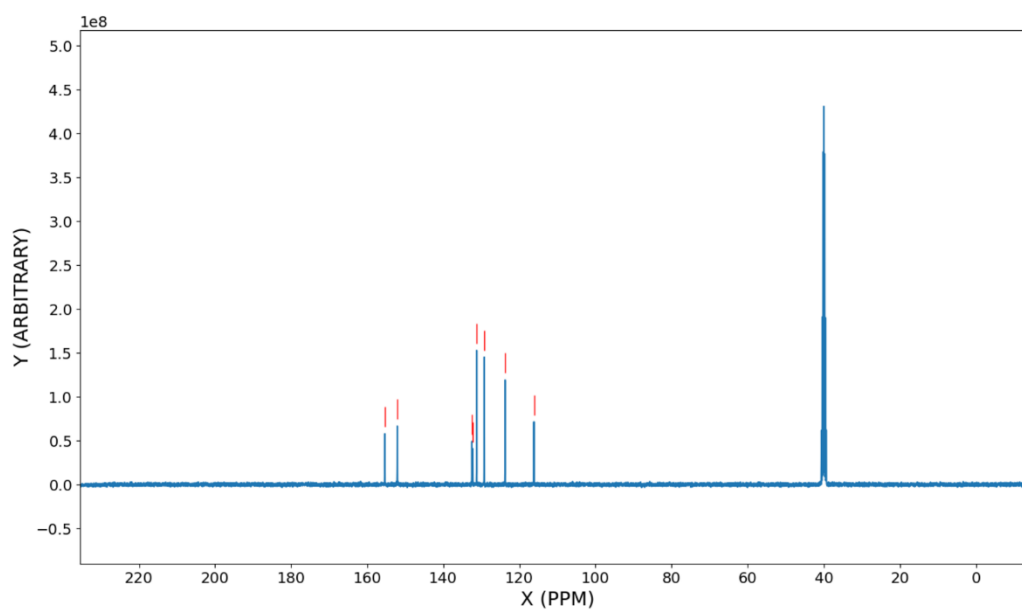
NMR spectra

[S2a] 1H-Quinoxalin-2-one

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

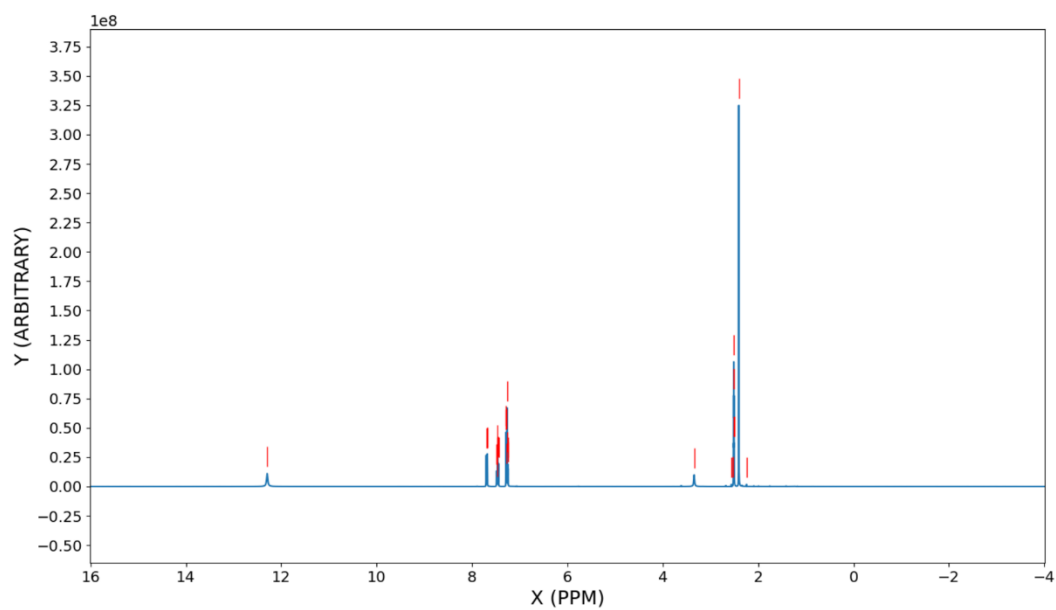


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

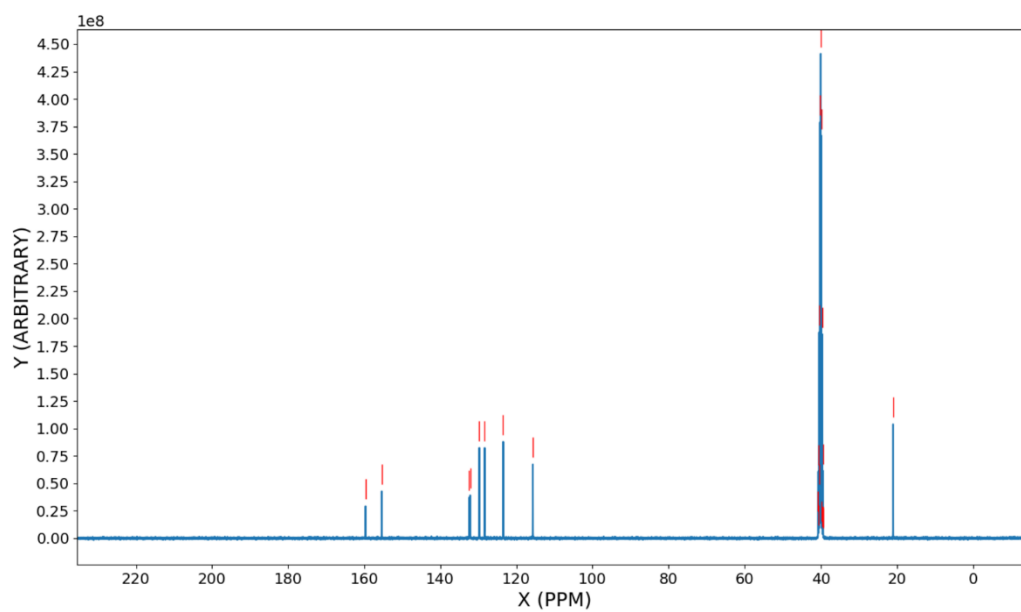


[S2b] 3-Methyl-1*H*-quinoxalin-2-one

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

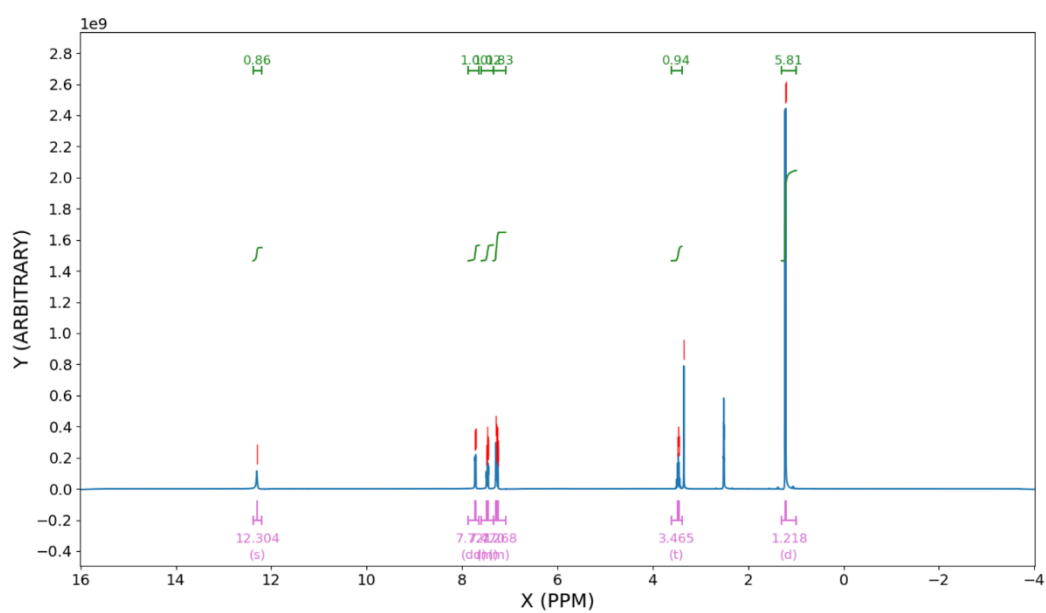


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

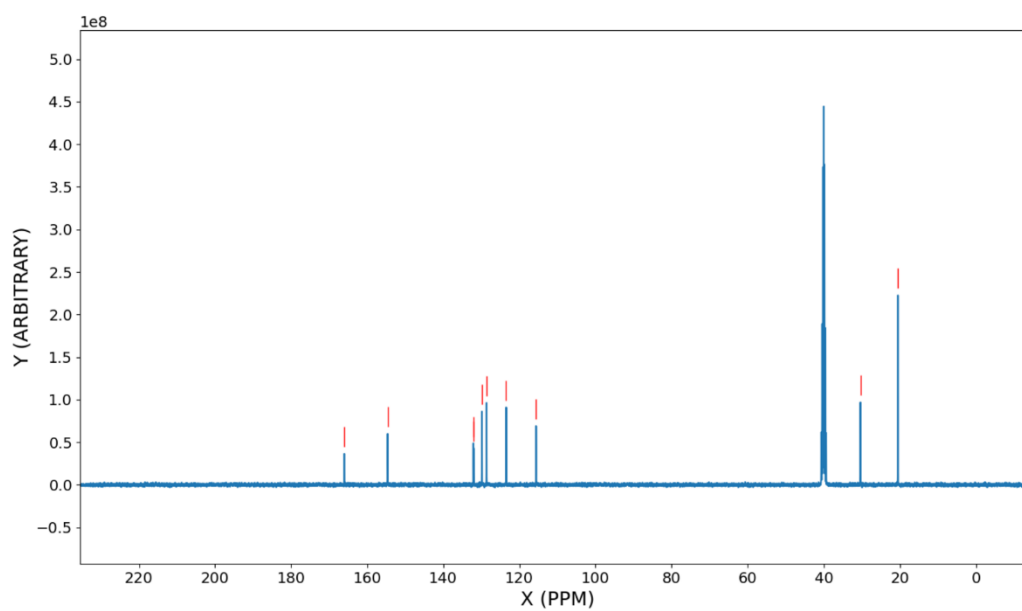


[S2c] 3-Propan-2-yl-1*H*-quinoxalin-2-one

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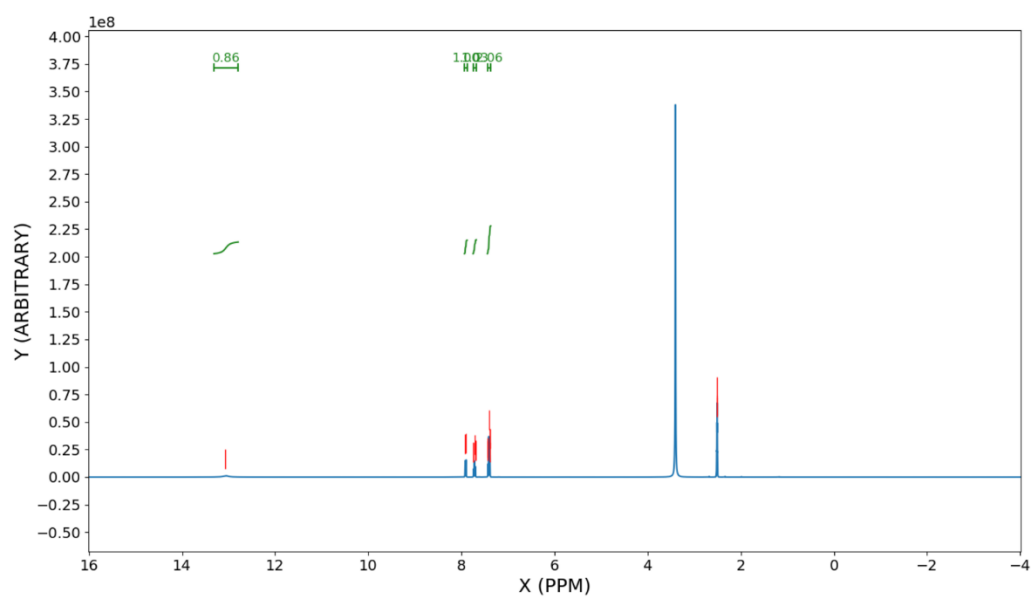


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

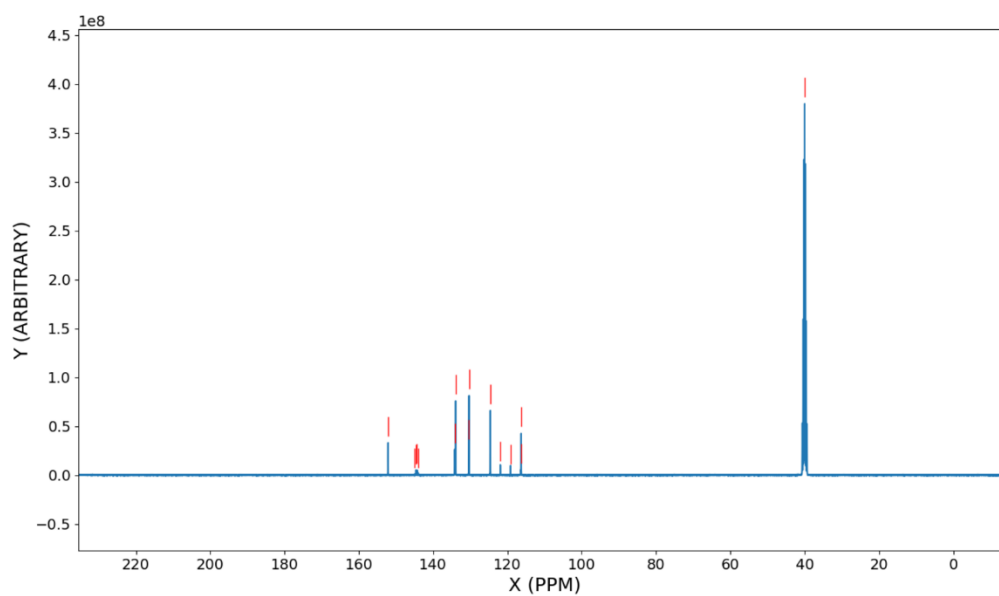


[S2d] 3-(Trifluoromethyl)-1*H*-quinoxalin-2-one

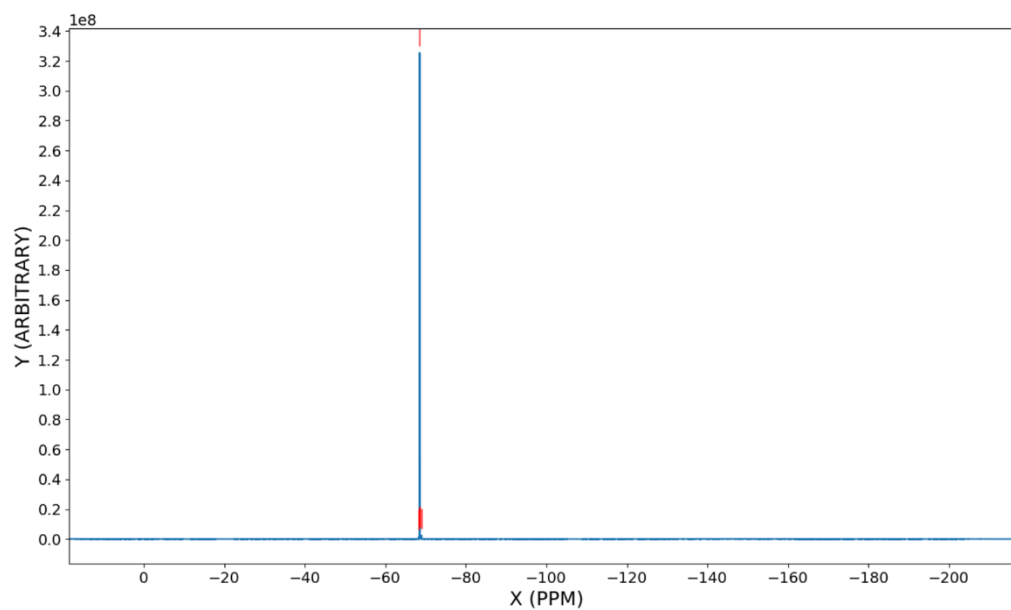
CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)



CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

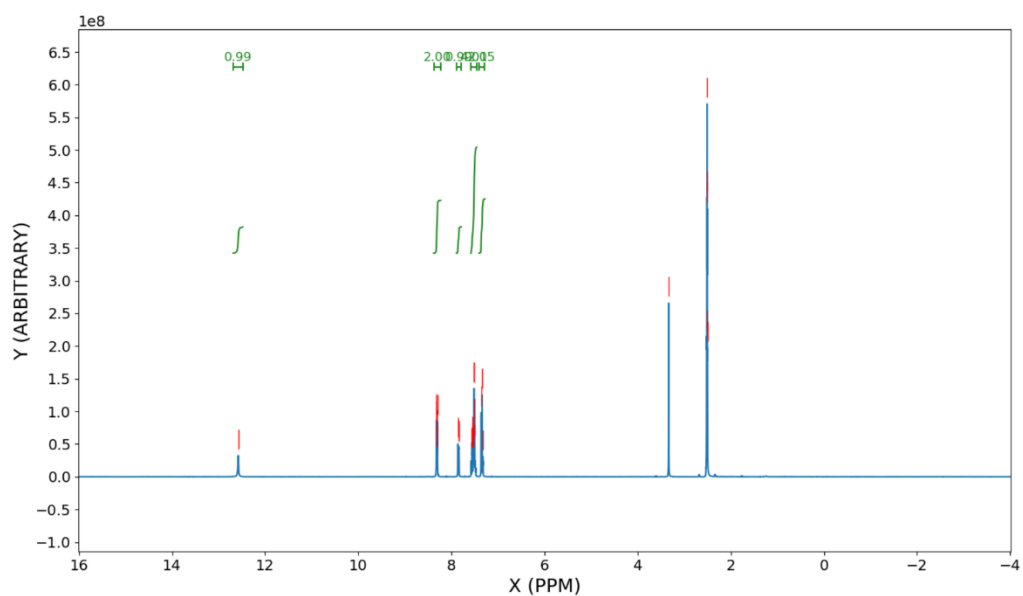


CHMO:0000597 | ^{19}F nuclear magnetic resonance spectroscopy (^{19}F NMR)

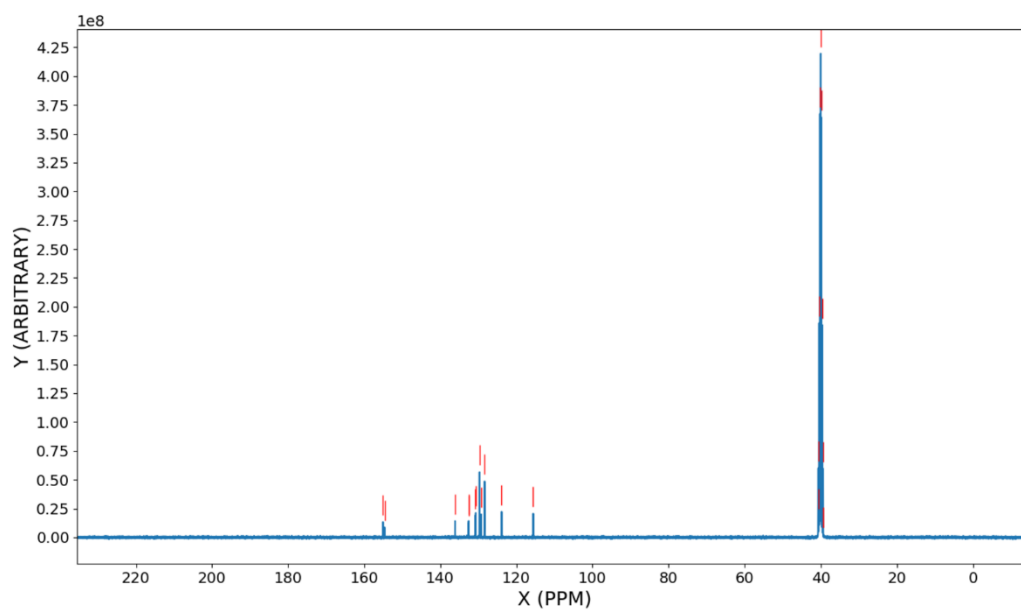


[S2e] 3-Phenyl-1*H*-quinoxalin-2-one

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

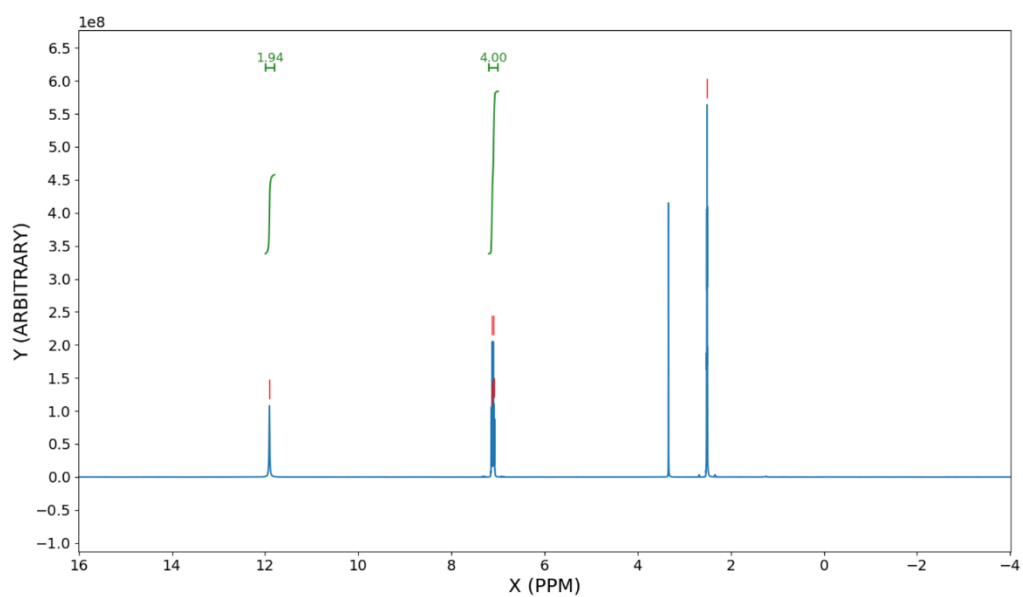


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

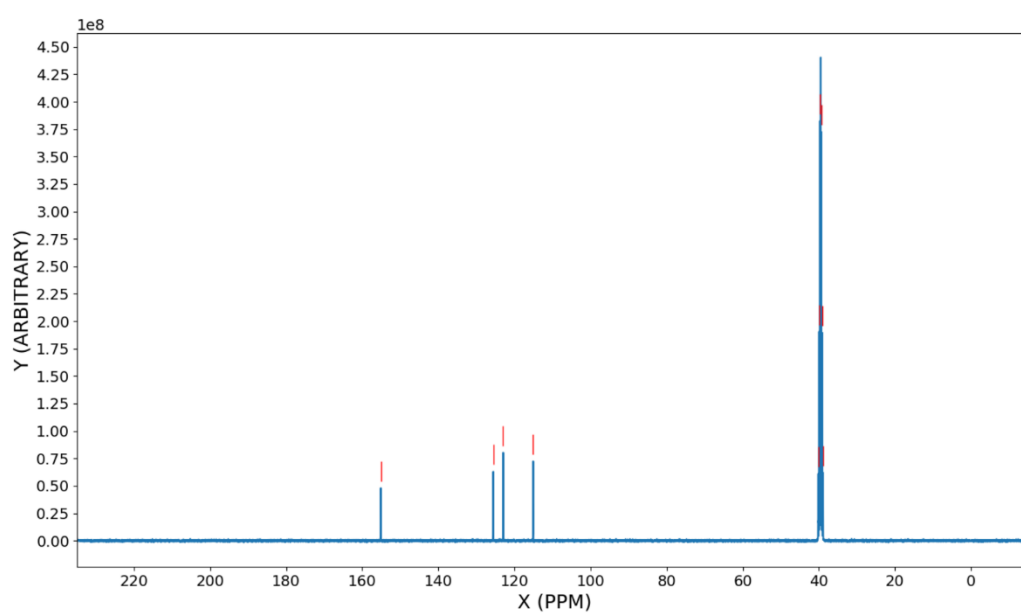


[S1] 1,4-Dihydroquinoxaline-2,3-dione

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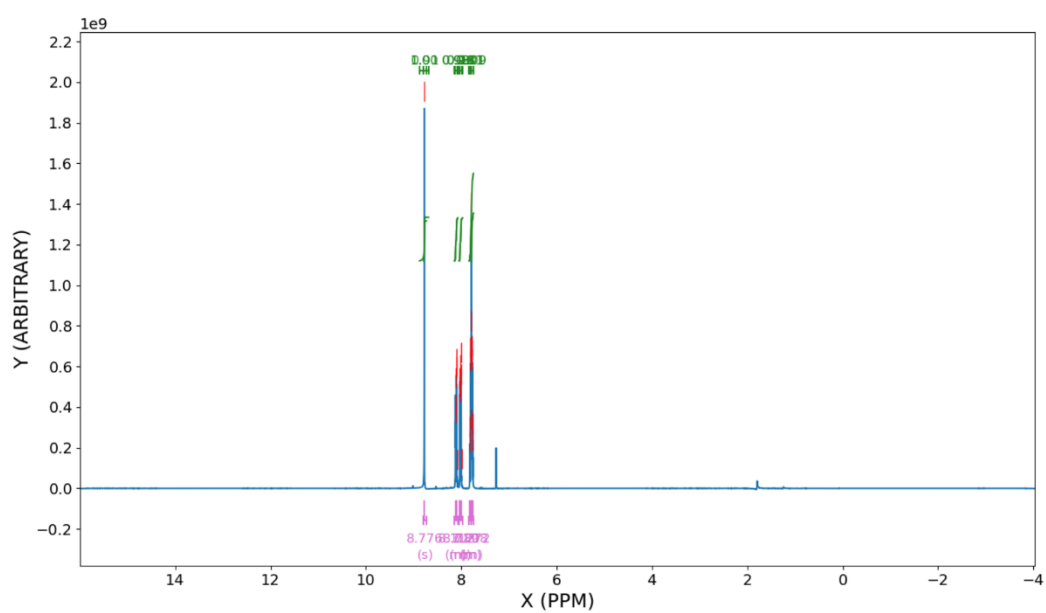


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

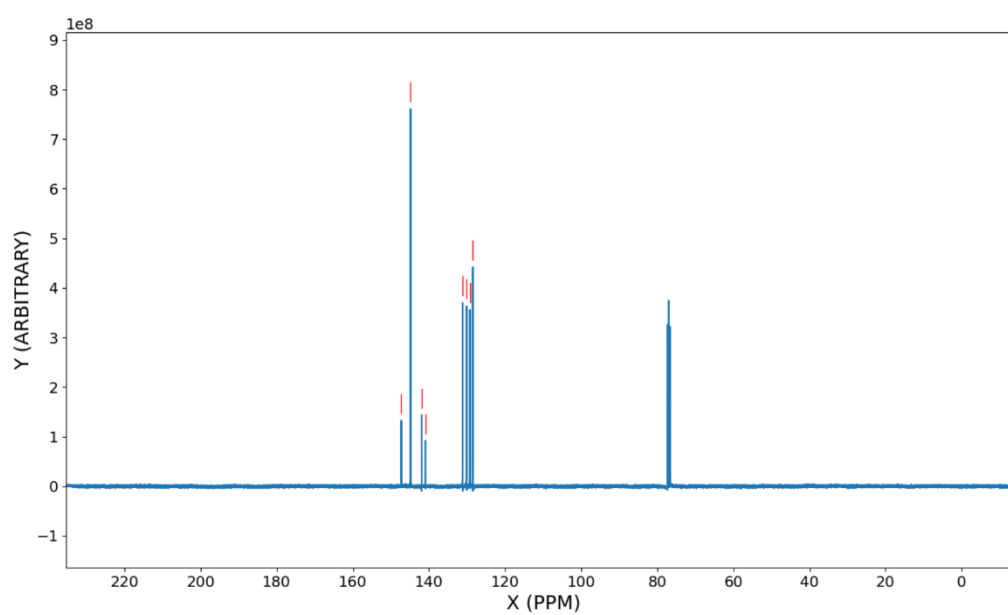


[10a] 2-Chloroquinoxaline

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

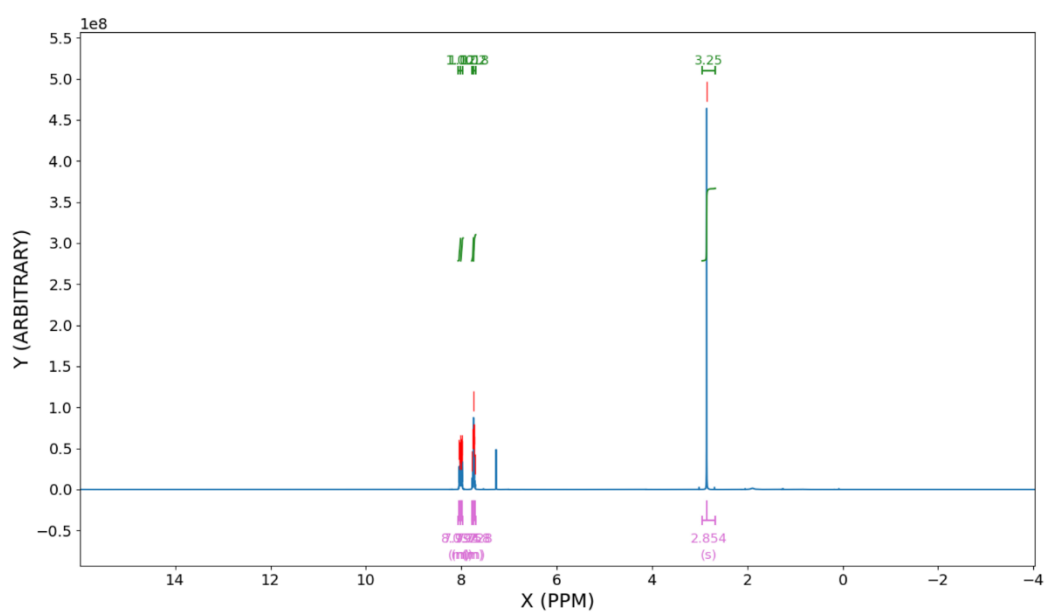


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

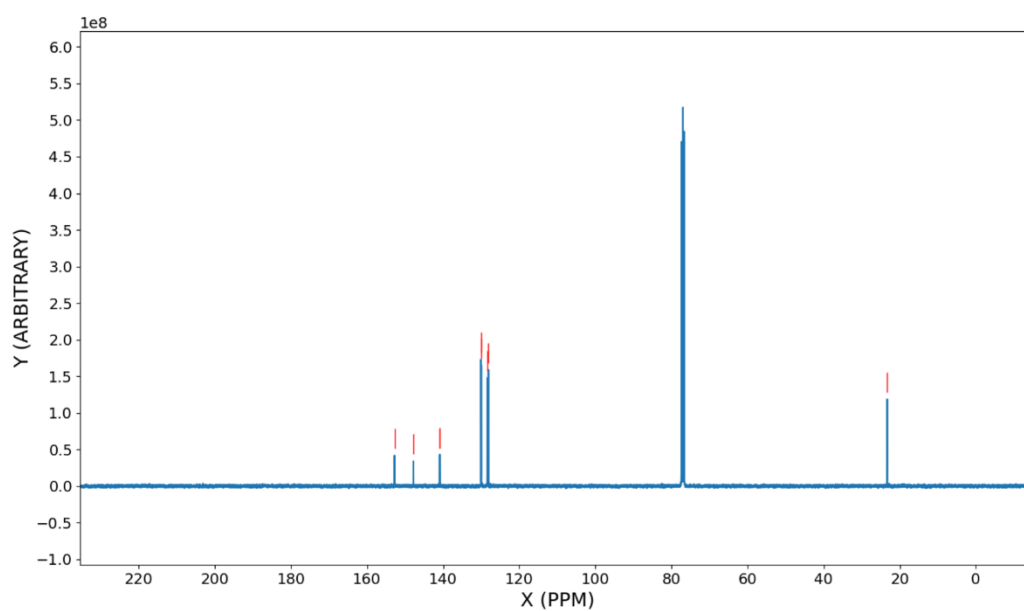


[10b] 2-Chloro-3-methylquinoxaline

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

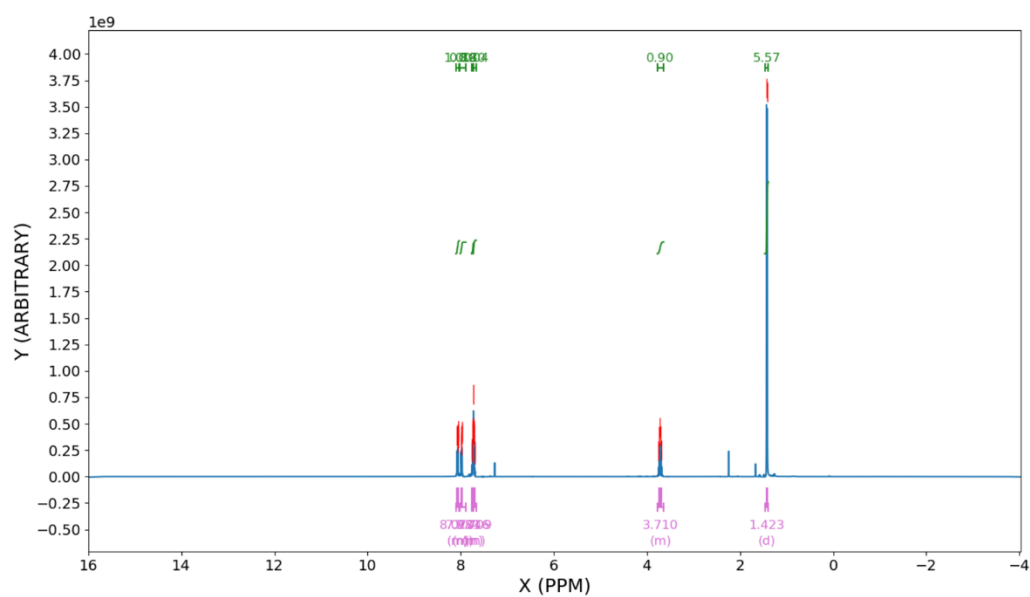


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

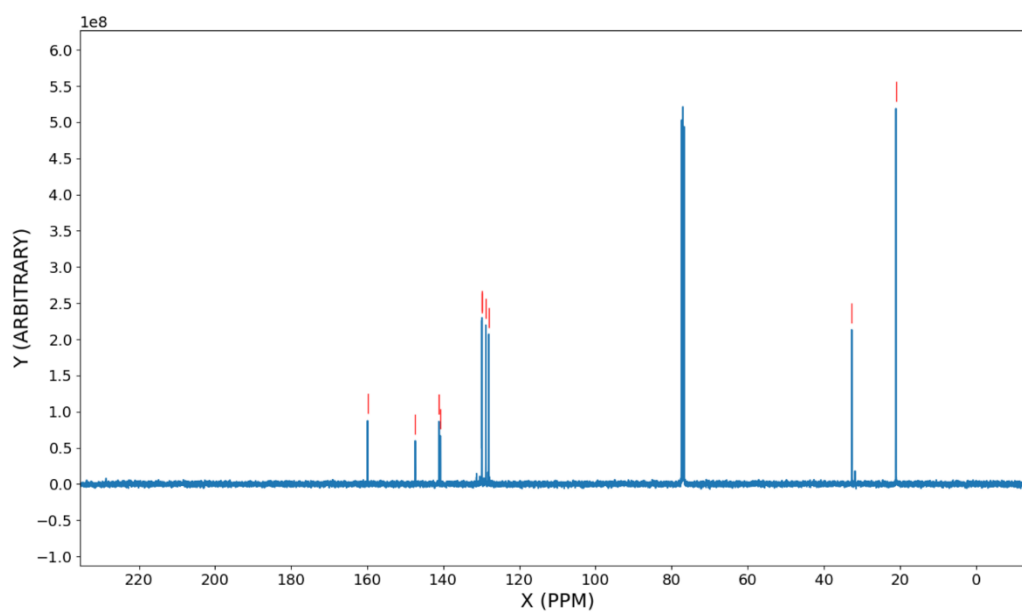


[10c] 2-Chloro-3-propan-2-ylquinoxaline

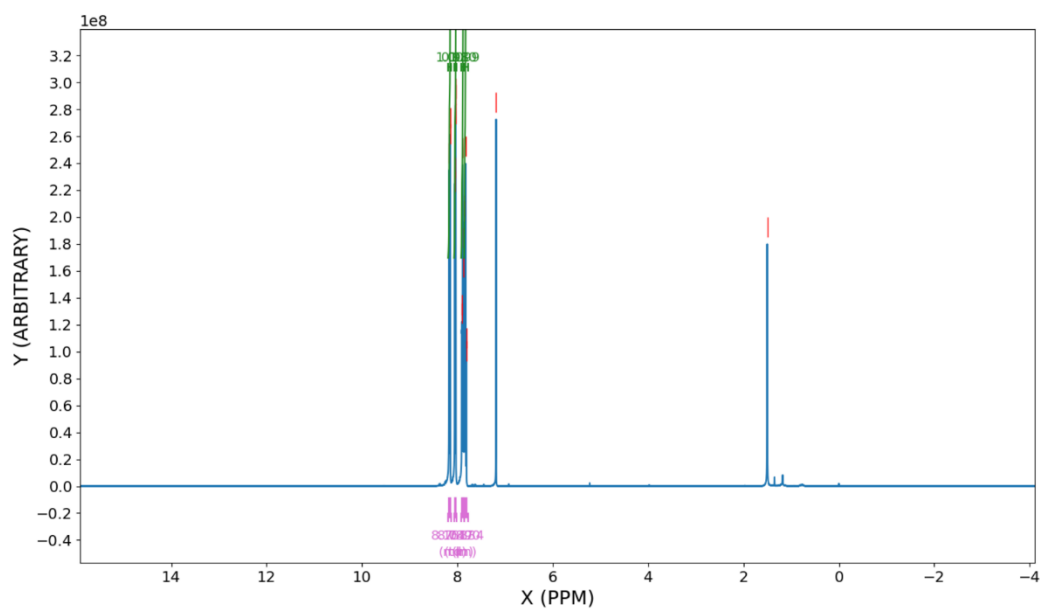
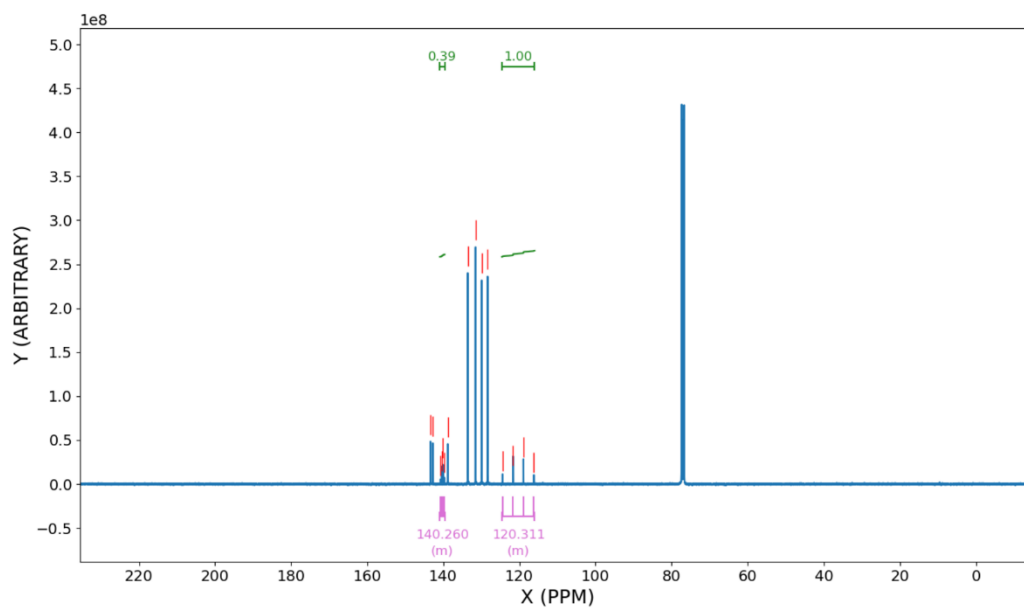
CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)



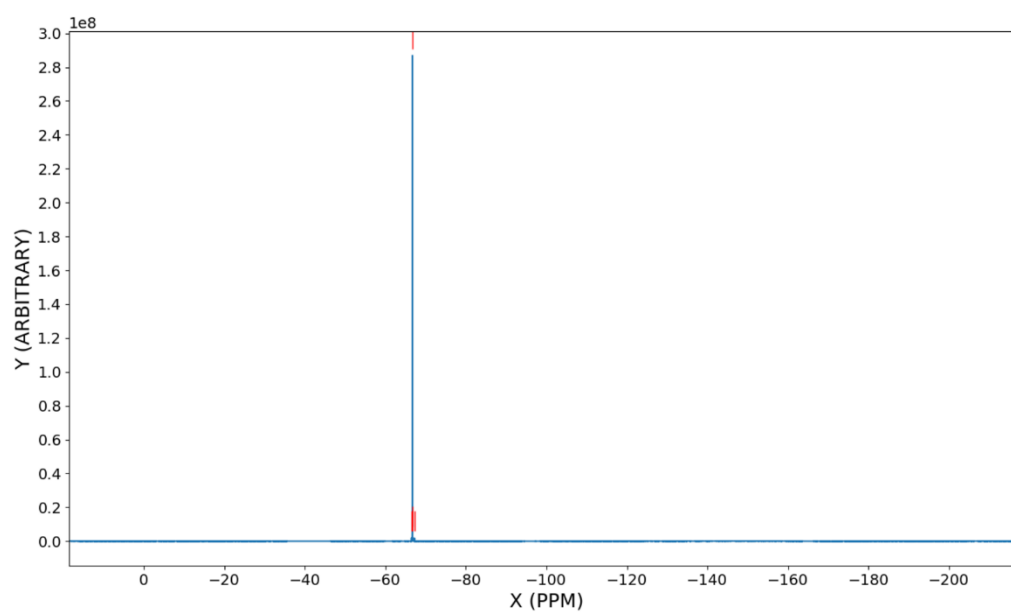
CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)



[10d] 2-Chloro-3-(trifluoromethyl)quinoxaline

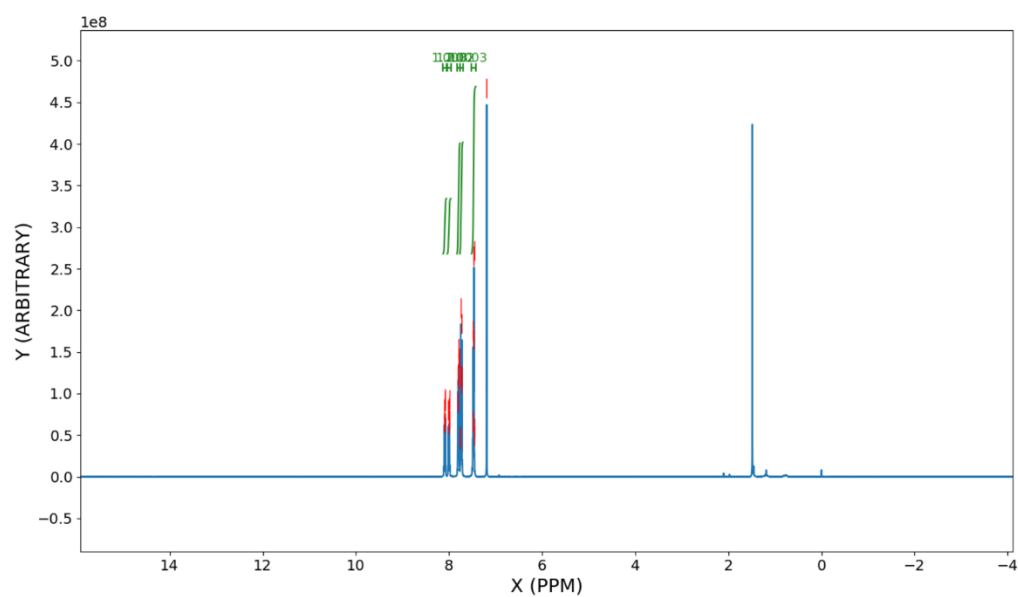
CHMO:0000593 | ¹H nuclear magnetic resonance spectroscopy (¹H NMR)CHMO:0000595 | ¹³C nuclear magnetic resonance spectroscopy (¹³C NMR)

CHMO:0000597 | ^{19}F nuclear magnetic resonance spectroscopy (^{19}F NMR)

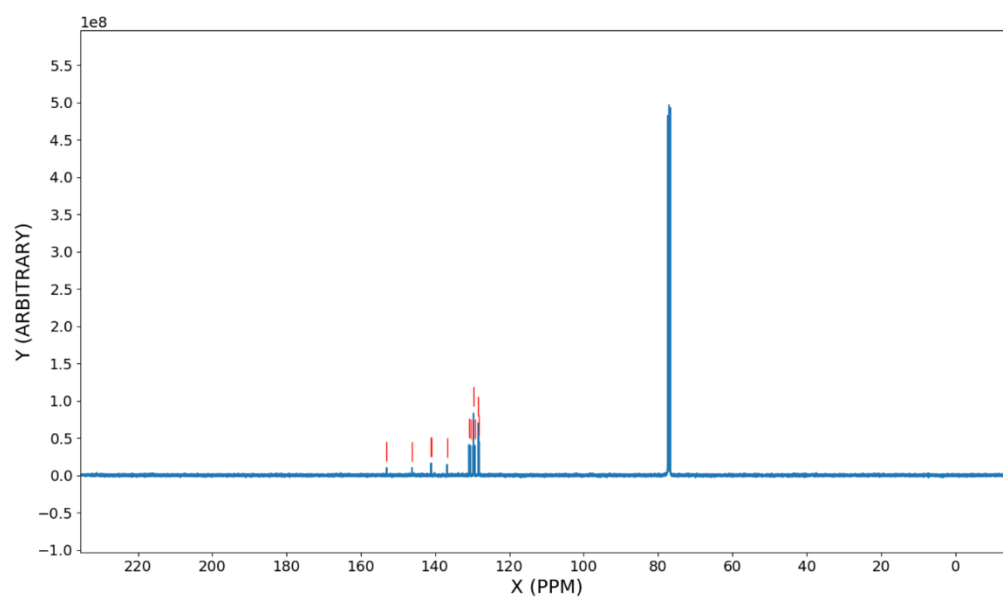


[10e] 2-Chloro-3-phenylquinoxaline

CHMO:0000595 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

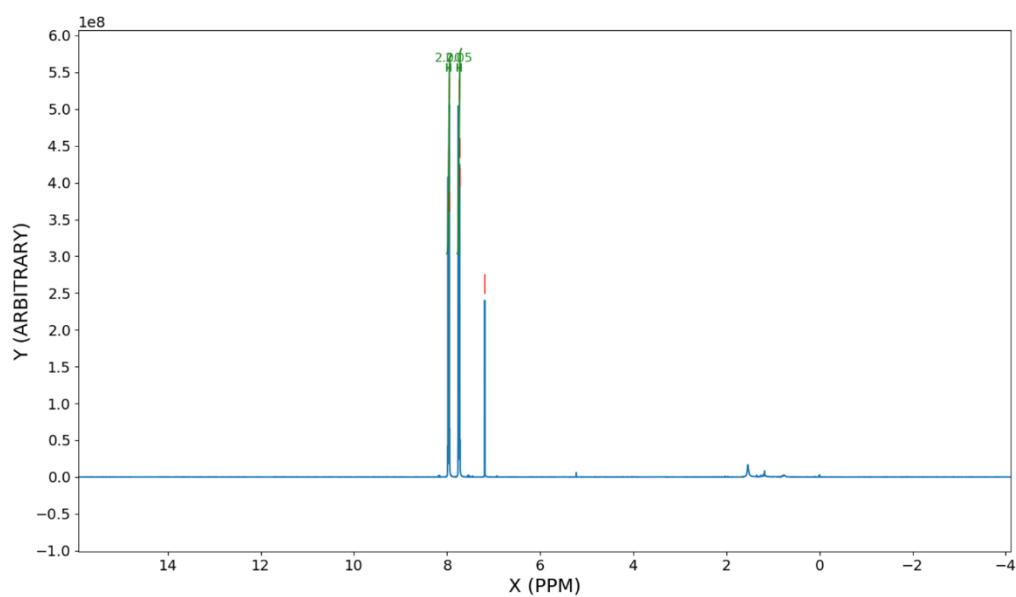


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

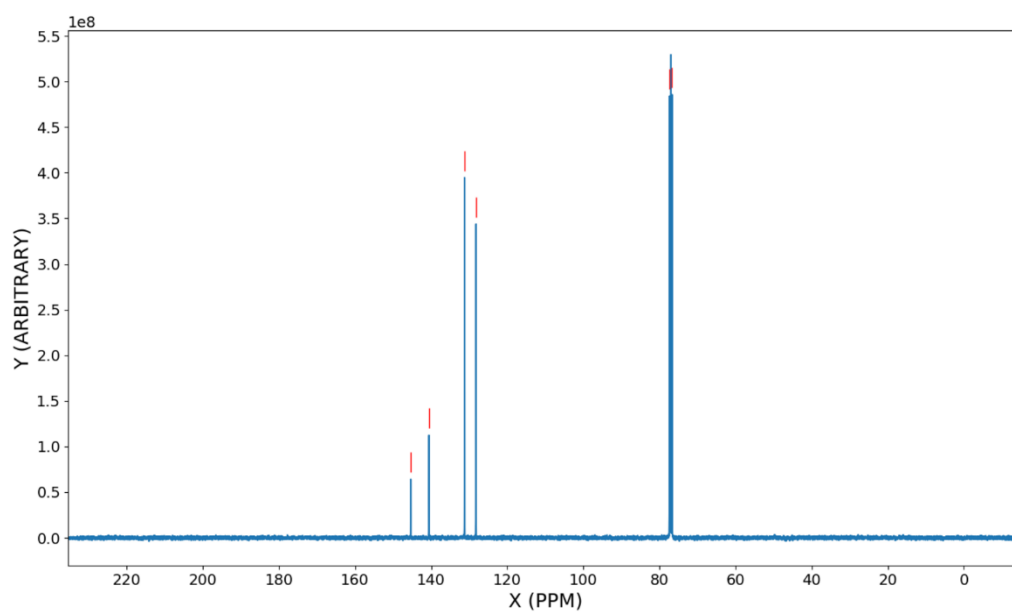


[10f] 2,3-Dichloroquinoxaline

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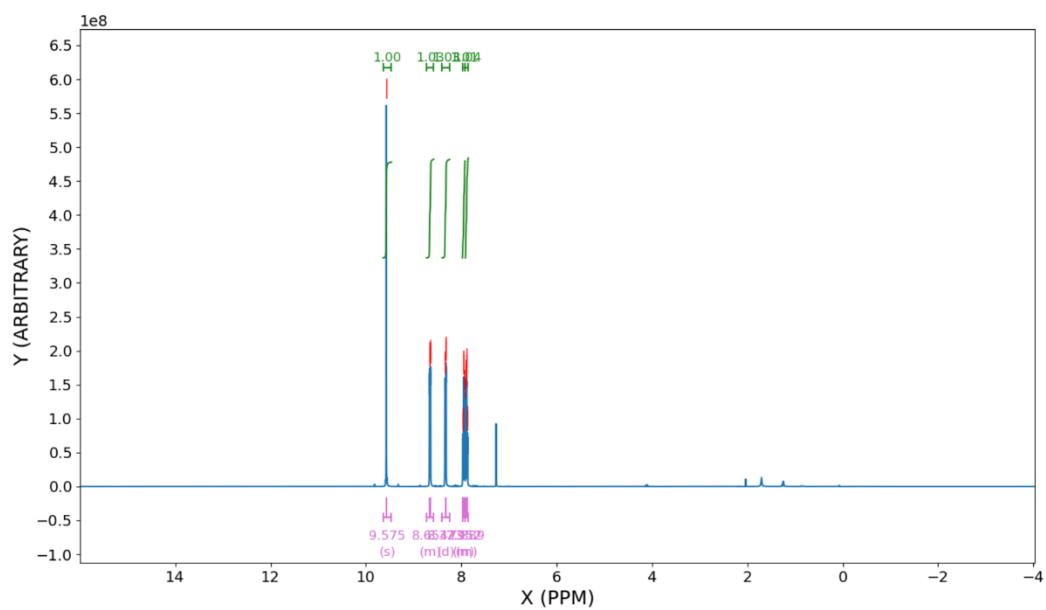


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

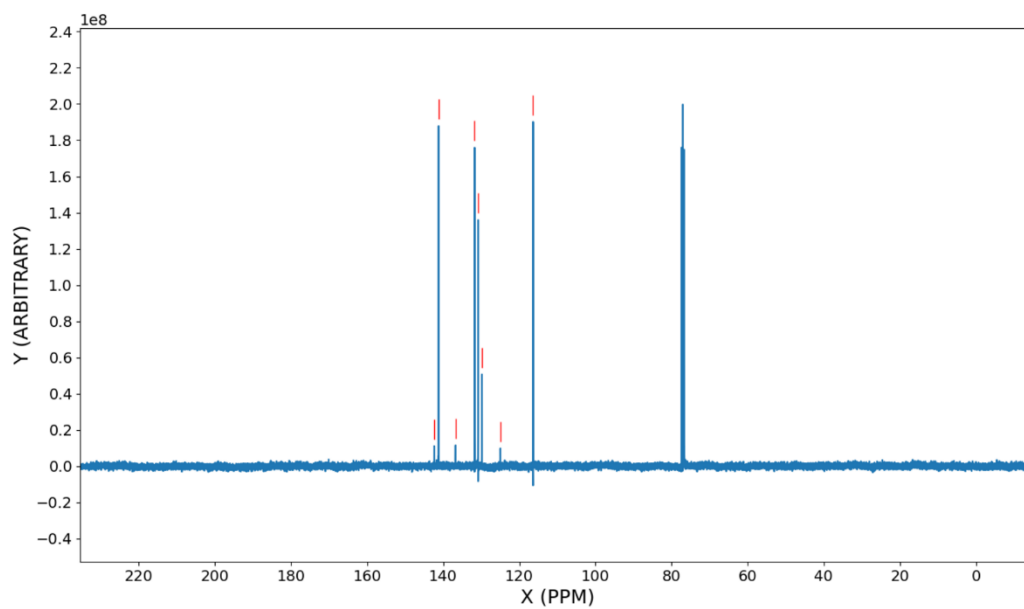


[11a] Tetrazolo[1,5-*a*]quinoxaline

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

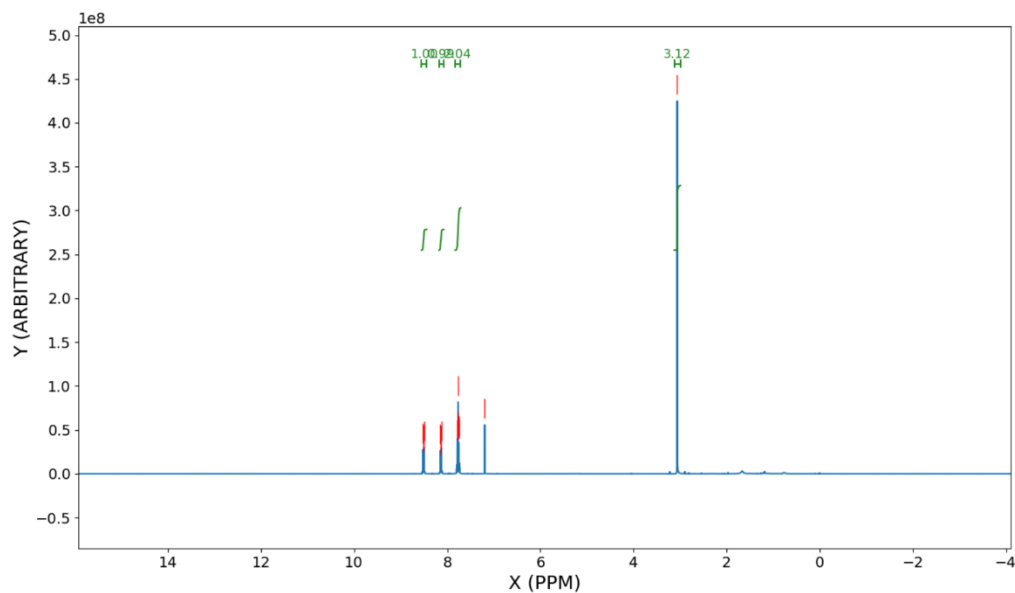


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

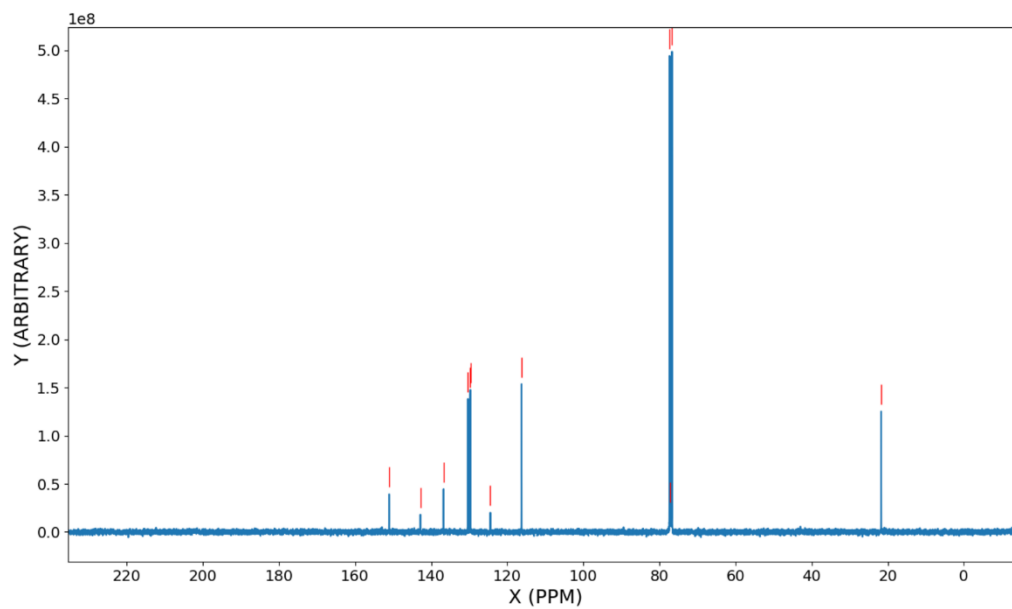


[11b] 4-Methyltetrazolo[1,5-*a*]quinoxaline

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

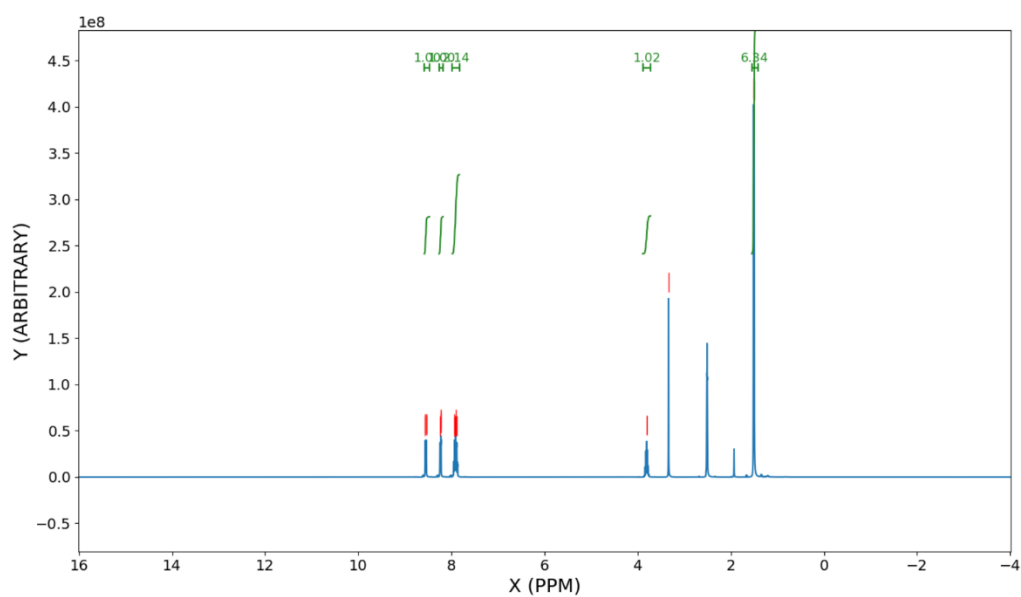


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

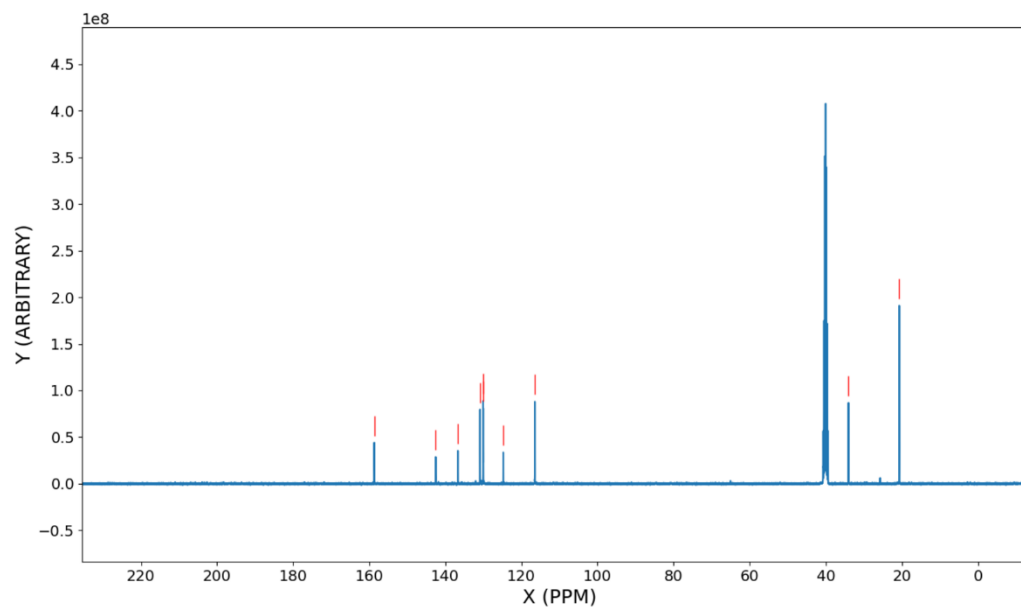


[11c] 4-Isopropyltetrazolo[1,5-*a*]quinoxaline

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

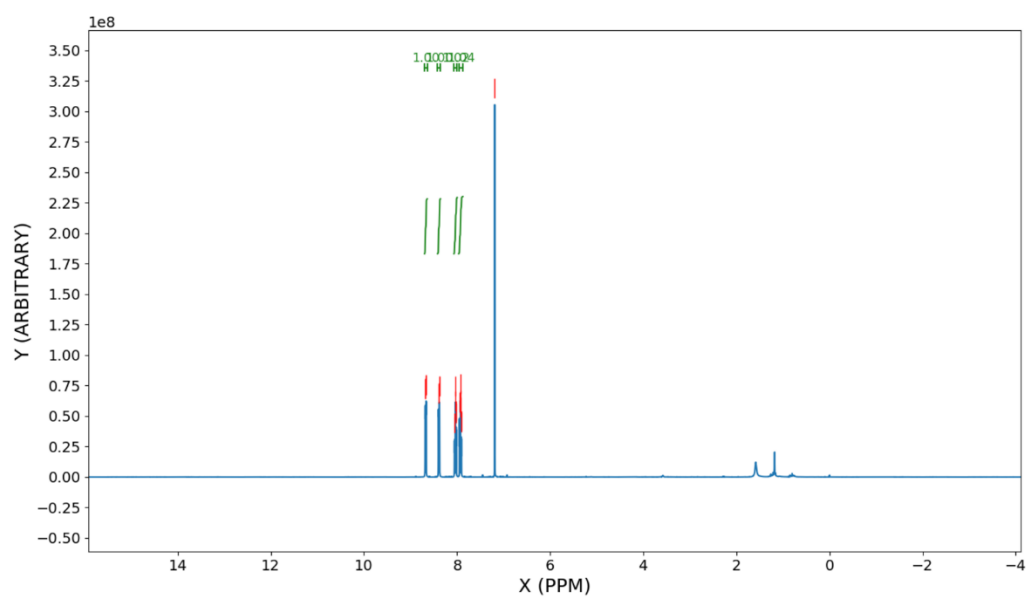


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

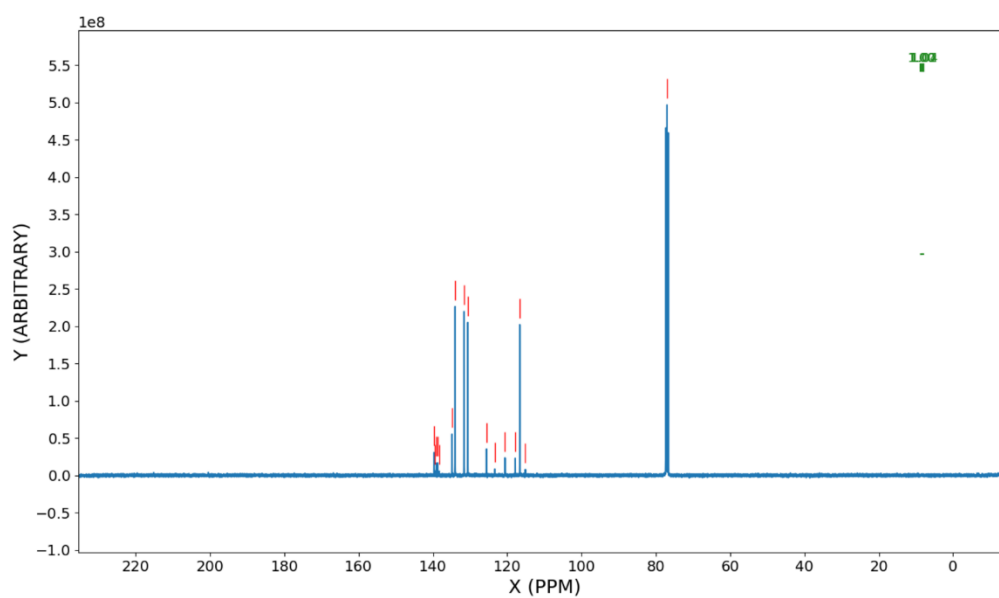


[11d] 4-(Trifluoromethyl)tetrazolo[1,5-*a*]quinoxaline

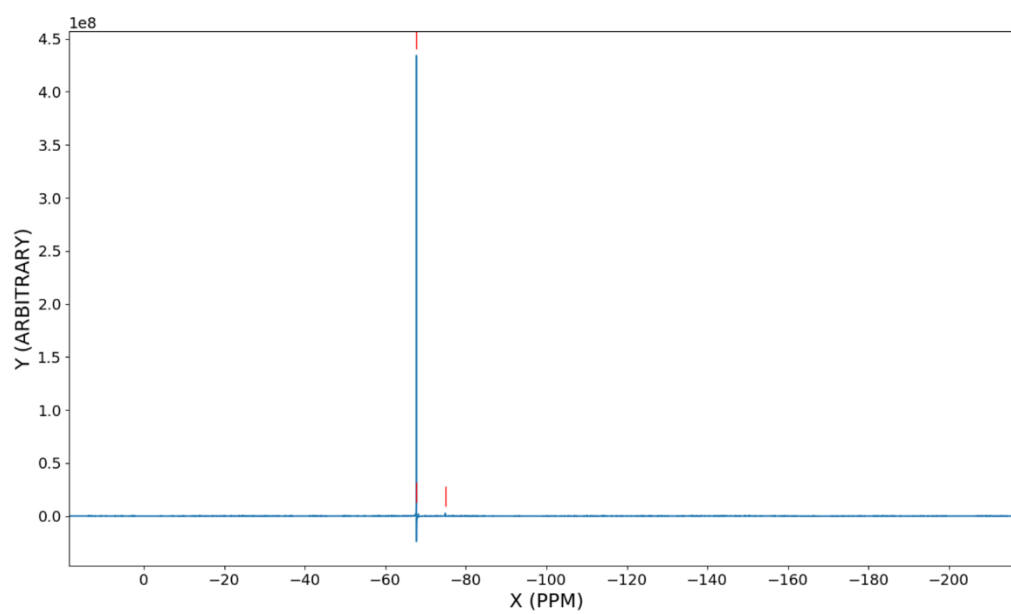
CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)



CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

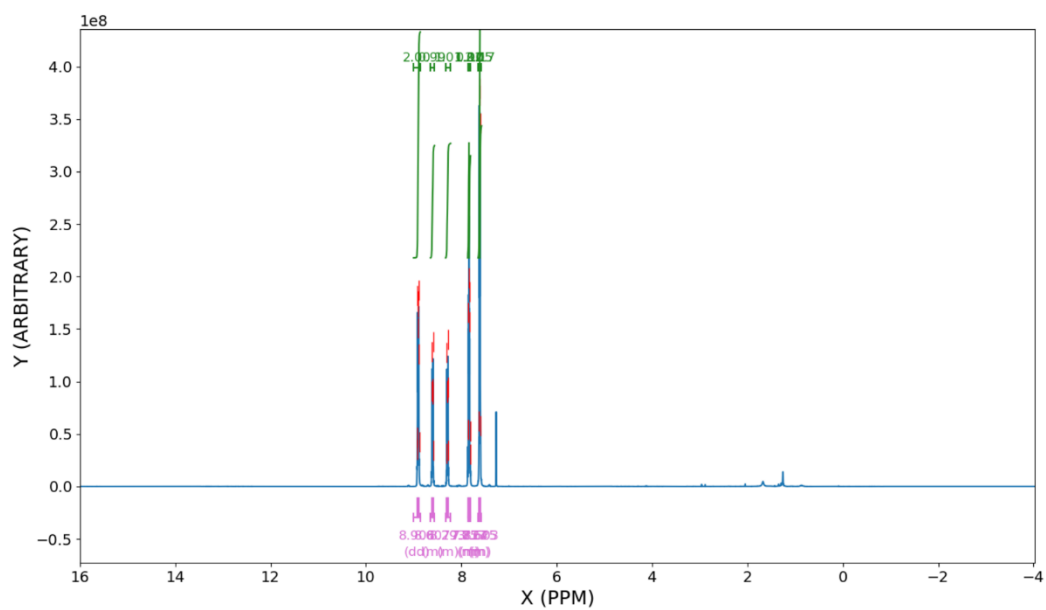


CHMO:0000597 | ^{19}F nuclear magnetic resonance spectroscopy (^{19}F NMR)

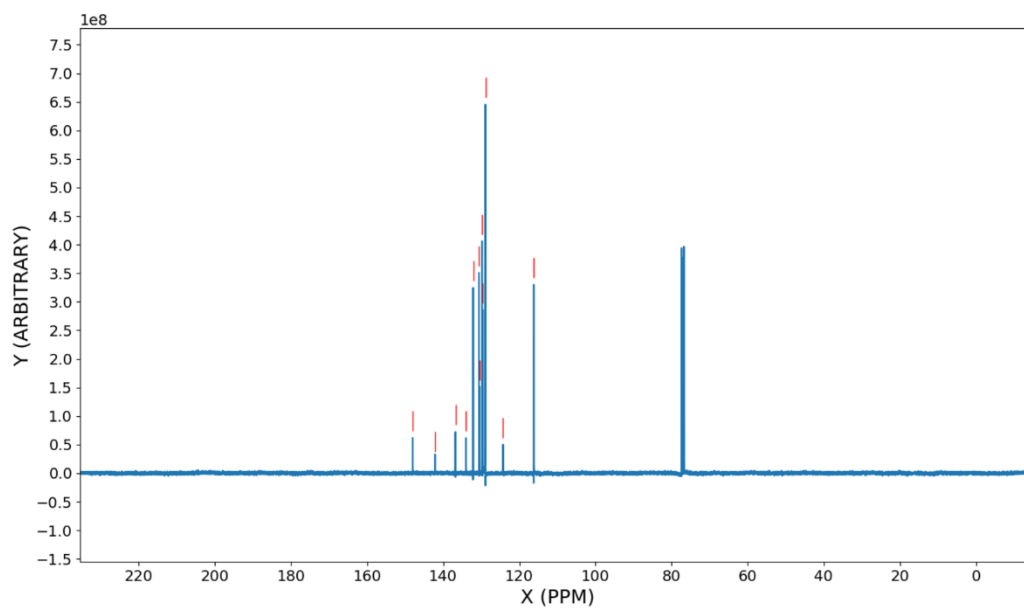


[11e] 4-Phenyltetrazolo[1,5-*a*]quinoxaline

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

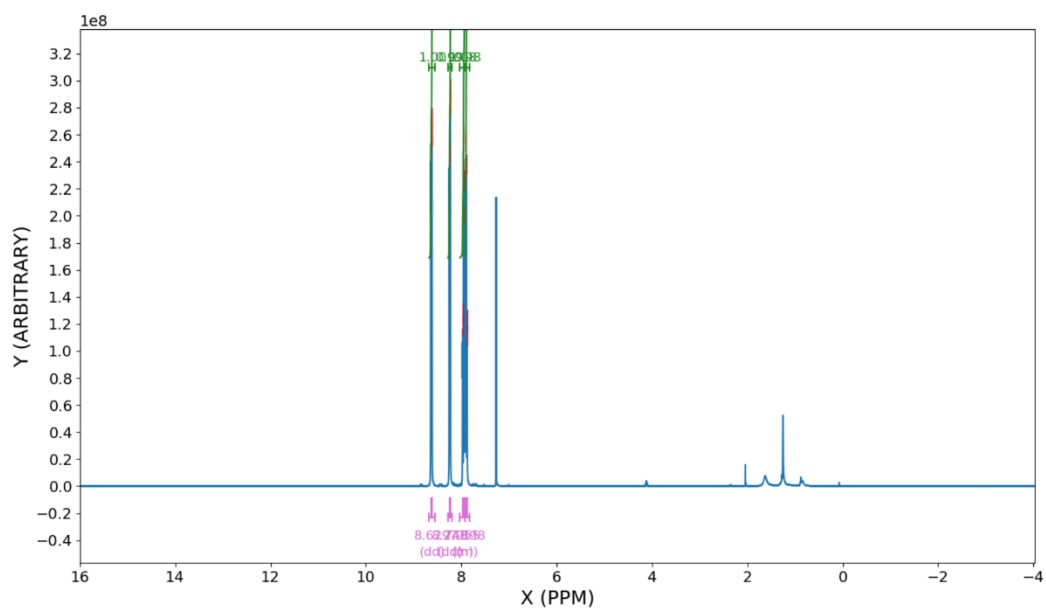


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

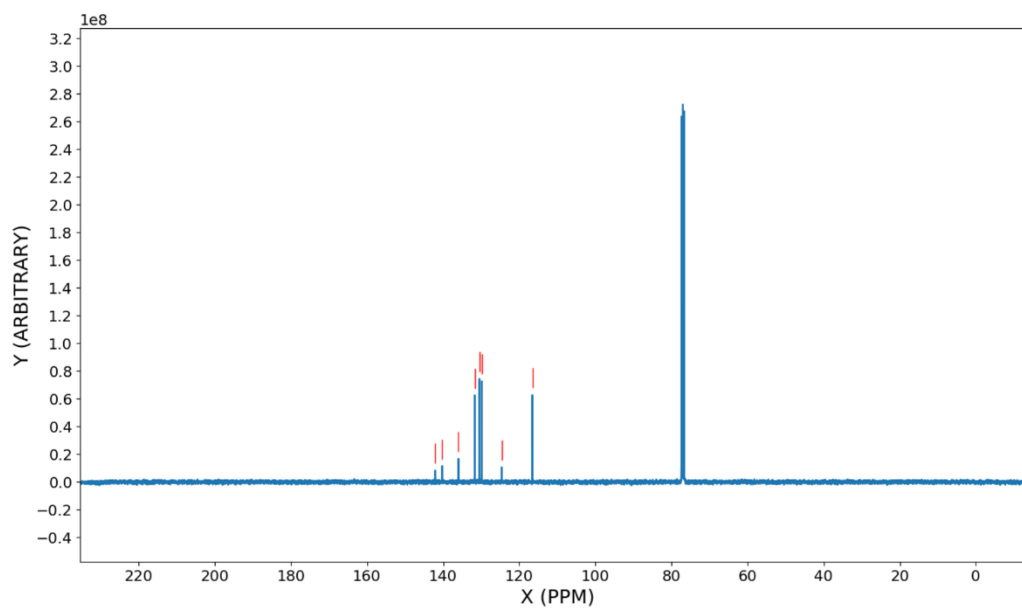


[11f] 4-Chlorotetrazolo[1,5-*a*]quinoxaline

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

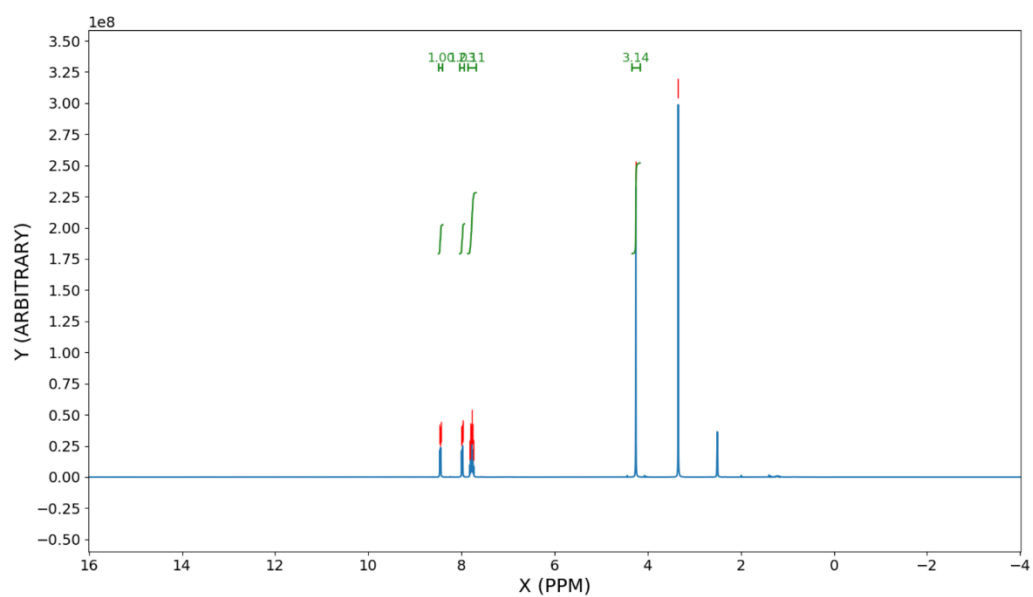


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

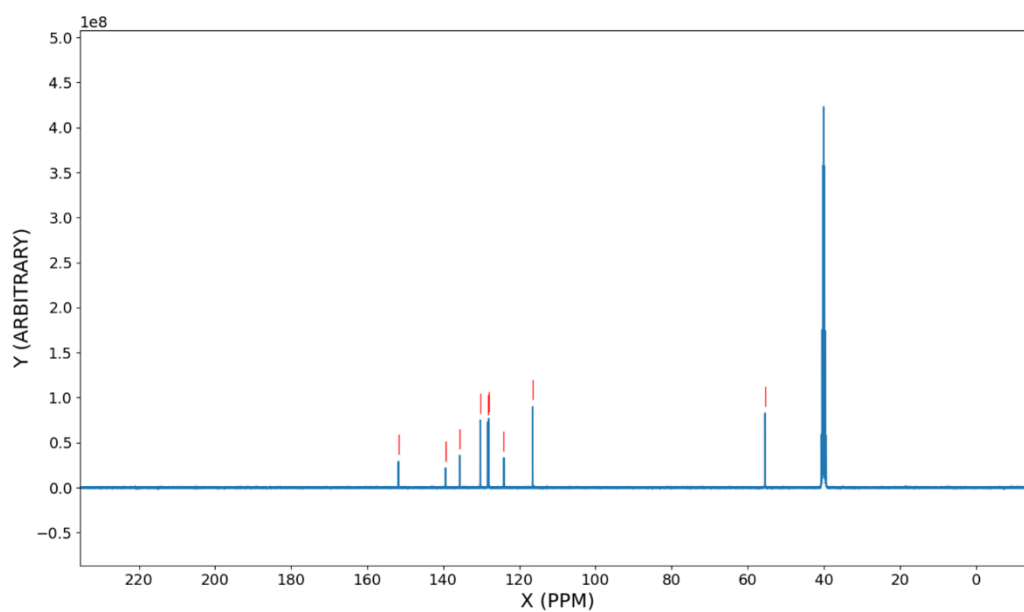


[11g] 4-Methoxytetrazolo[1,5-*a*]quinoxaline

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

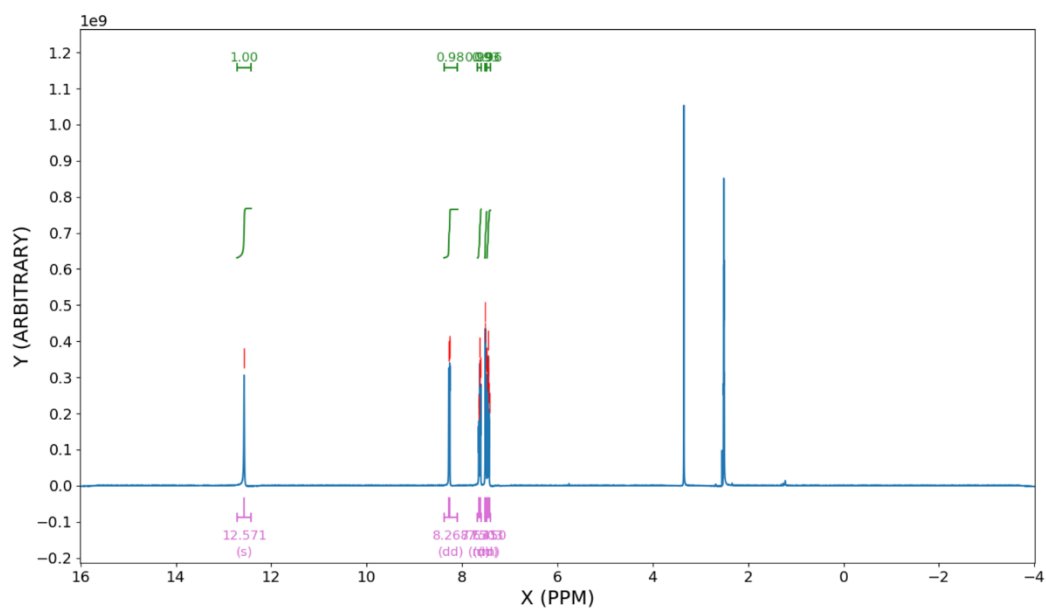


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

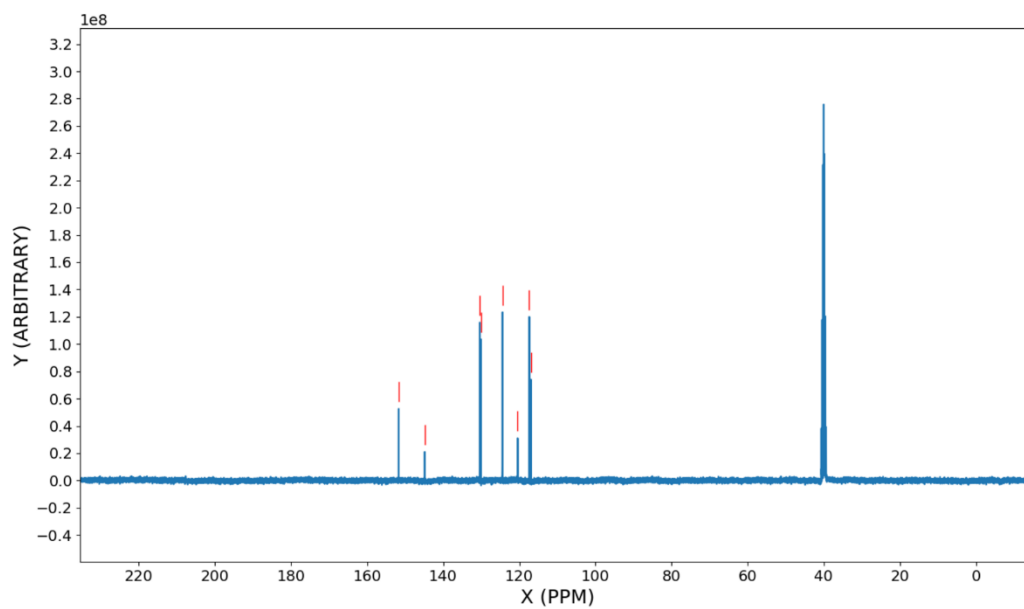


[11h] 5*H*-Tetrazolo[1,5-*a*]quinoxalin-4-one

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

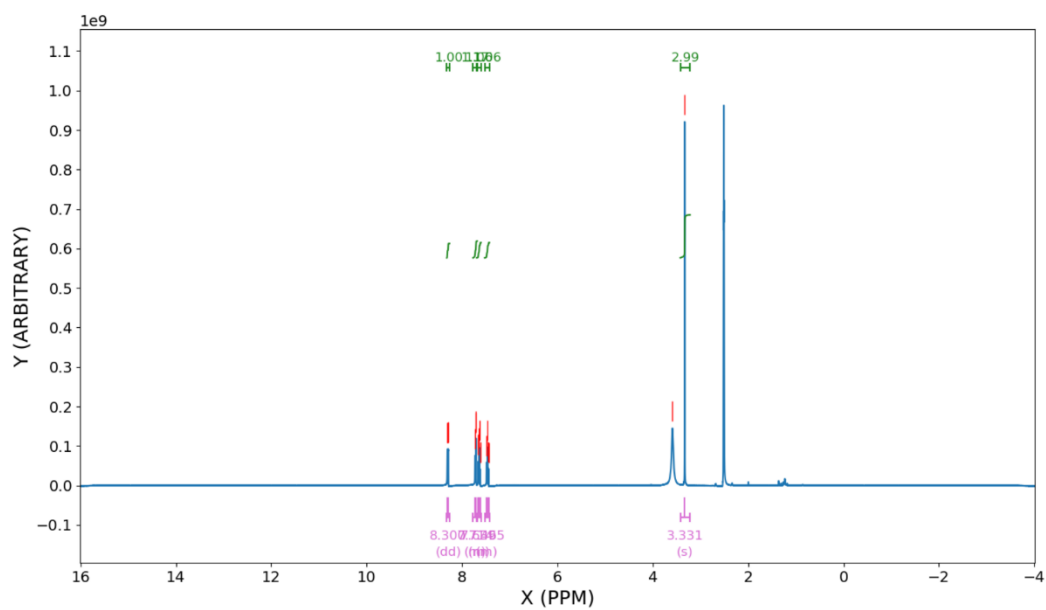


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

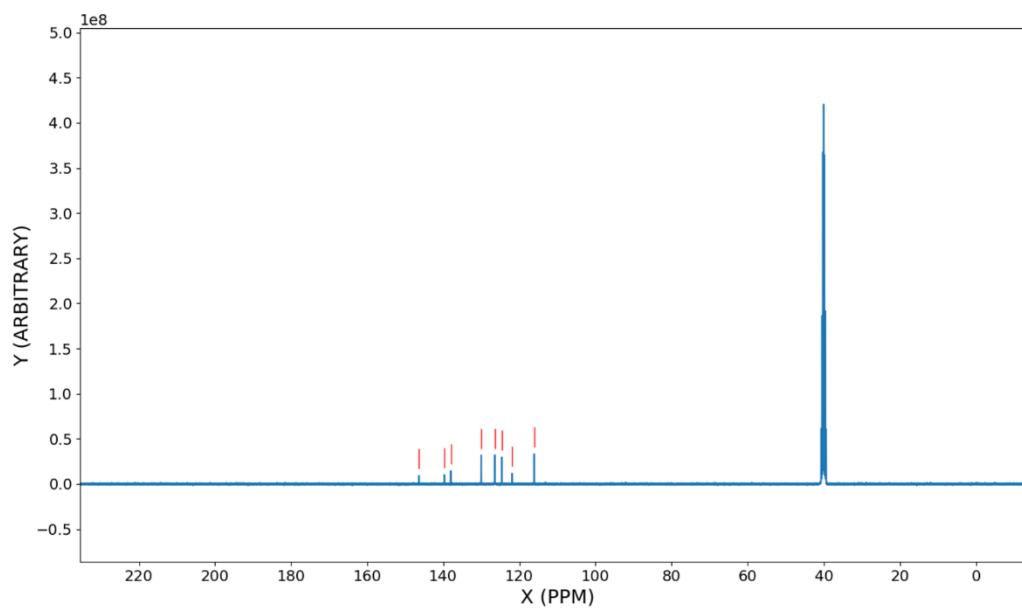


[11i] *N,N*-Dimethyltetrazolo[1,5-*a*]quinoxalin-4-amine

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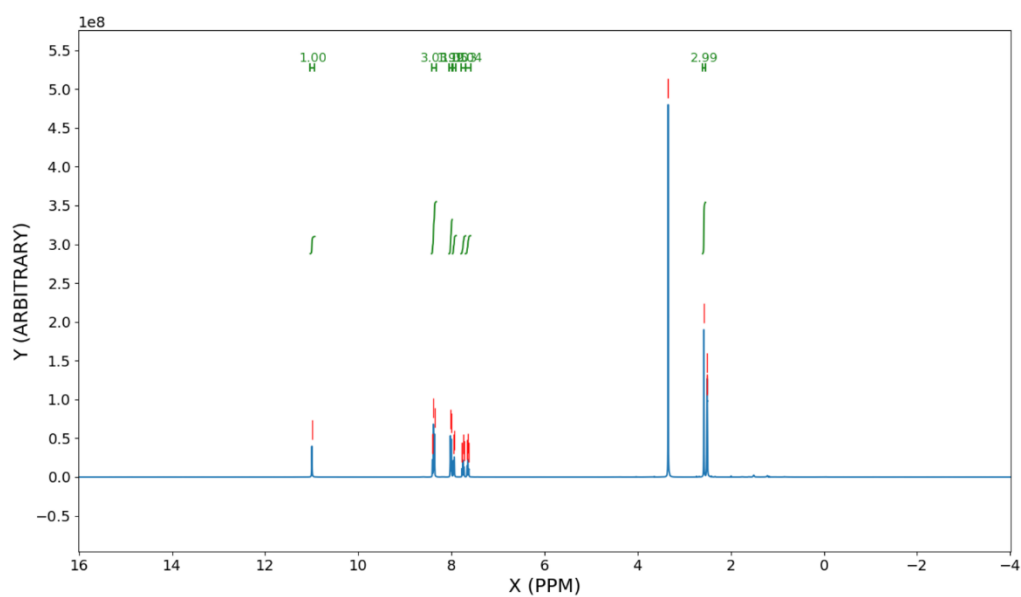


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

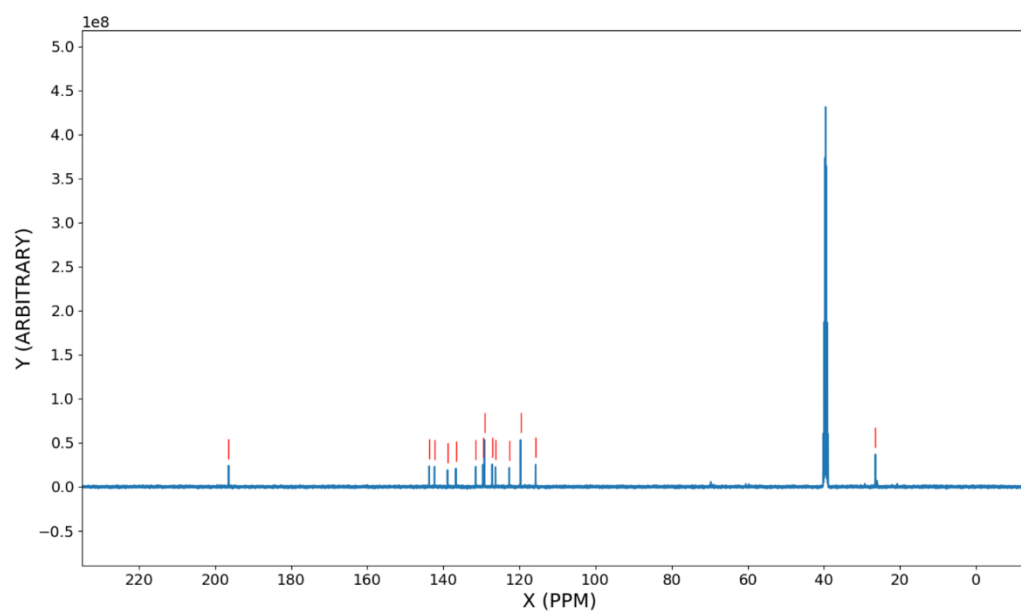


[11j] 1-[4-(Tetrazolo[1,5-*a*]quinoxalin-4-ylamino)phenyl]ethanone

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

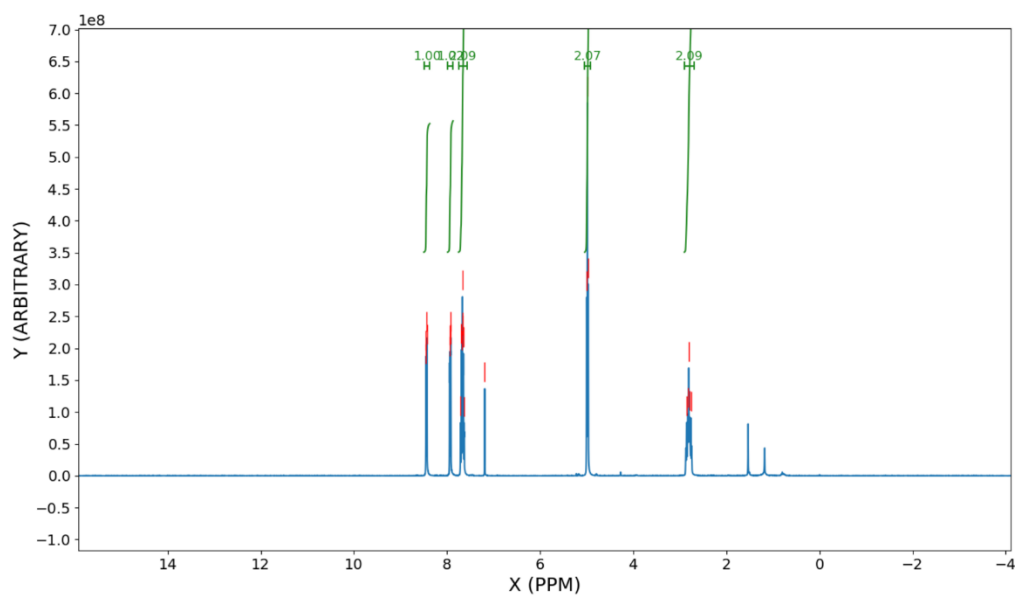


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

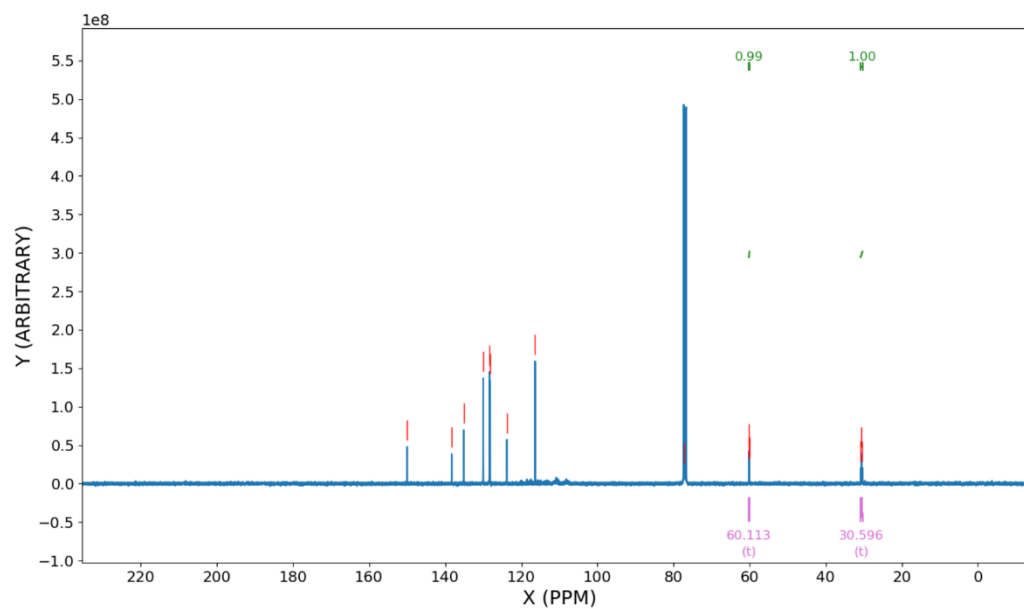


[11k] 4-((3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-Heptafluorodecyl)oxy)tetrazolo[1,5-*a*]quinoxaline

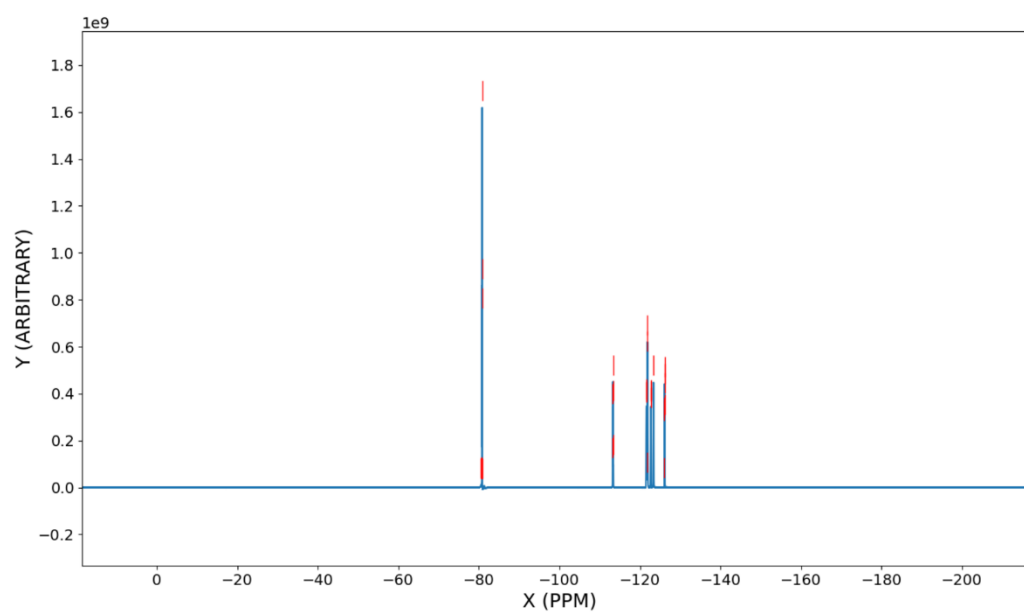
CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)



CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

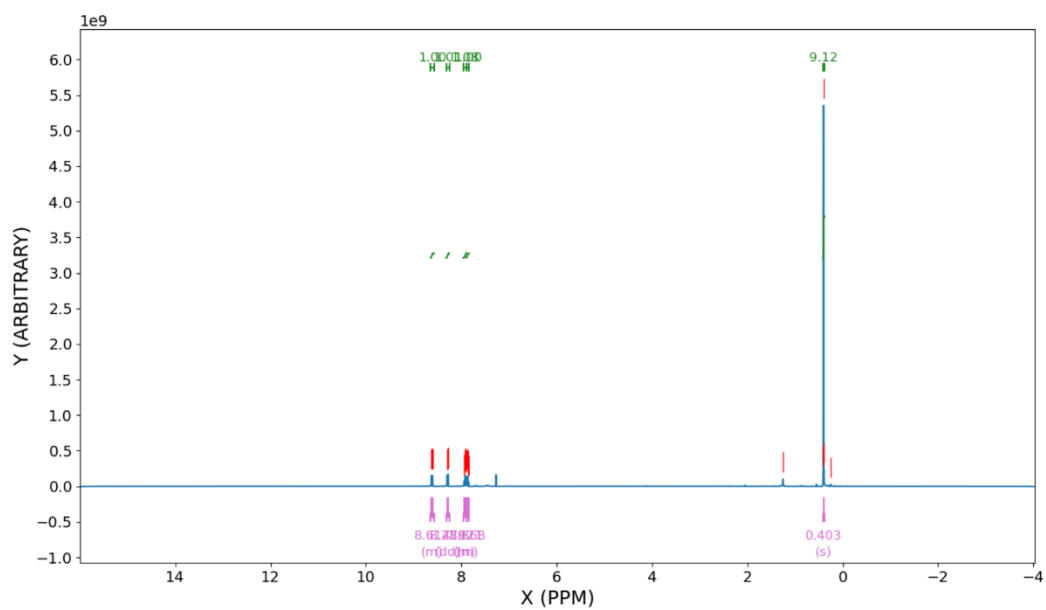


CHMO:0000597 | ^{19}F nuclear magnetic resonance spectroscopy (^{19}F NMR)

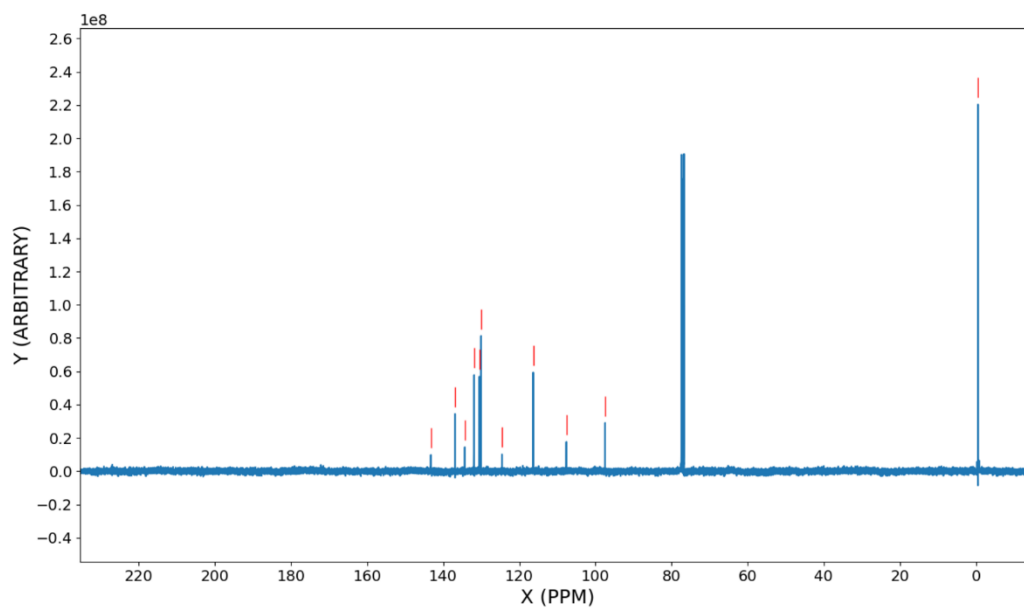


[111] 4-((Trimethylsilyl)ethynyl)tetrangolo[1,5-*a*]quinoxaline

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

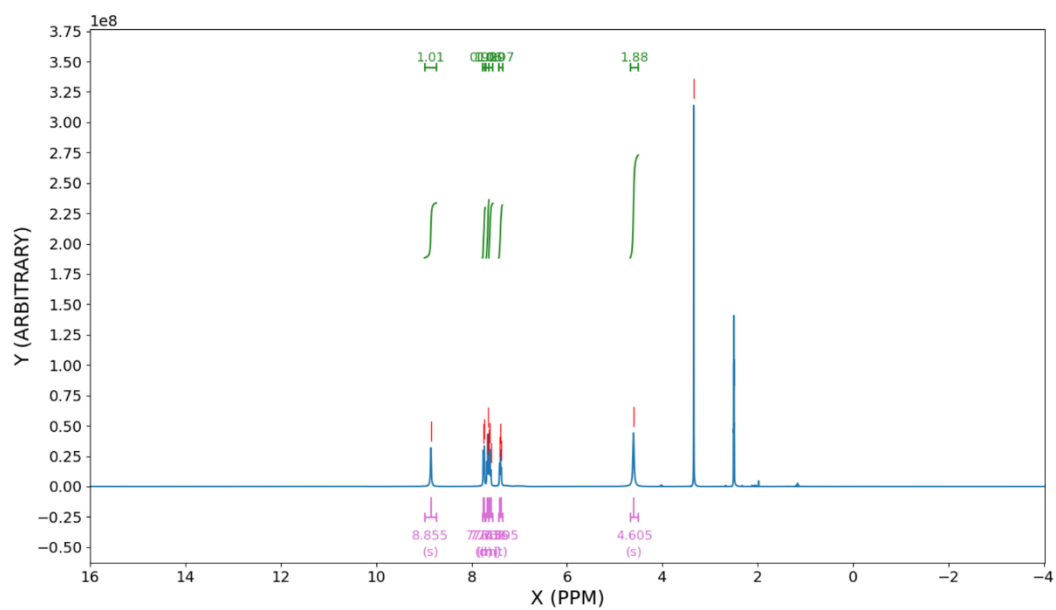


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

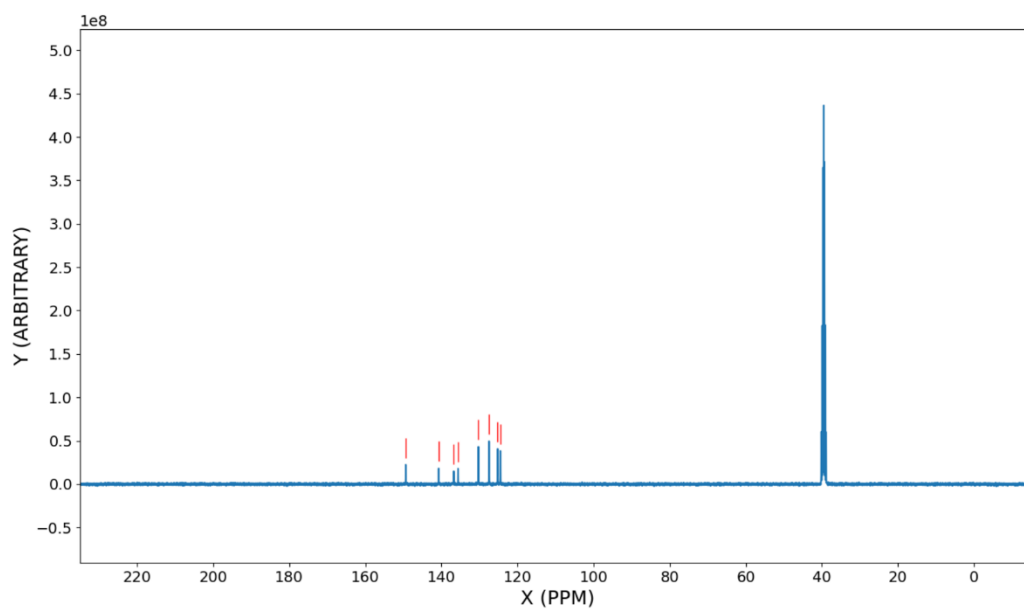


[12] (3-Chloroquinoxalin-2-yl)hydrazine

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

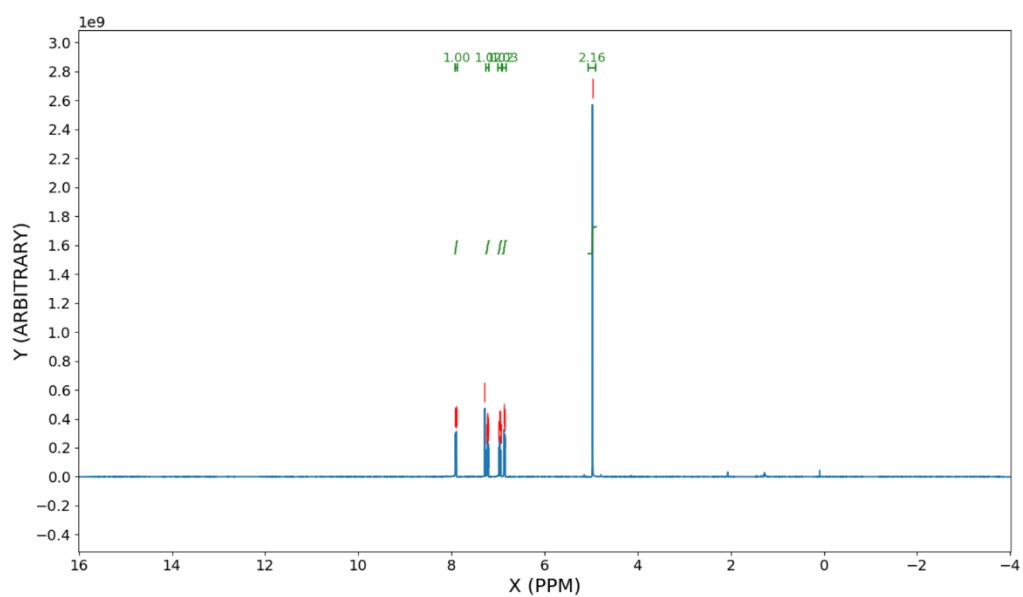


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

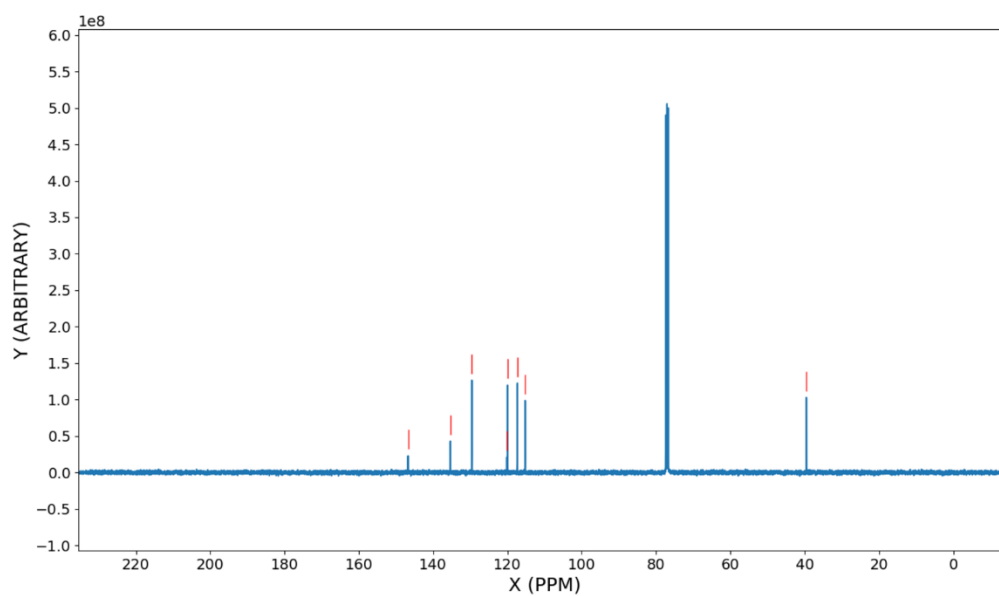


[S3] 4,5-Dihydrotetrazolo[1,5-*a*]quinoxaline

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

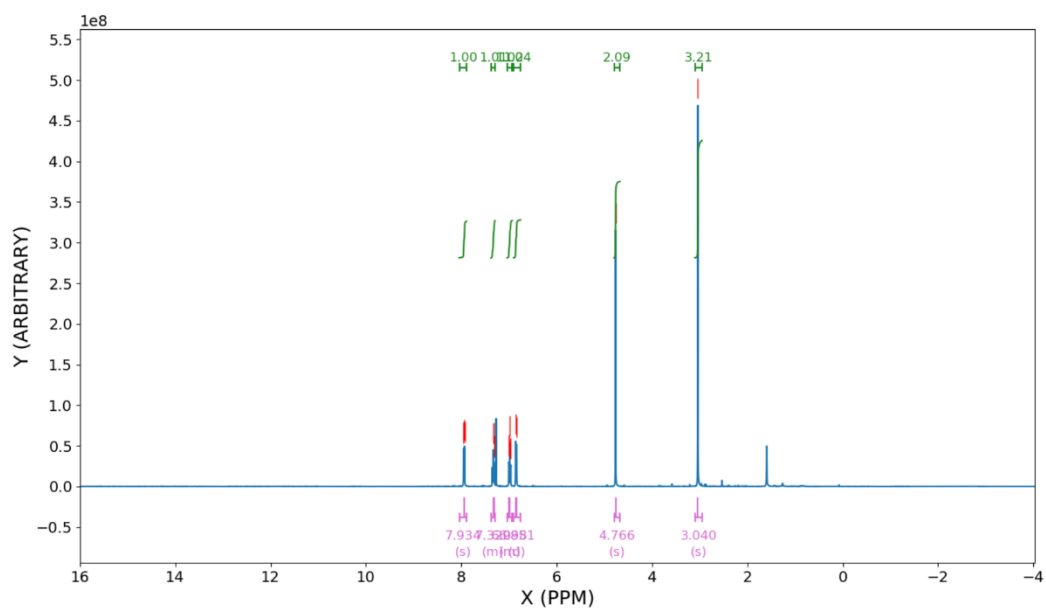


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

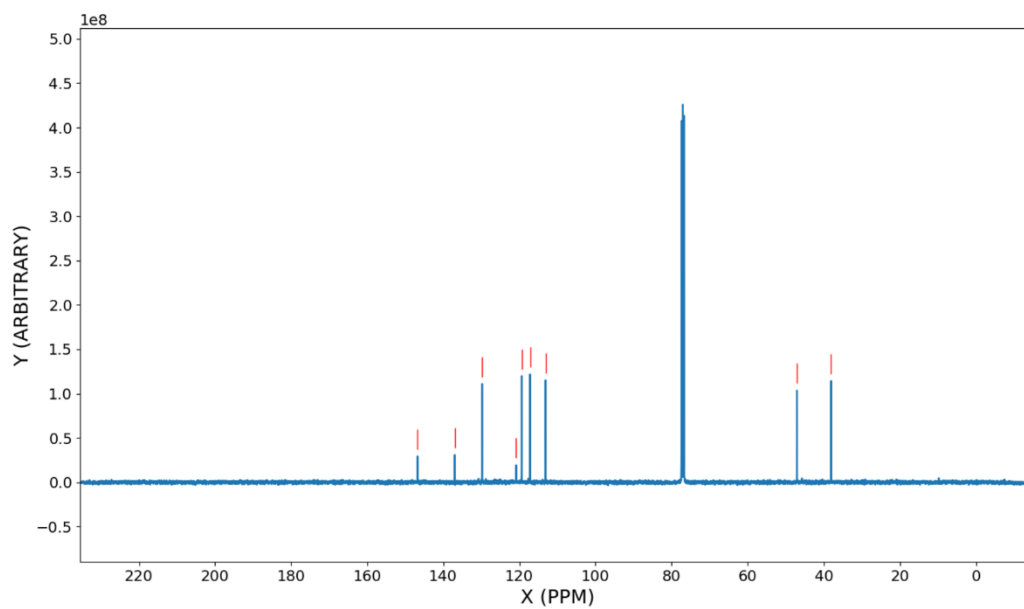


[S4] 5-Methyl-4*H*-tetrazolo[1,5-*a*]quinoxaline

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

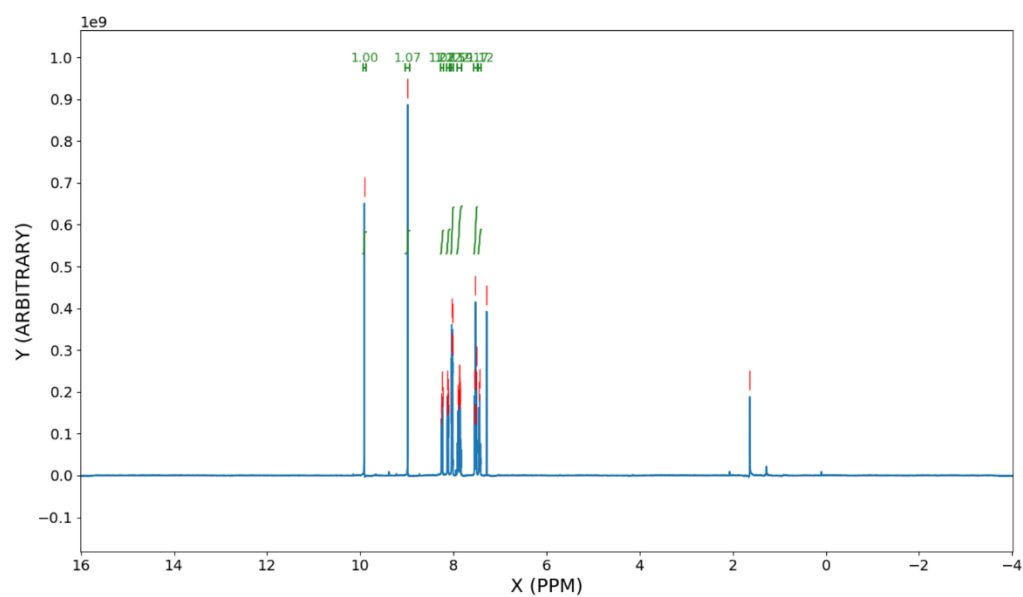


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

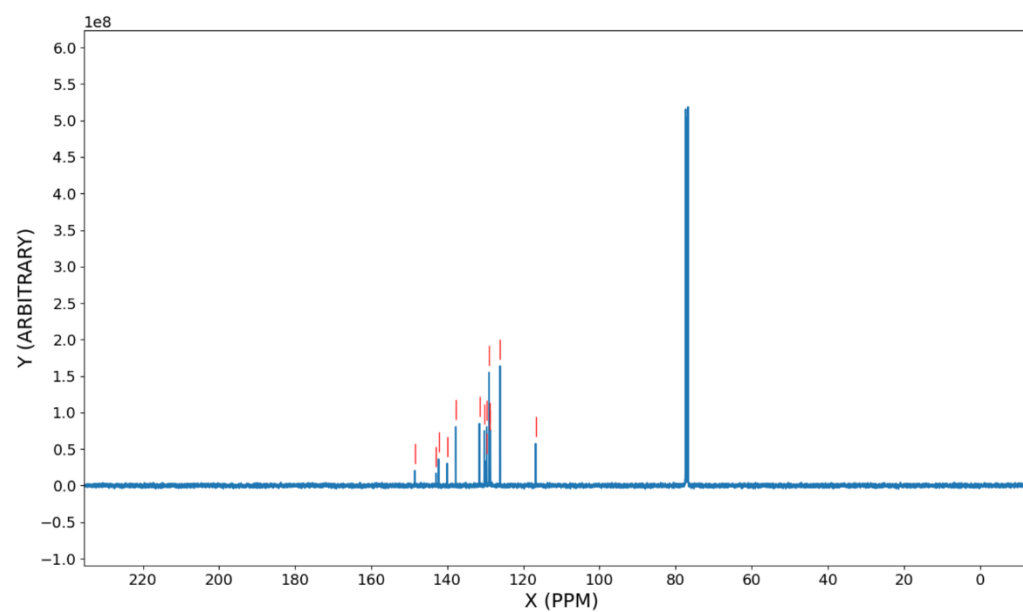


[14a] 2-(4-Phenyl-1*H*-1,2,3-triazol-1-yl)quinoxaline

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

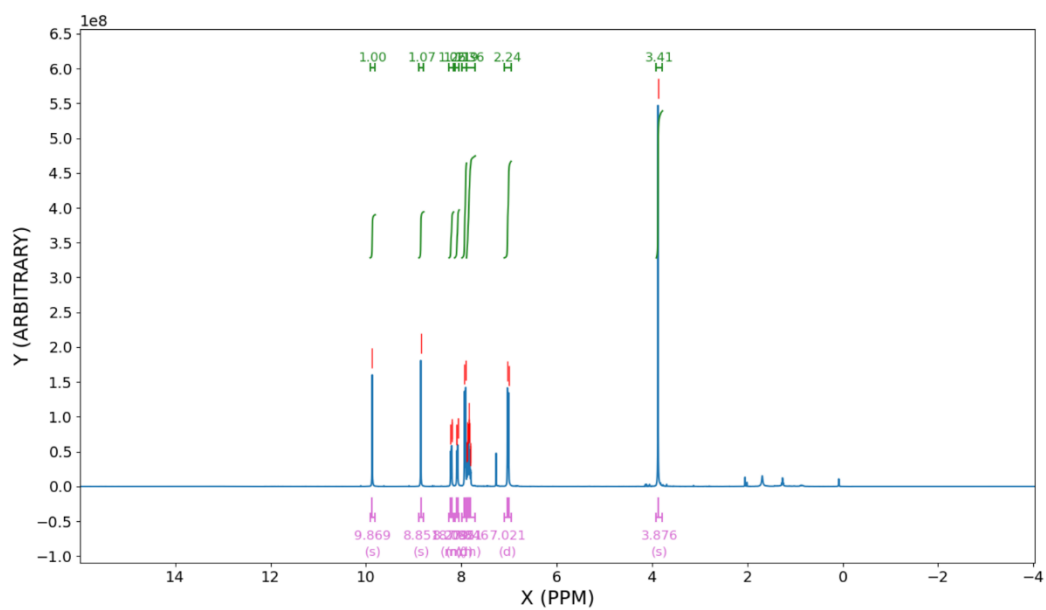


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

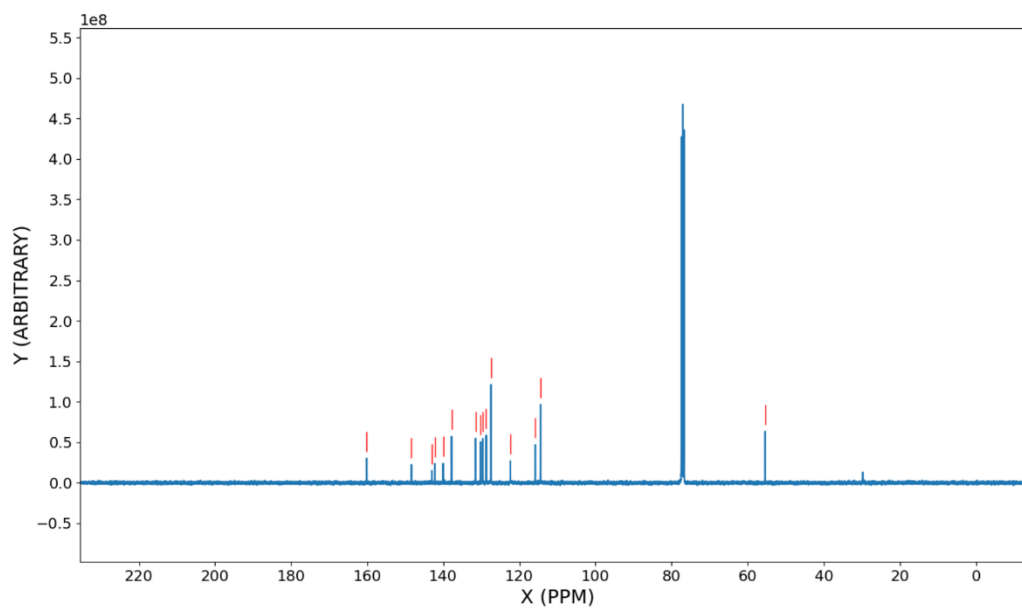


[14b] 2-(4-(4-Methoxyphenyl)-1*H*-1,2,3-triazol-1-yl)quinoxaline

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

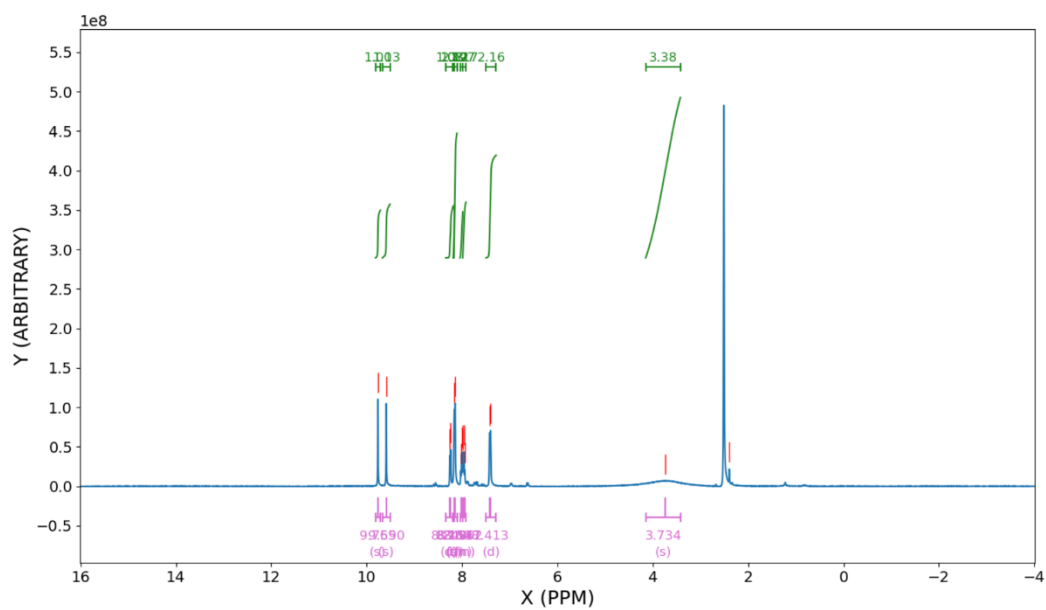


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

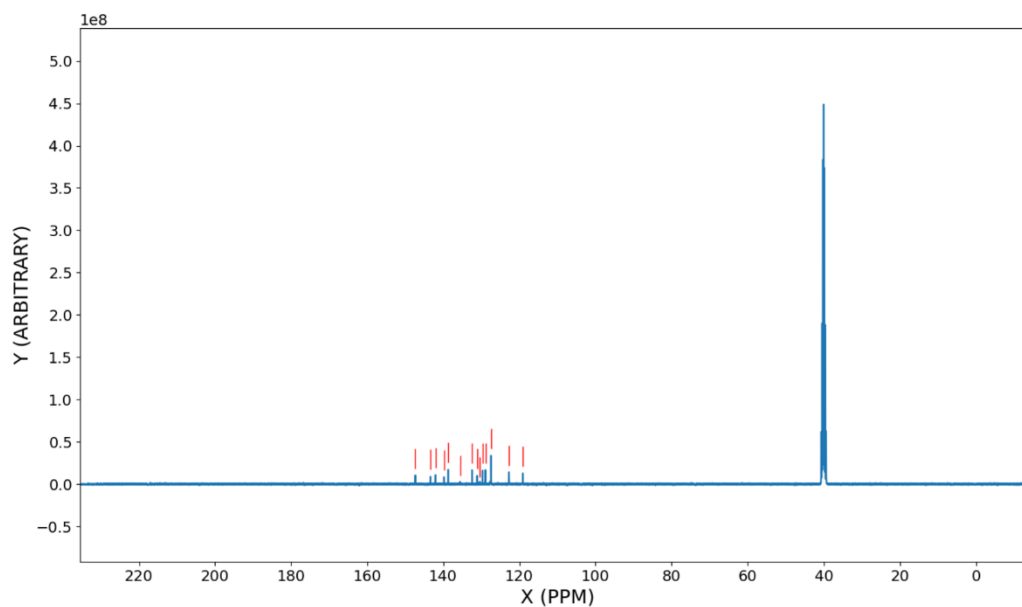


[14c] 4-(1-(Quinoxalin-2-yl)-1H-1,2,3-triazol-4-yl)benzenaminium chloride

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

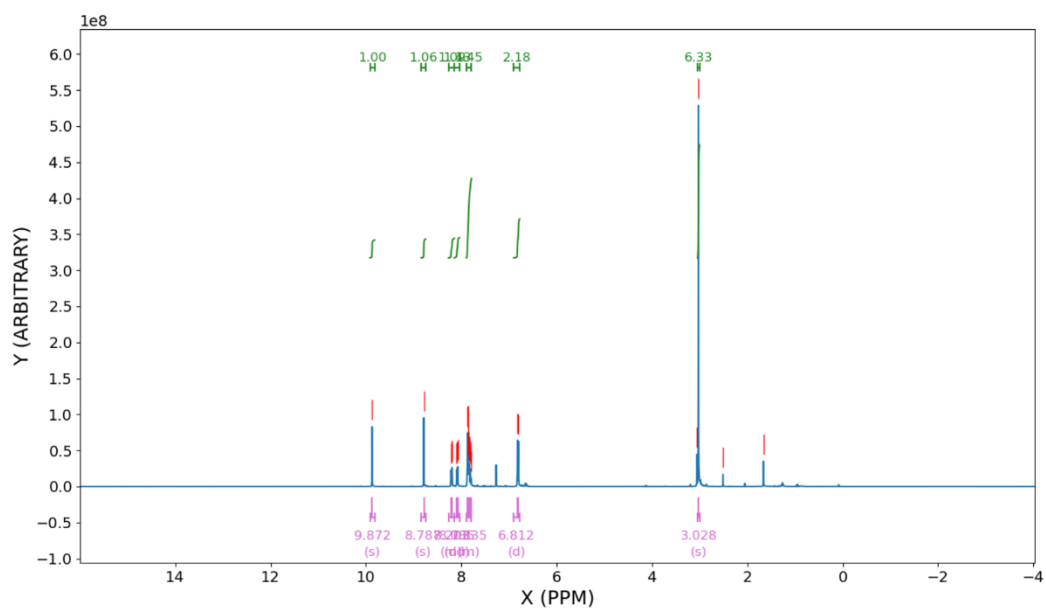


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

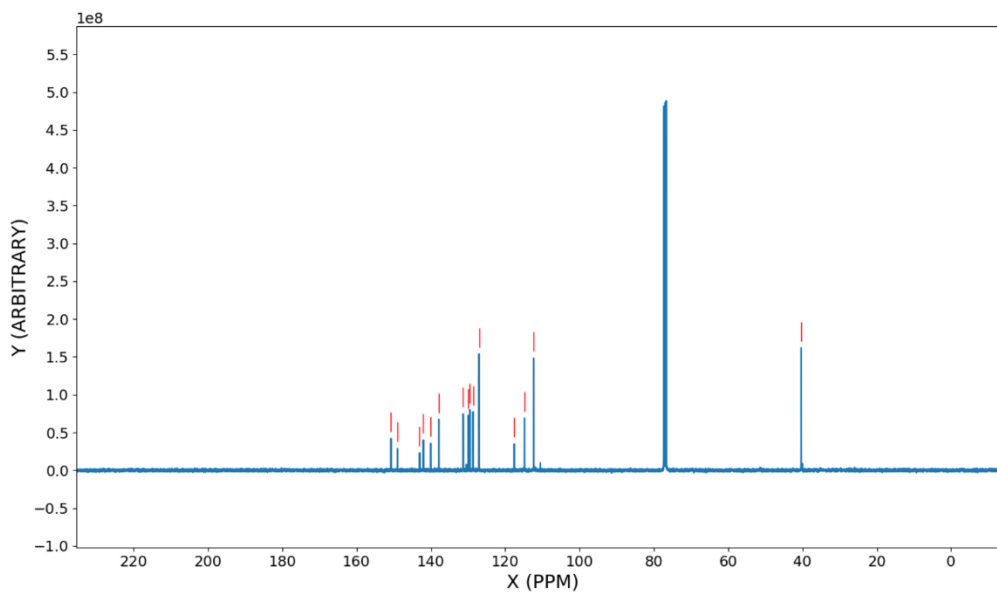


[**14d**] *N,N*-Dimethyl-4-(1-(quinoxalin-2-yl)-1*H*-1,2,3-triazol-4-yl)aniline

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

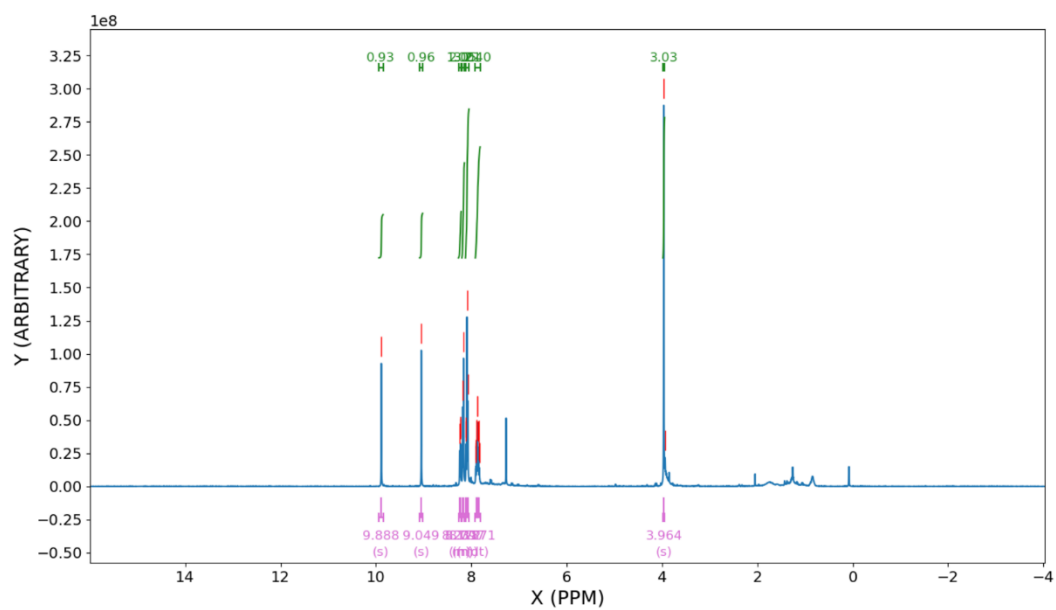


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

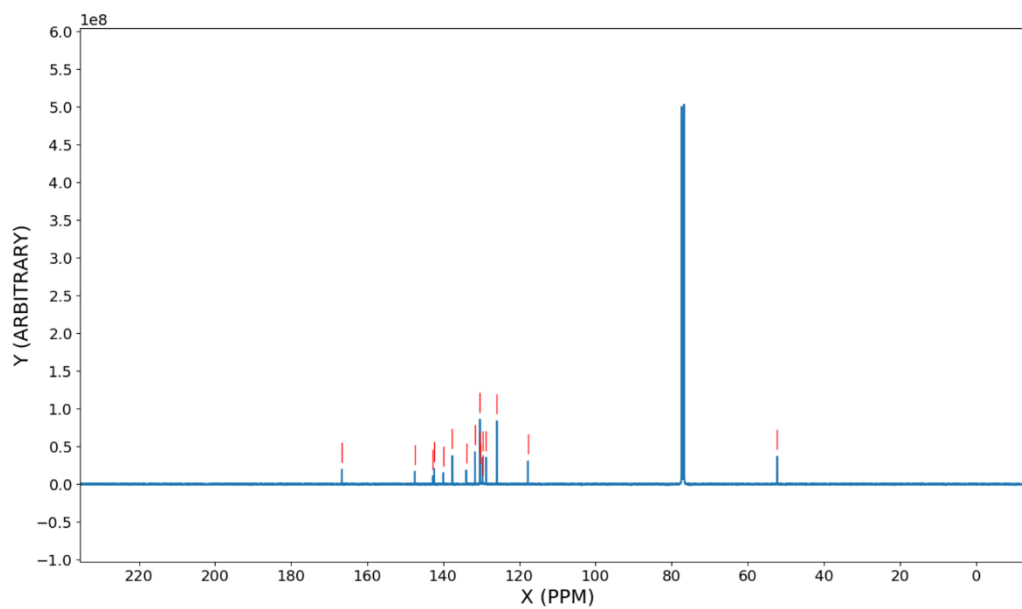


[**14e**] Methyl 4-(1-(quinoxalin-2-yl)-1*H*-1,2,3-triazol-4-yl)benzoate

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

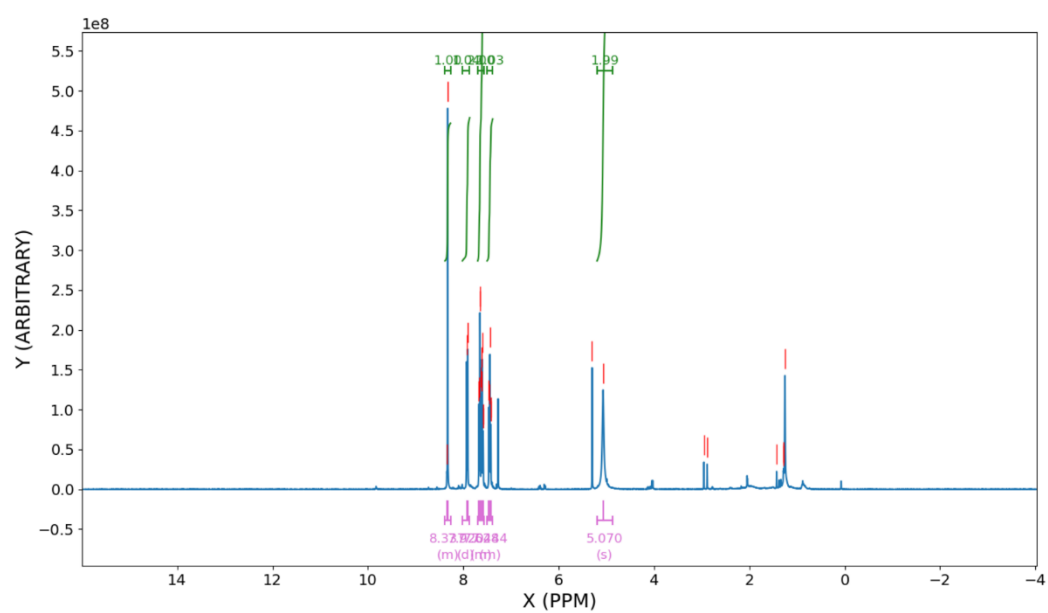


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)



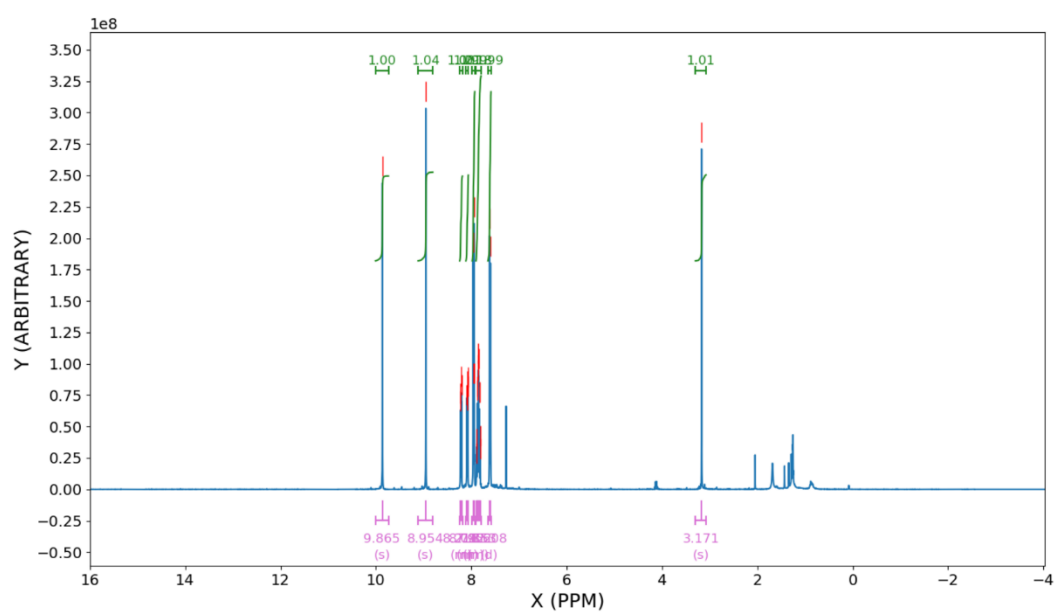
[S10] Quinoxalin-2-ylamine

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

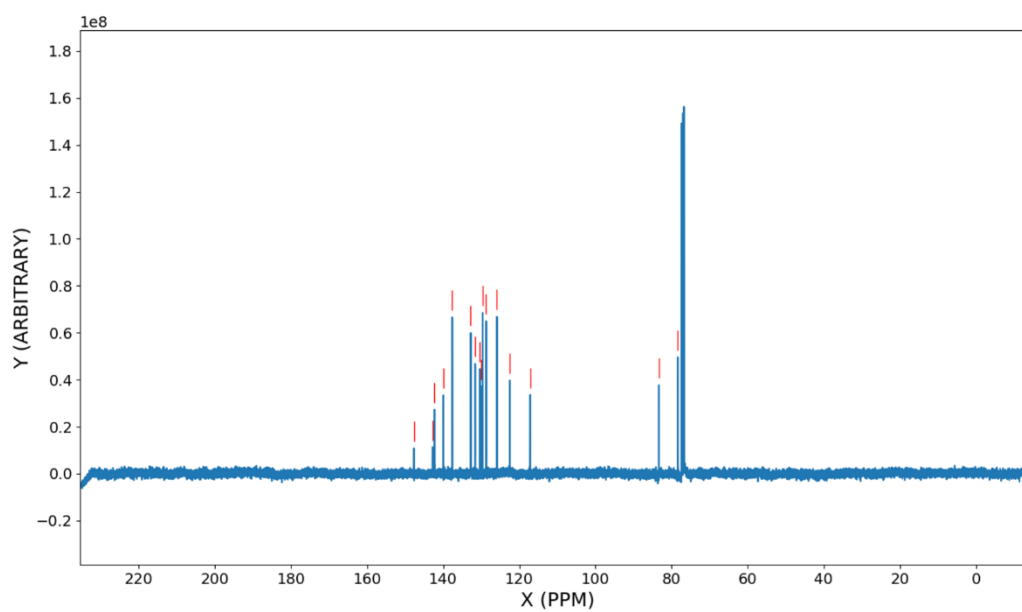


[14f] 2-(4-(4-Ethynylphenyl)-1*H*-1,2,3-triazol-1-yl)quinoxaline

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

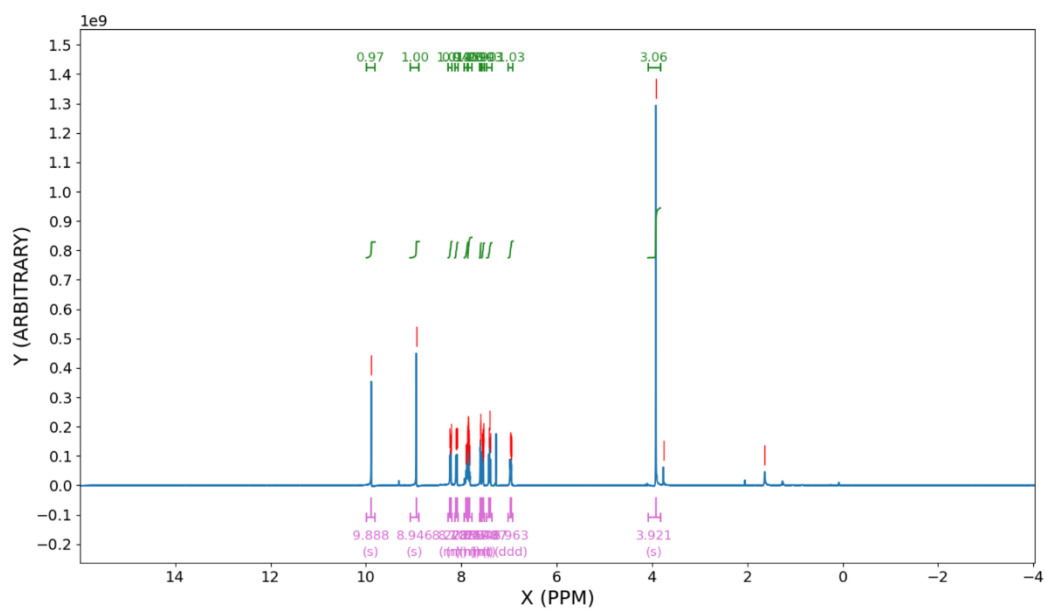


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

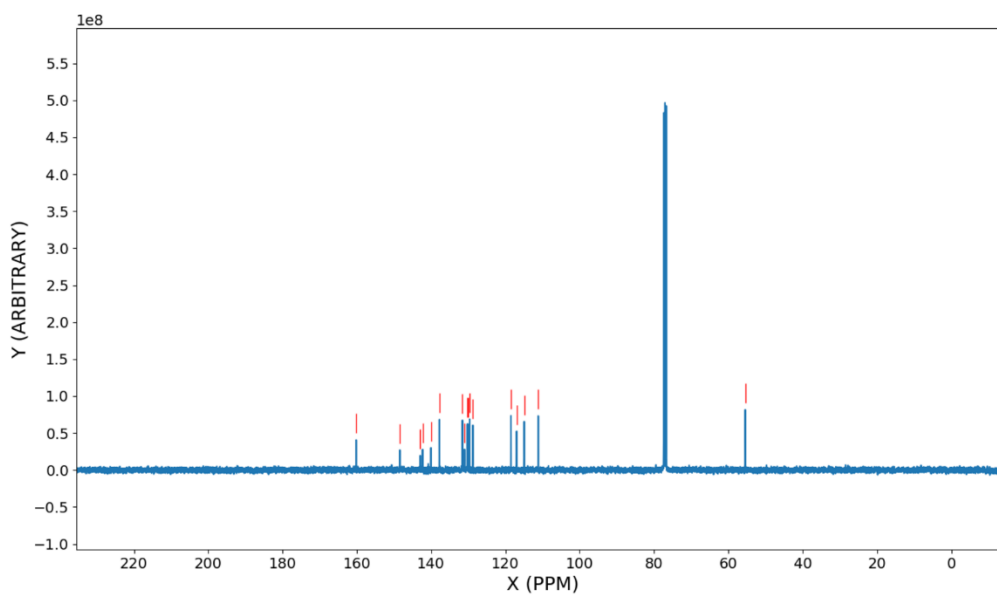


[14g] 2-(4-(3-Methoxyphenyl)-1*H*-1,2,3-triazol-1-yl)quinoxaline

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)



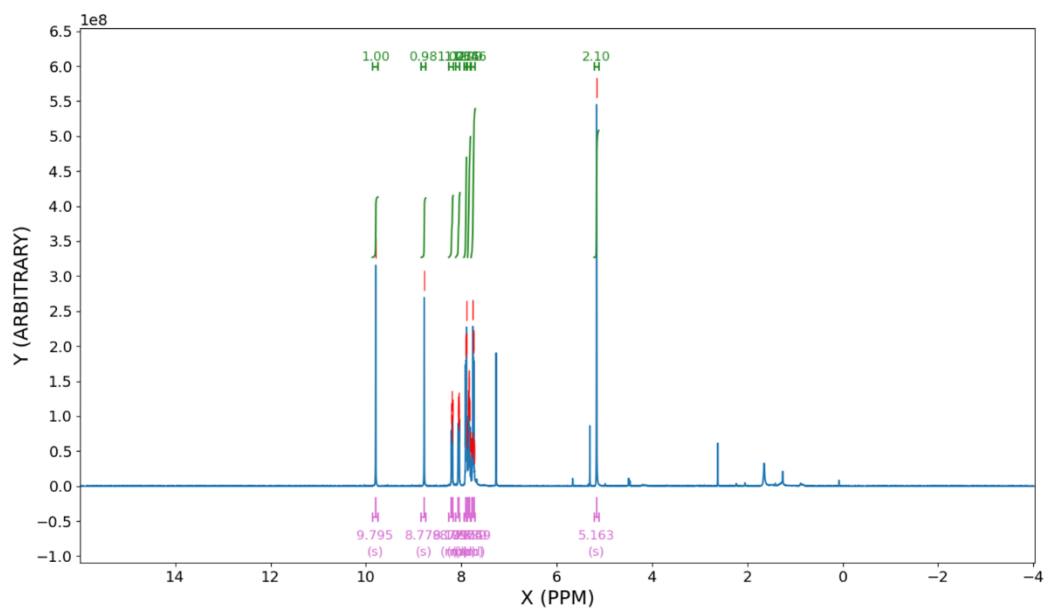
CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)



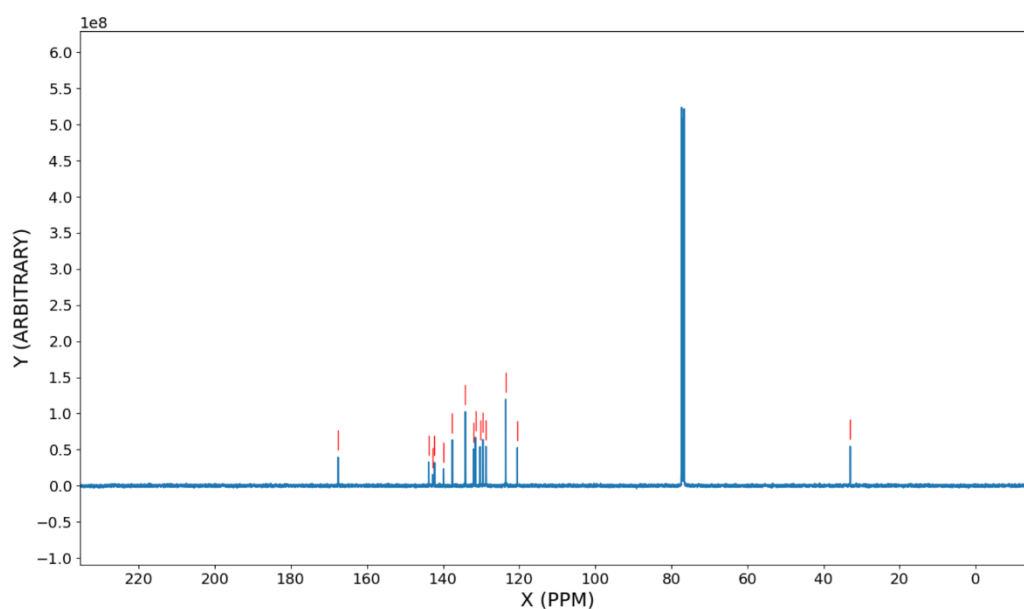
CHMO:0000593 | ¹H nuclear magnetic resonance spectroscopy (¹H NMR)

[14i] 2-((1-(Quinoxalin-2-yl)-1*H*-1,2,3-triazol-4-yl)methyl)isoindoline-1,3-dione

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

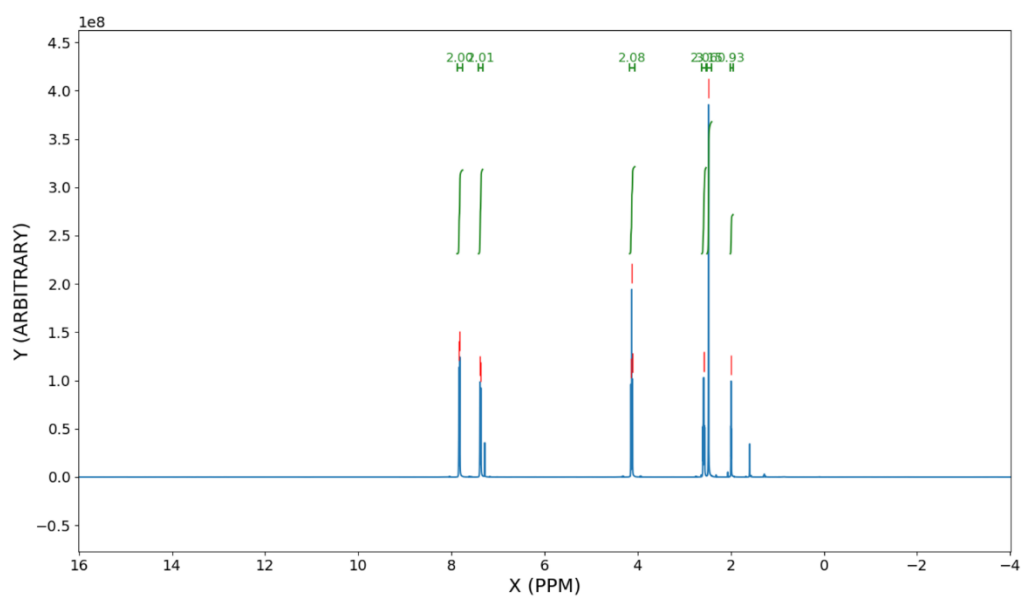


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

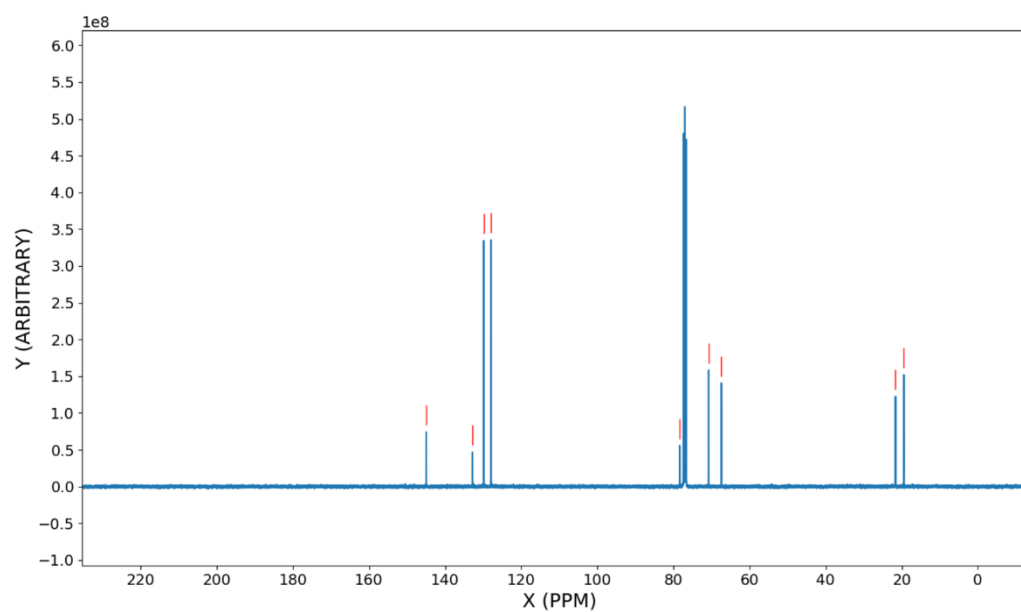


[4j] But-3-ynyl 4-methylbenzenesulfonate

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

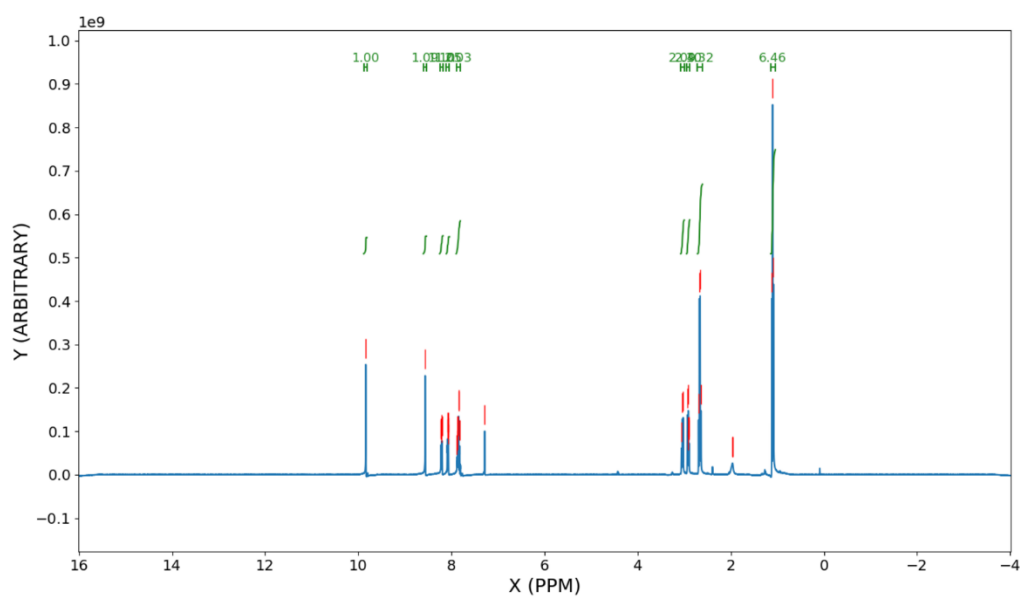


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

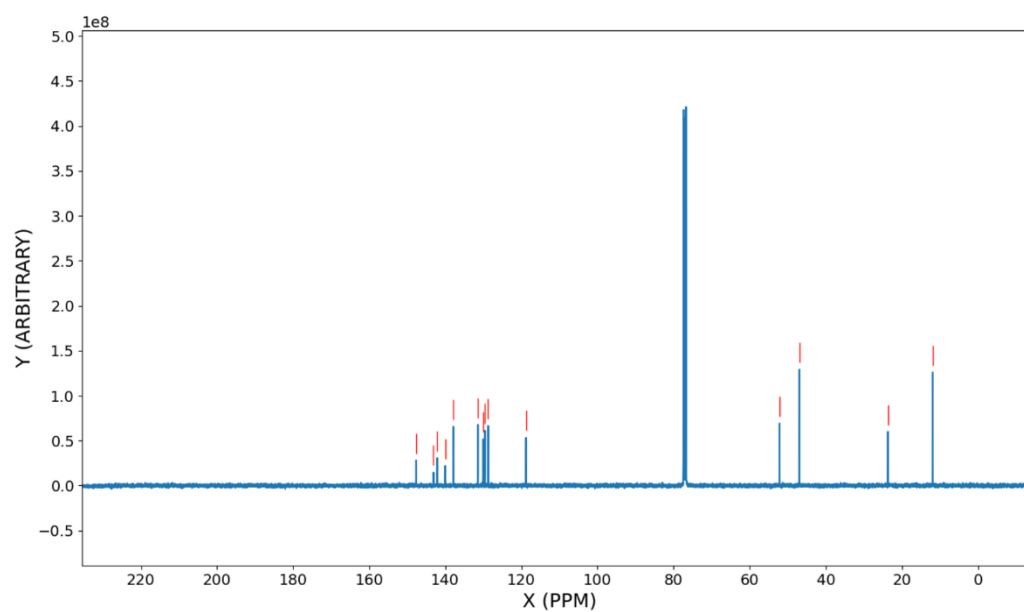


[14j*] *N,N*-Diethyl-2-(1-(quinoxalin-2-yl)-1*H*-1,2,3-triazol-4-yl)ethan-1-amine

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

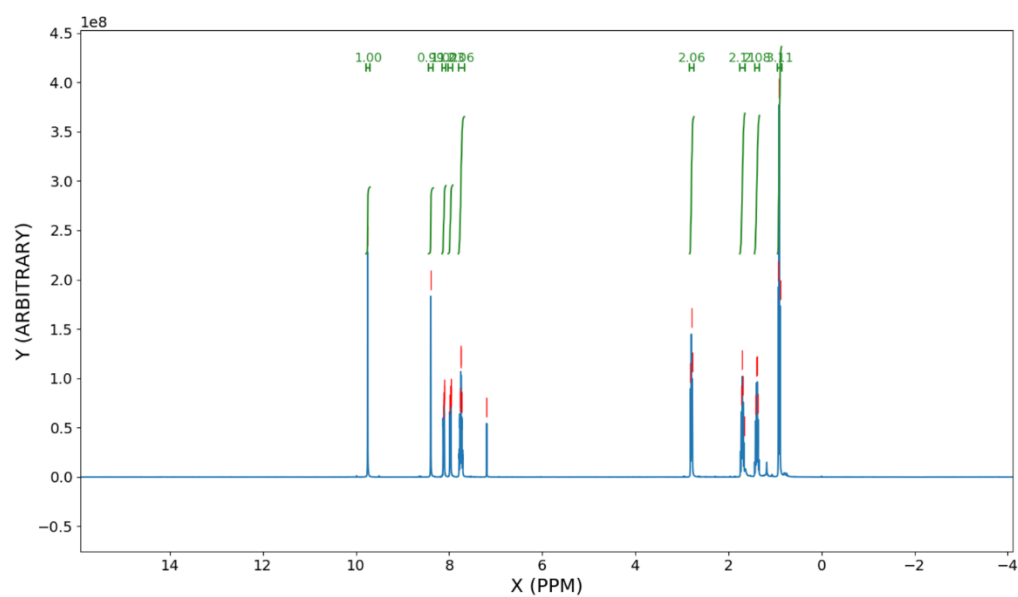


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

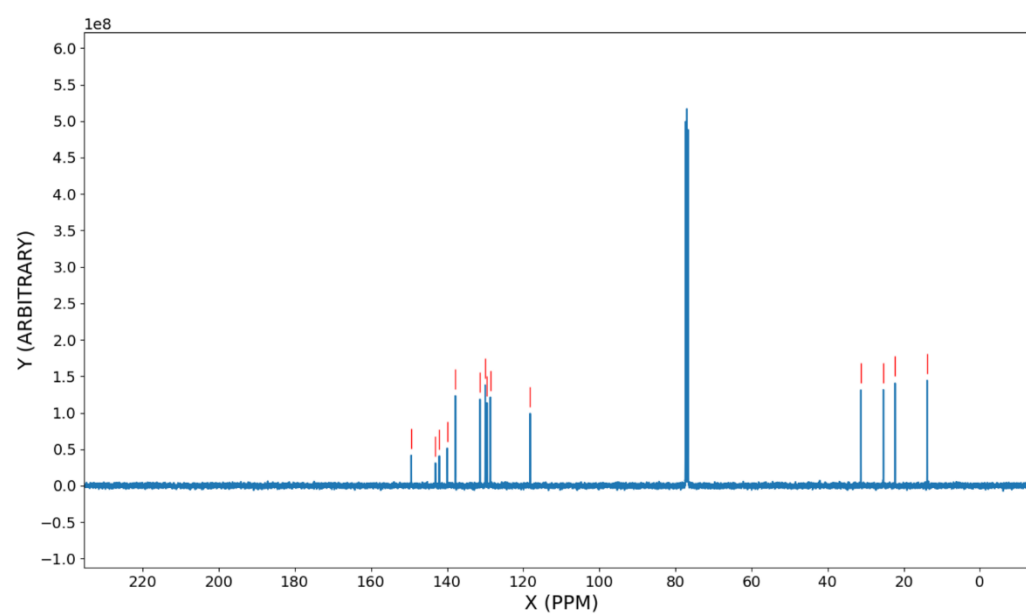


[14k] 2-(4-Butyl-1*H*-1,2,3-triazol-1-yl)quinoxaline

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

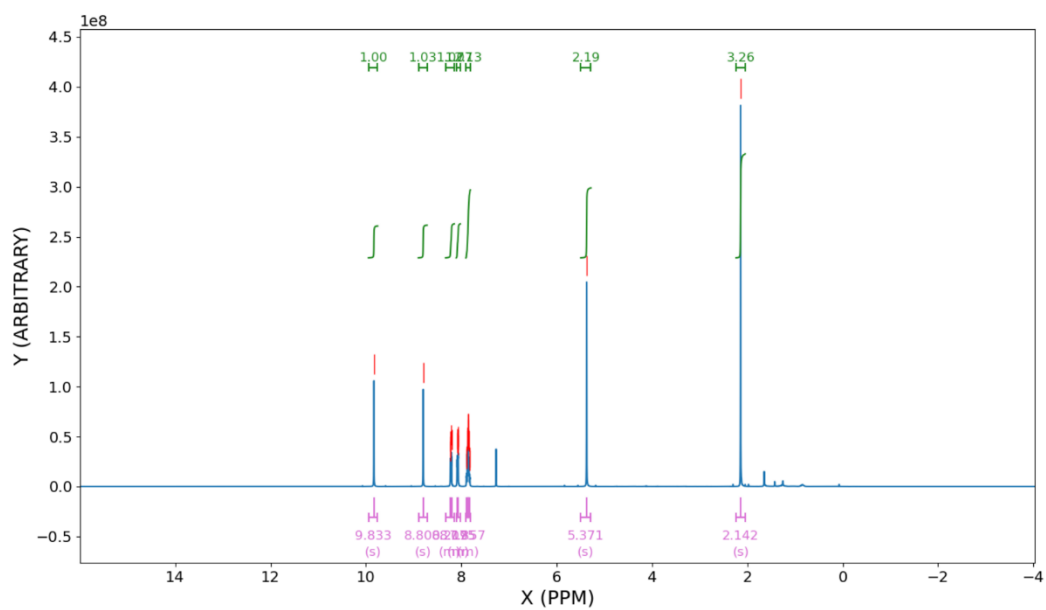


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

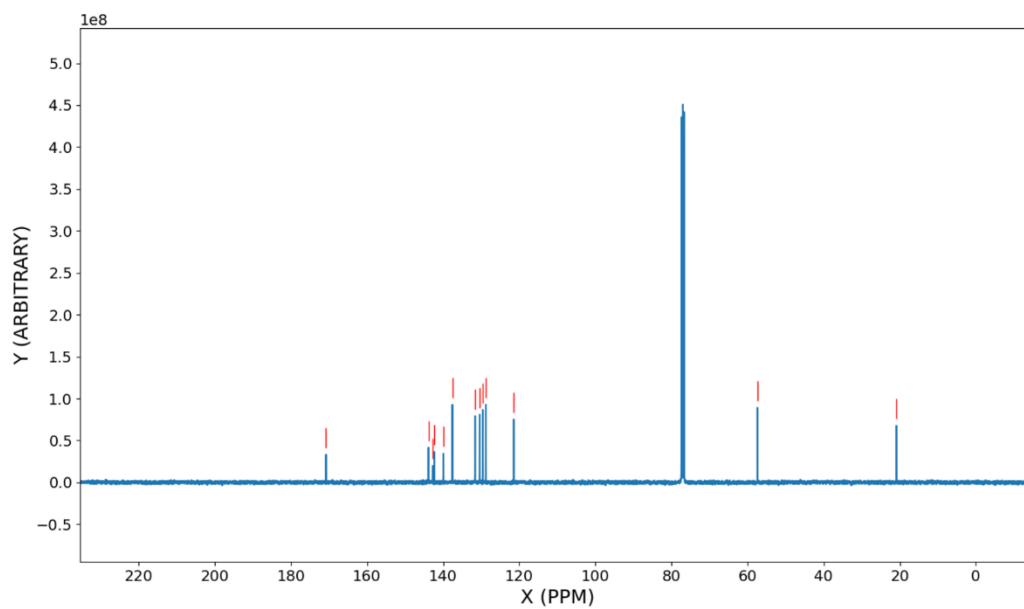


[14l] (1-(Quinoxalin-2-yl)-1*H*-1,2,3-triazol-4-yl)methyl acetate

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

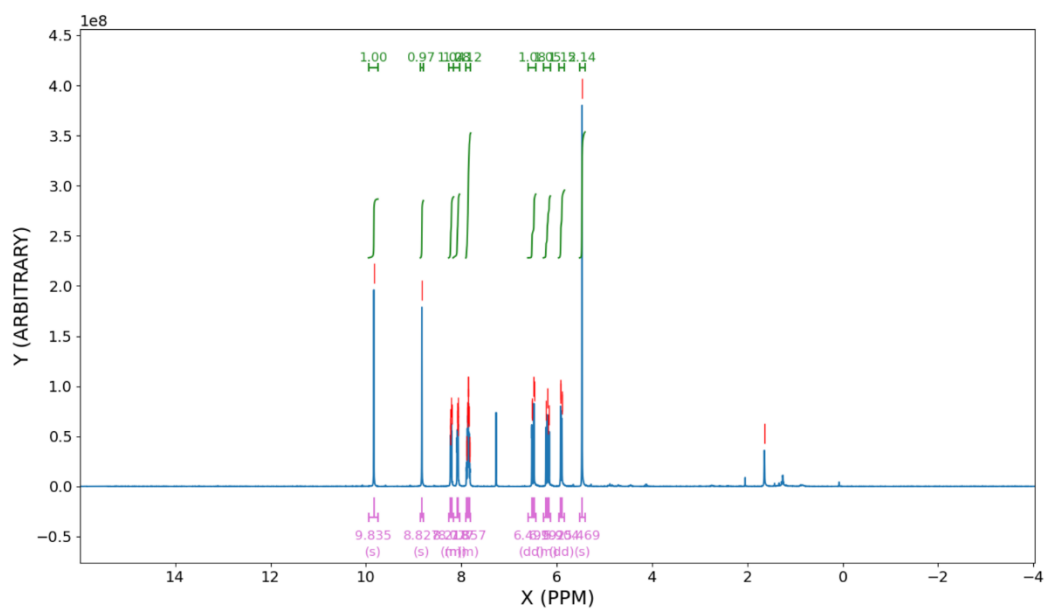


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

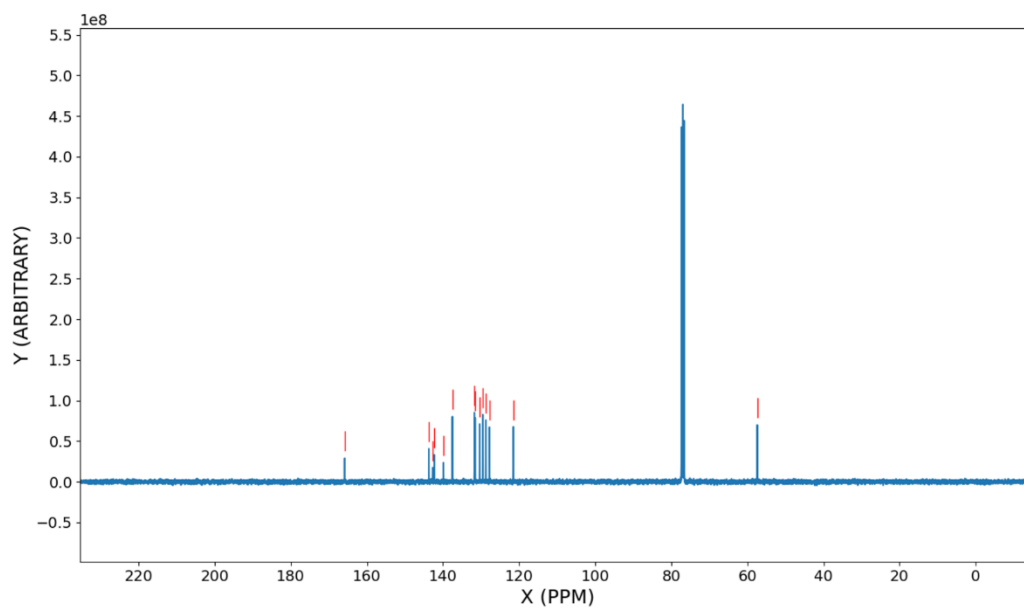


[14m] (1-(Quinoxalin-2-yl)-1*H*-1,2,3-triazol-4-yl)methyl acrylate

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

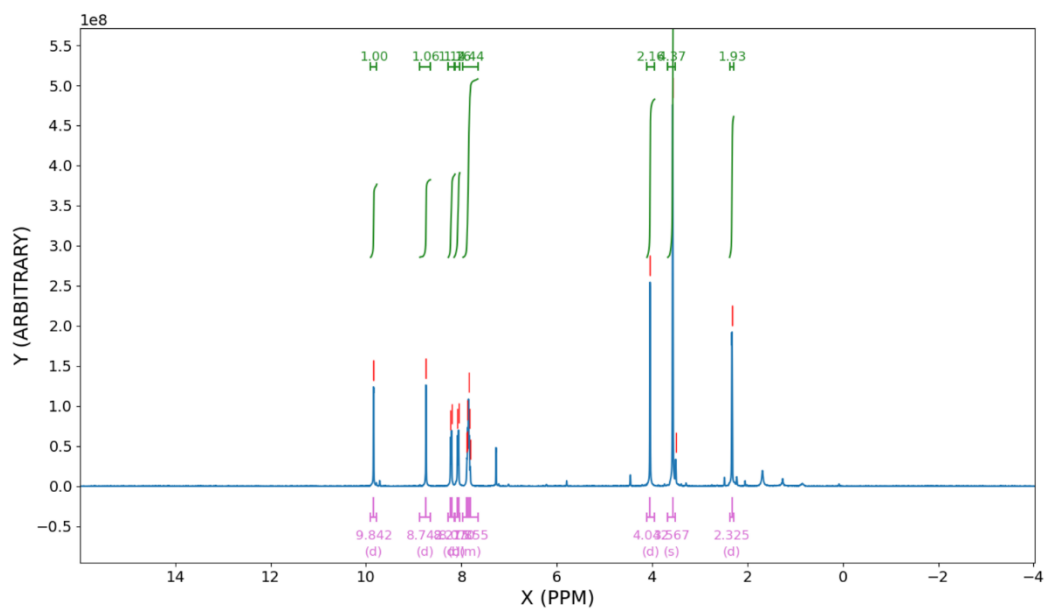


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

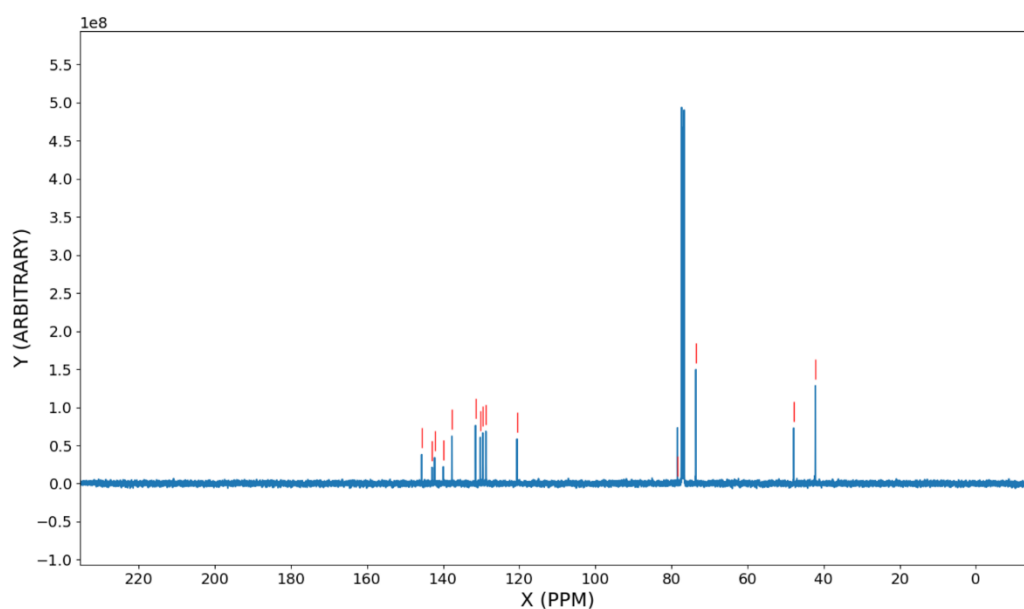


[14n] *N*-(Prop-2-yn-1-yl)-*N*-((1-(quinoxalin-2-yl)-1*H*-1,2,3-triazol-4-yl)methyl)prop-2-yn-1-amine

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

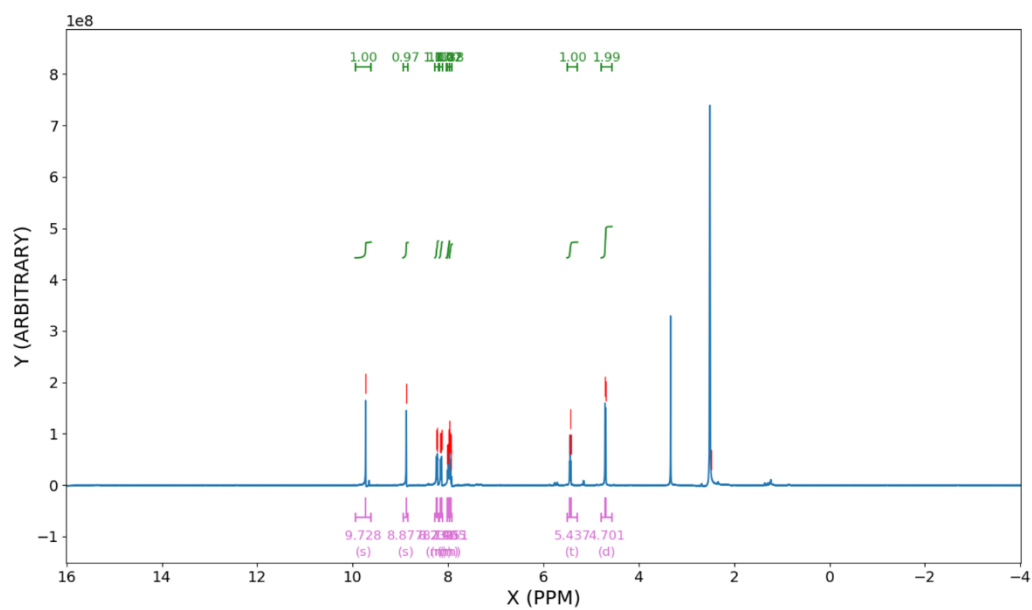


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

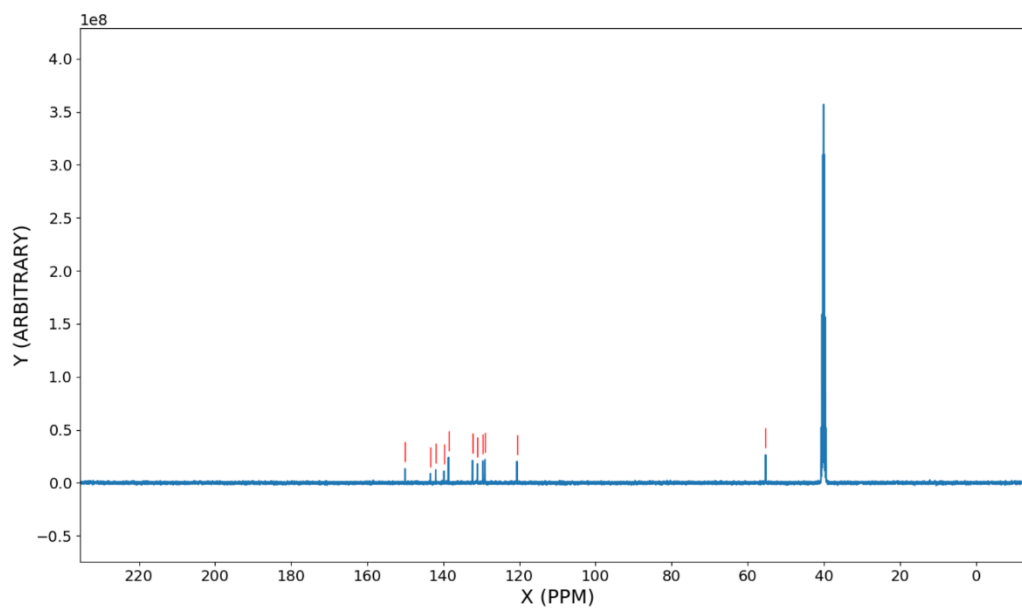


[14o] (1-(Quinoxalin-2-yl)-1*H*-1,2,3-triazol-4-yl)methanol

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

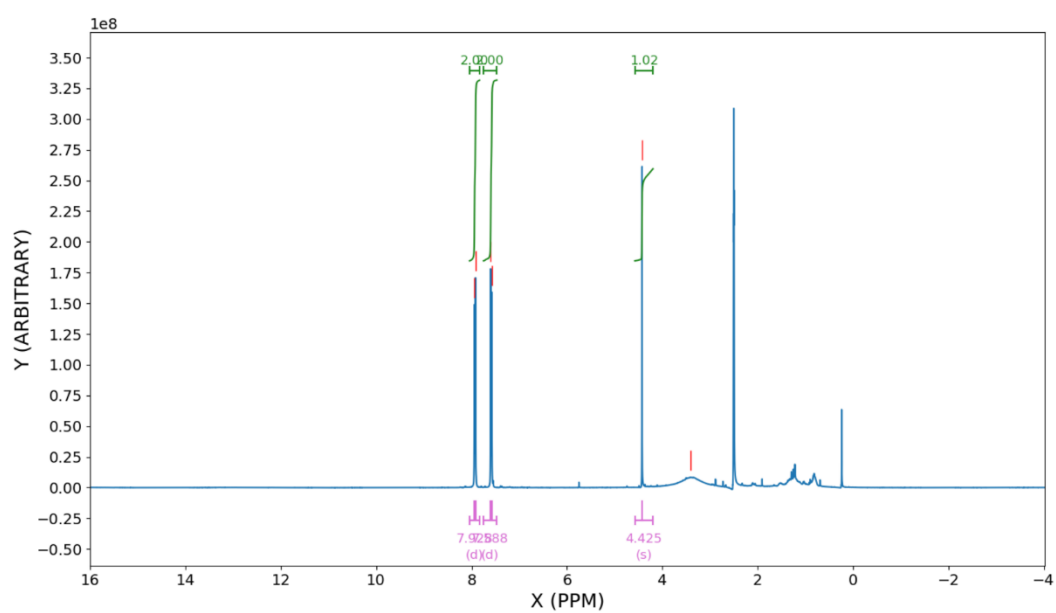


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

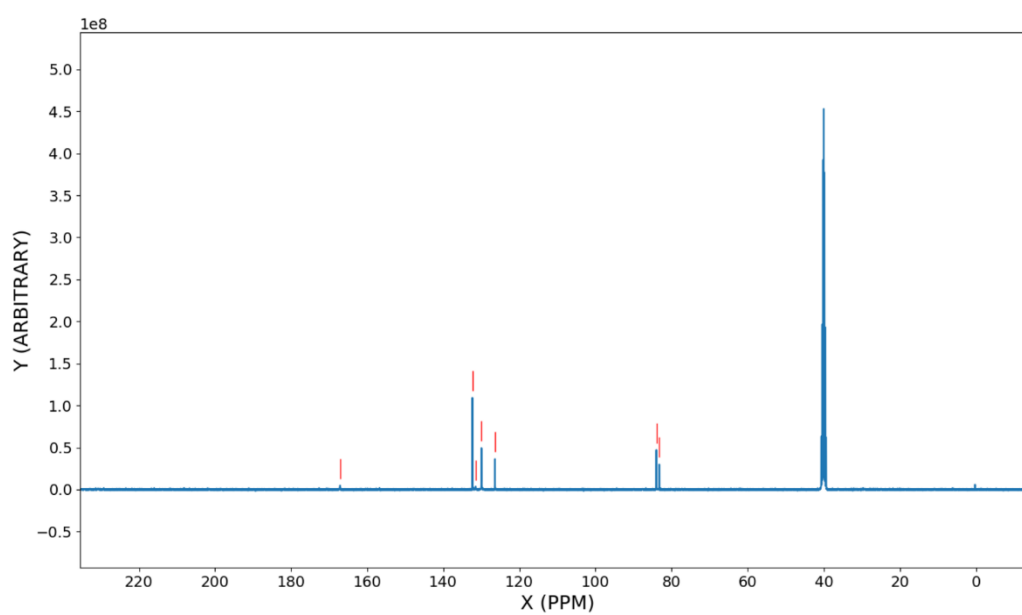


[4p] 4-Ethynylbenzoic acid

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

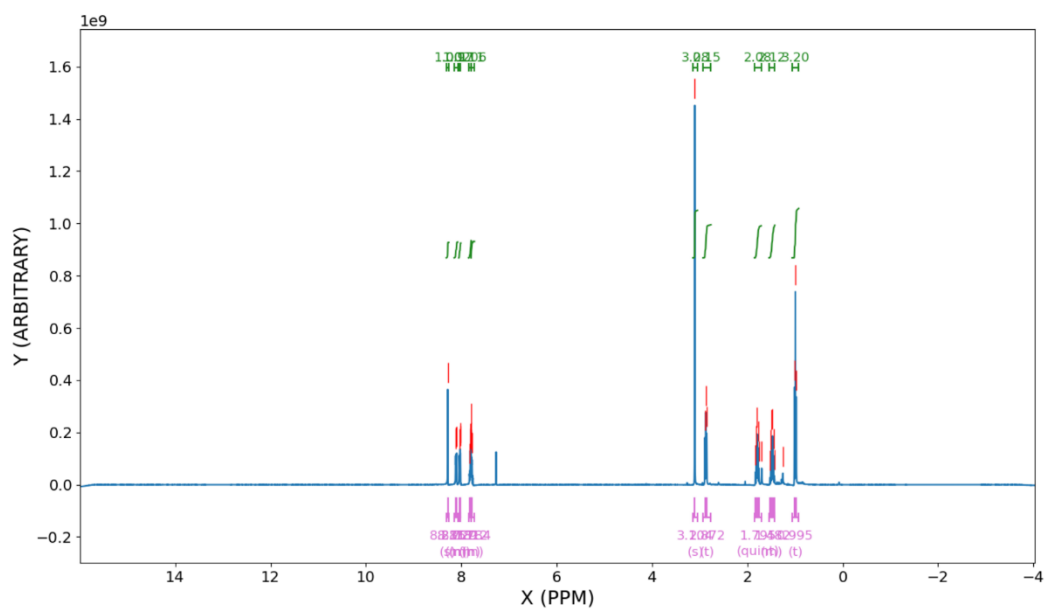


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

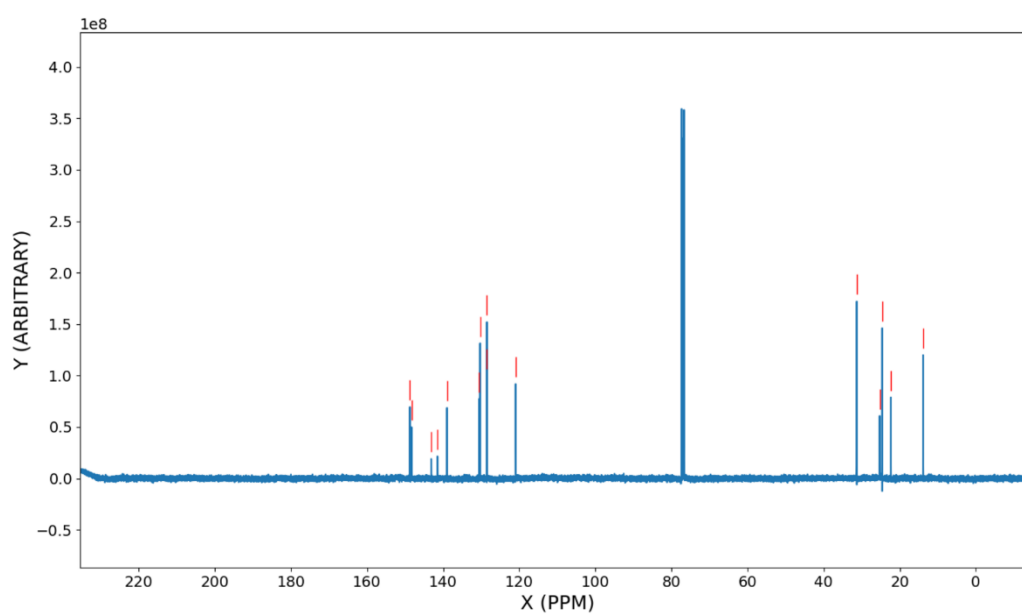


[15a] 2-(4-Butyl-1*H*-1,2,3-triazol-1-yl)-3-methylquinoxaline

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

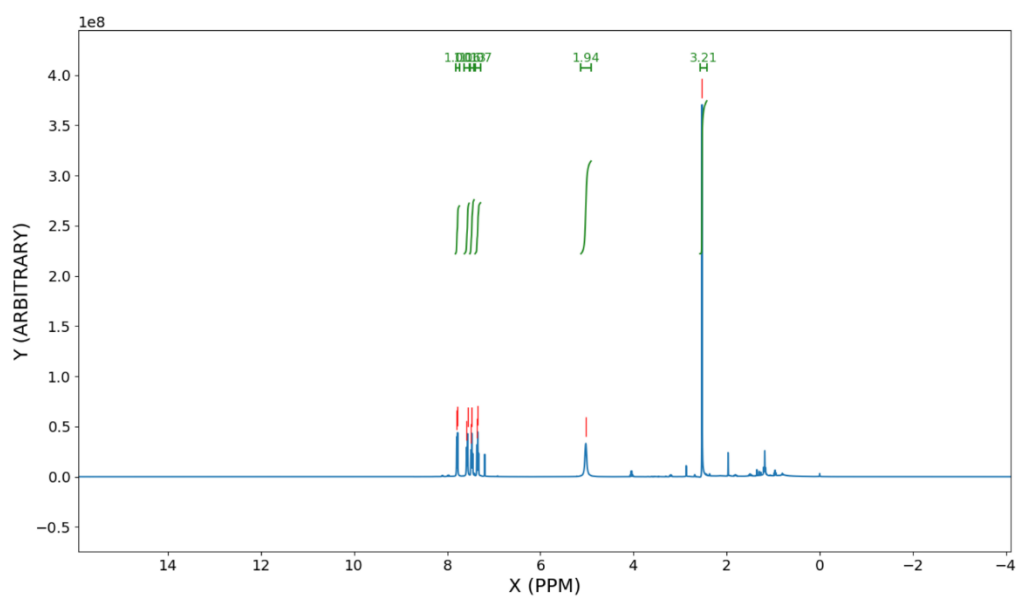


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

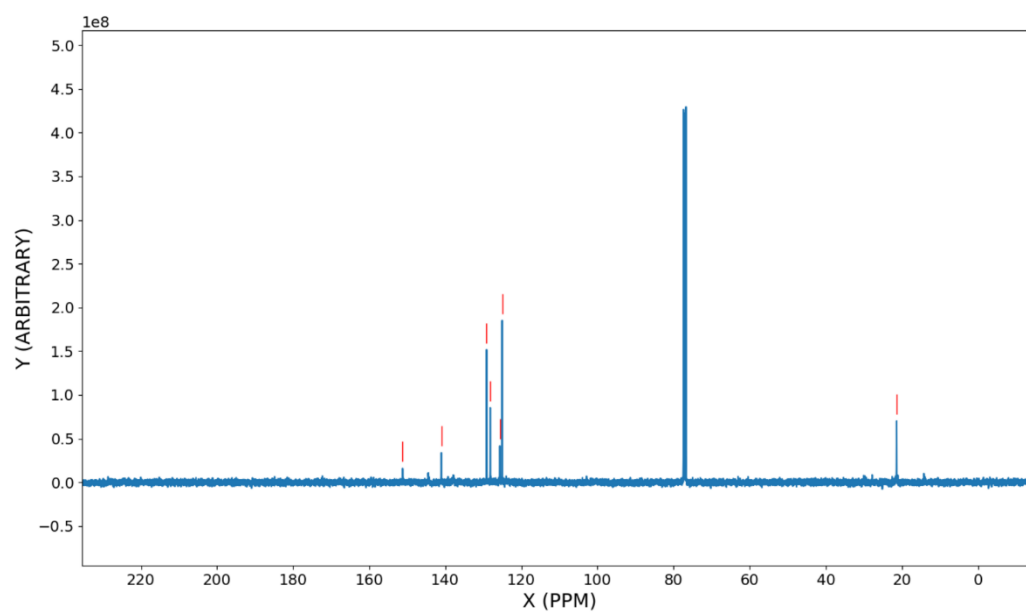


[17a] 3-Methylquinoxalin-2-amine

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

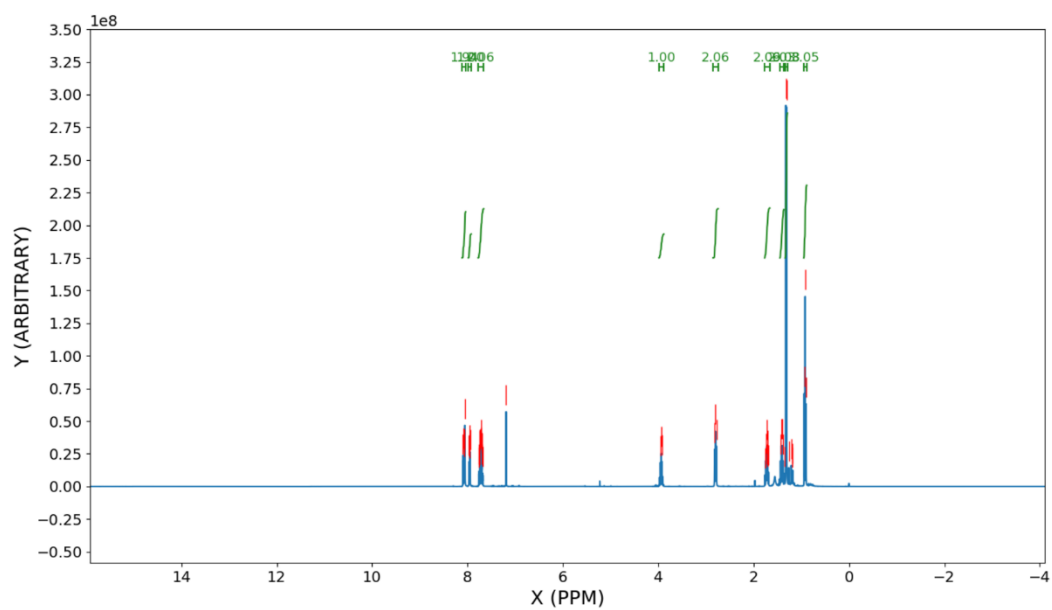


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

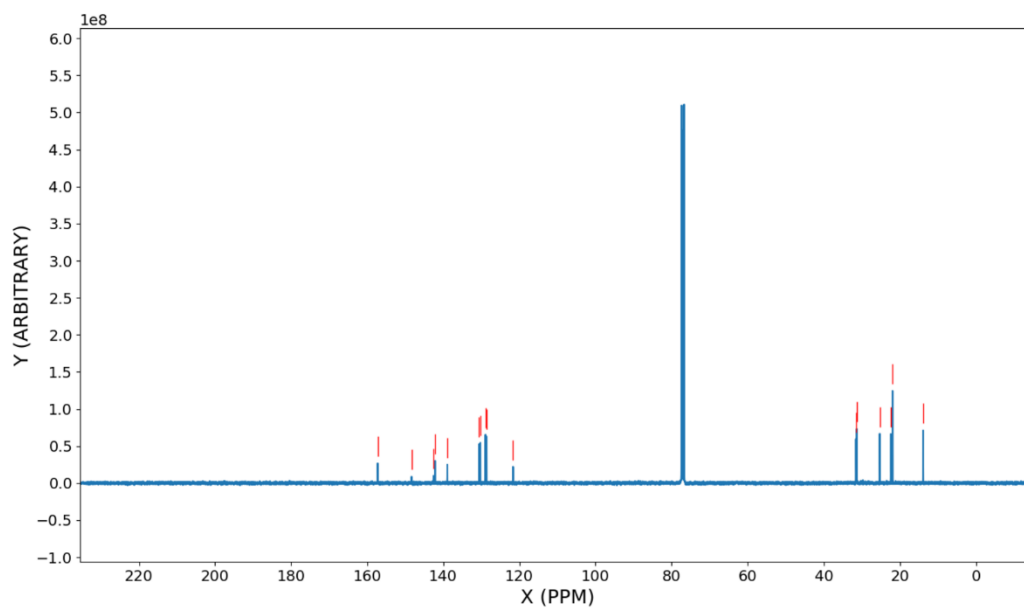


[15b] 2-(4-Butyl-1*H*-1,2,3-triazol-1-yl)-3-isopropylquinoxaline

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

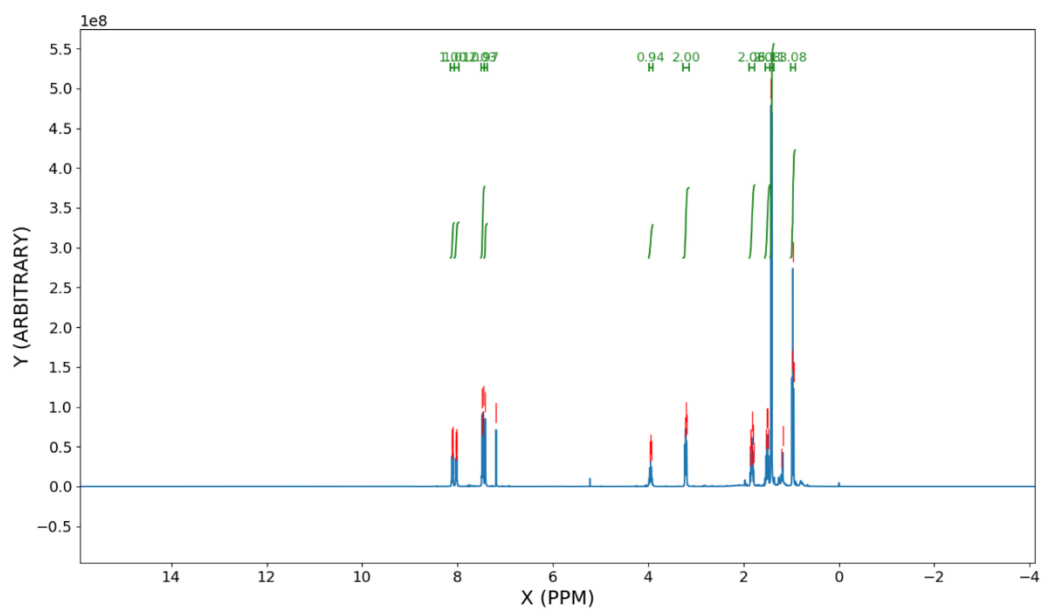


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

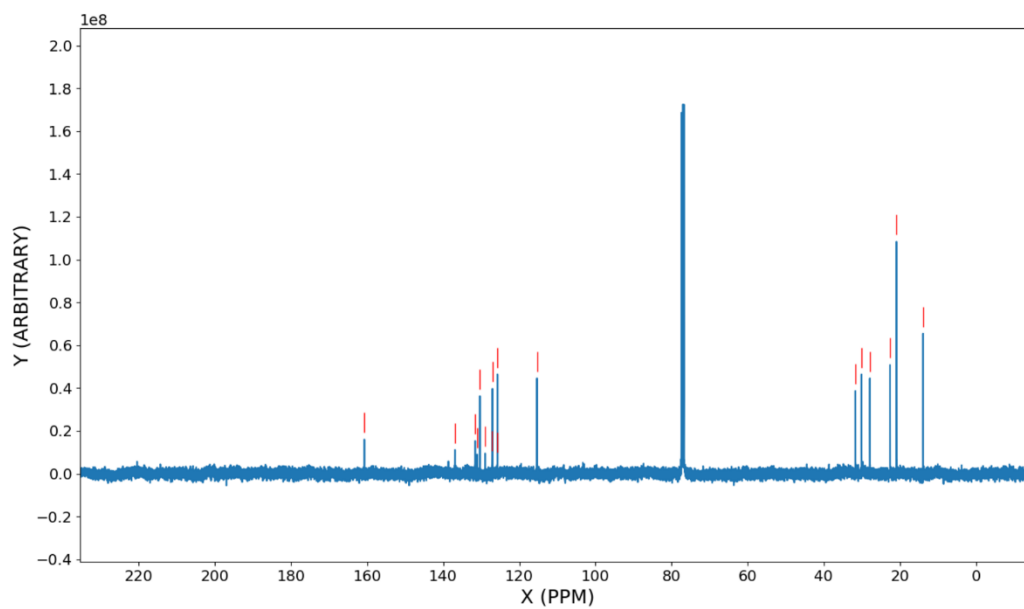


[16b] 1-Butyl-4-isopropylimidazo[1,2-*a*]quinoxaline

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

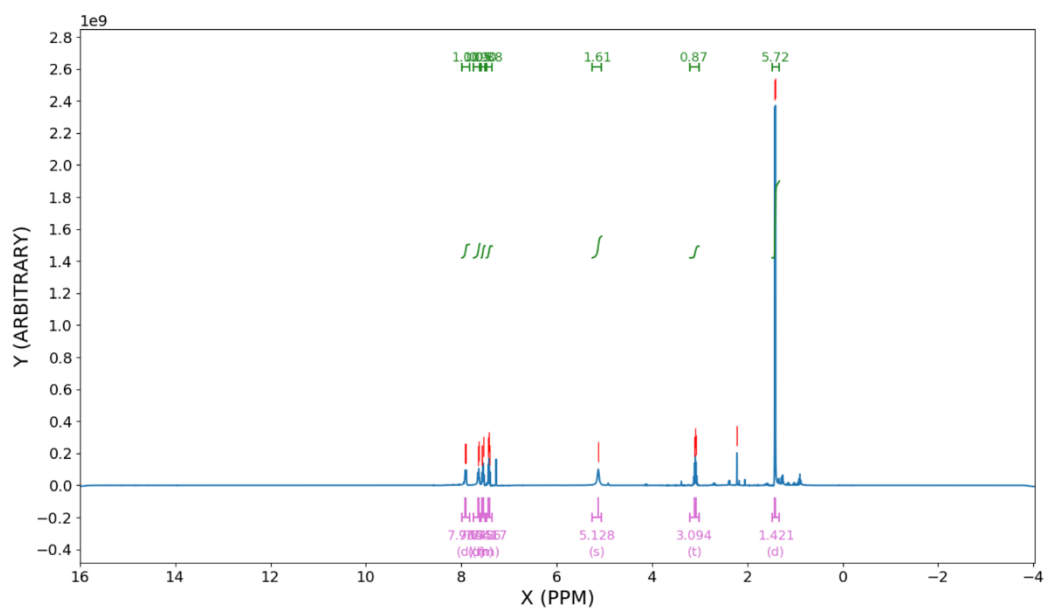


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

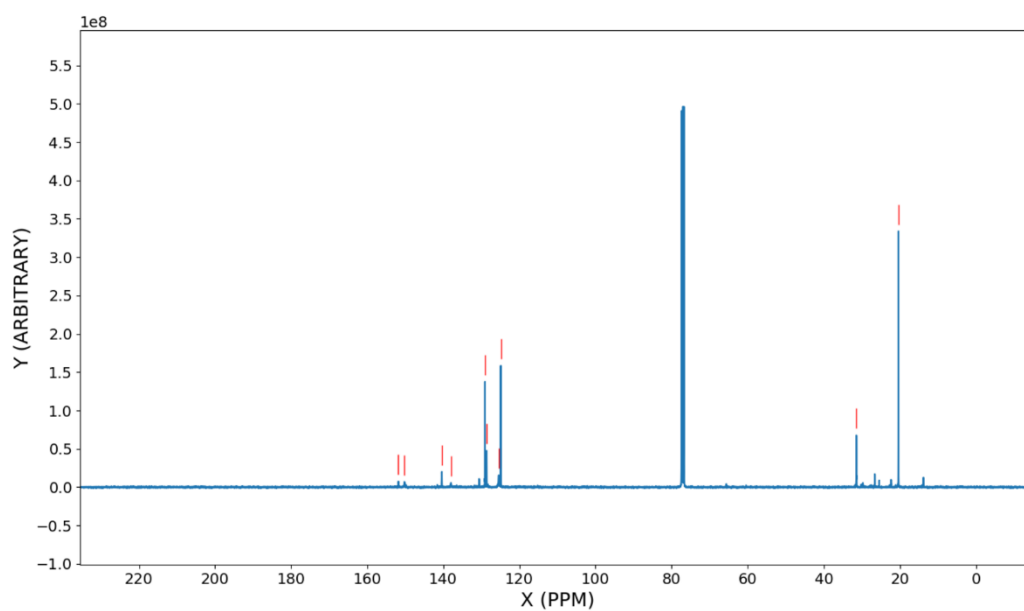


[17b] 3-Propan-2-ylquinoxalin-2-amine

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

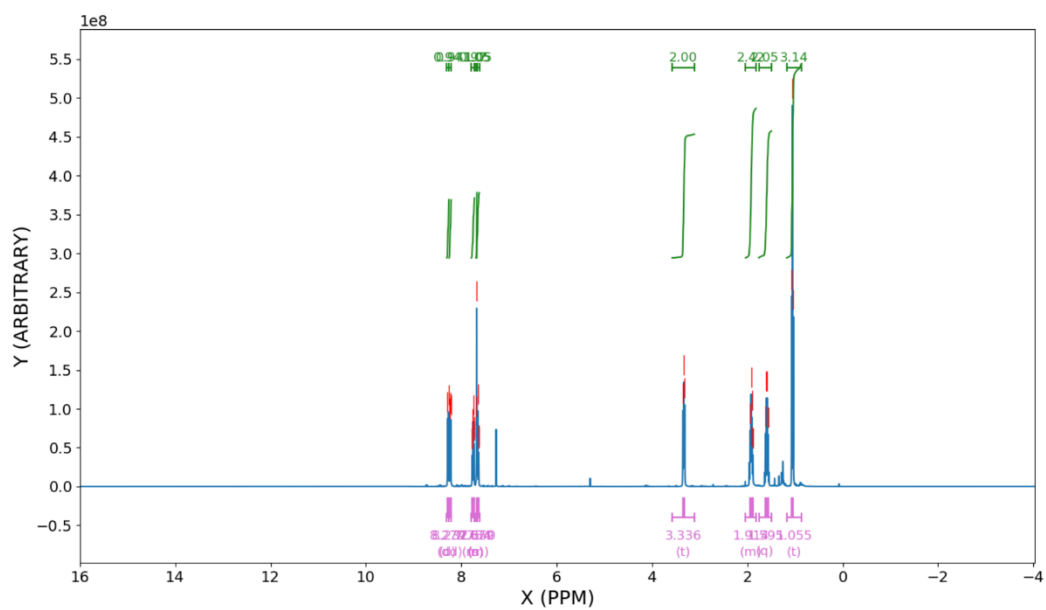


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

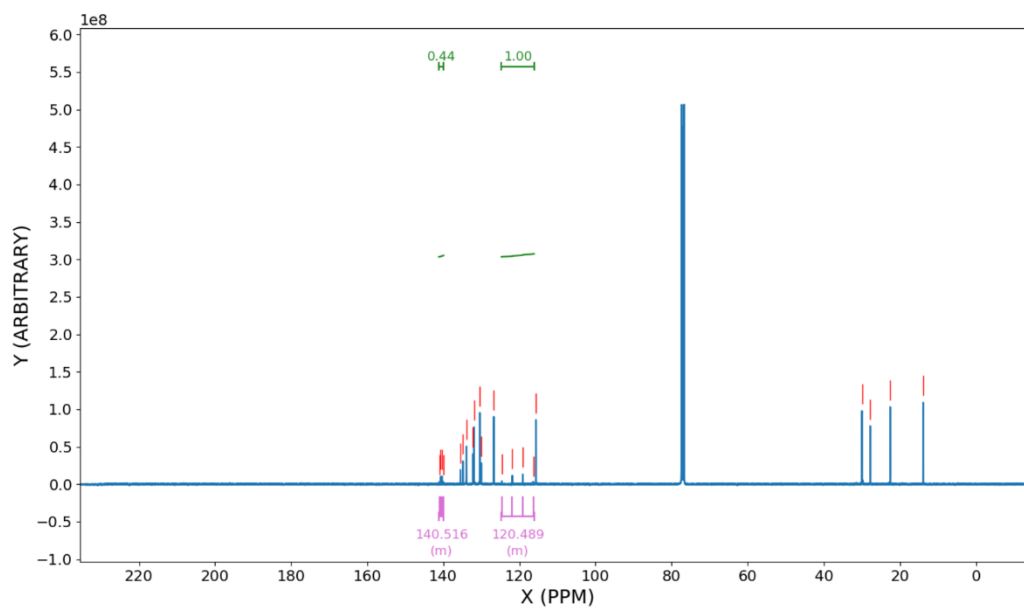


[16c] 1-Butyl-4-(trifluoromethyl)imidazo[1,2-*a*]quinoxaline

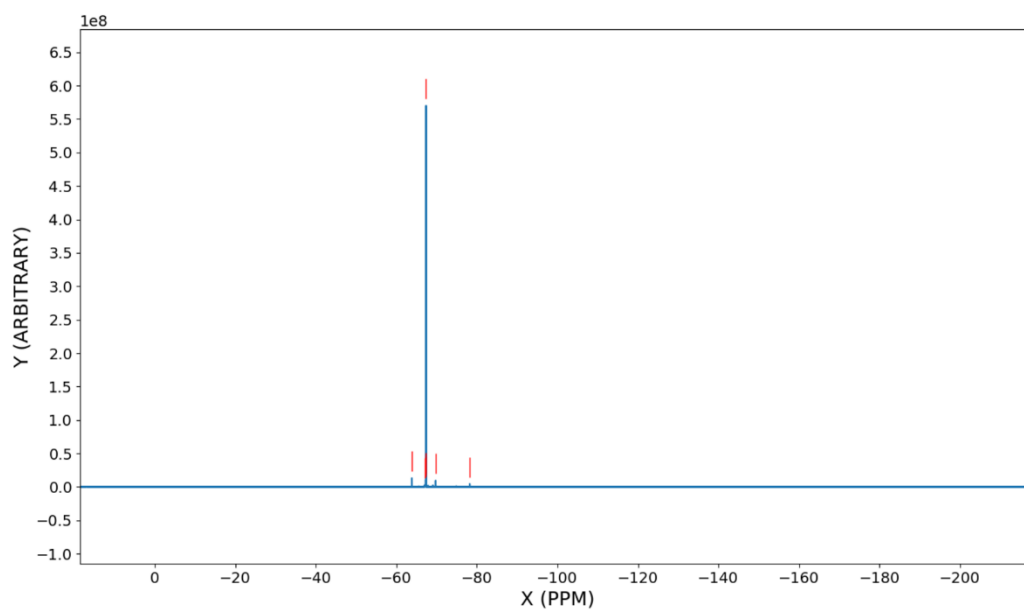
CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)



CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

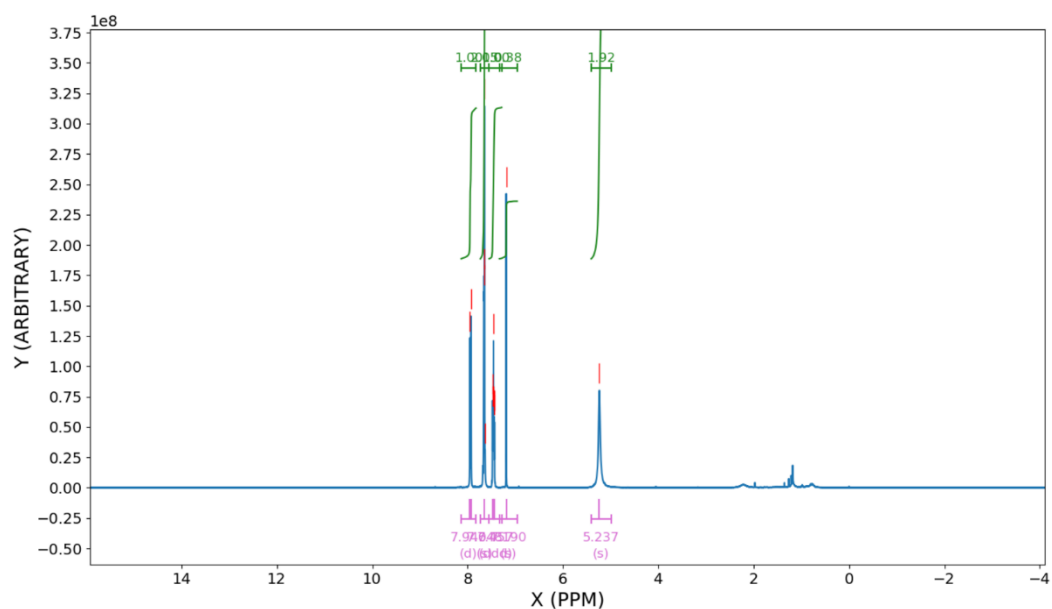


CHMO:0000597 | ^{19}F nuclear magnetic resonance spectroscopy (^{19}F NMR)

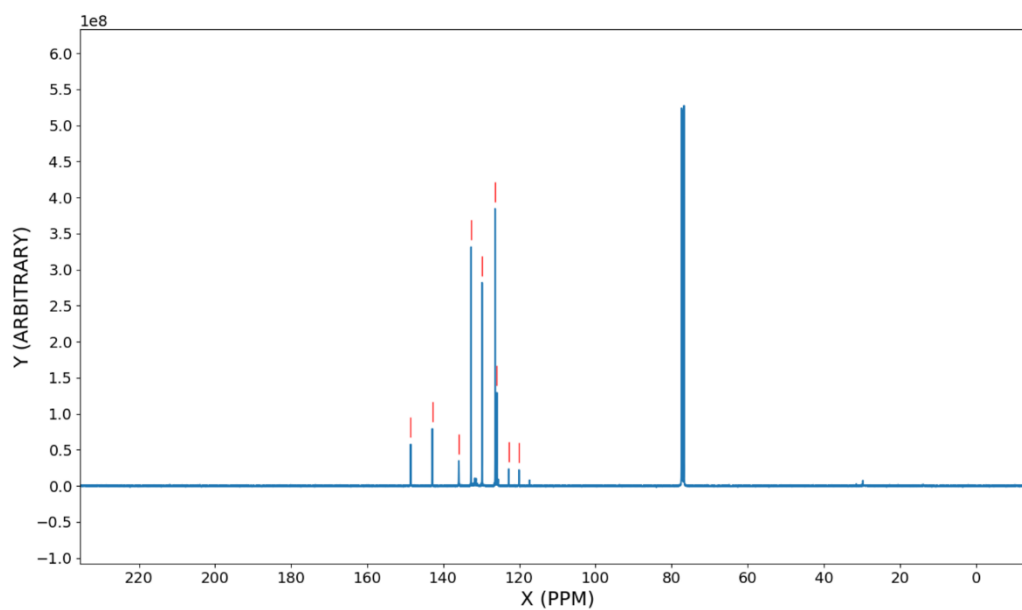


[17c] 3-(Trifluoromethyl)quinoxalin-2-amine

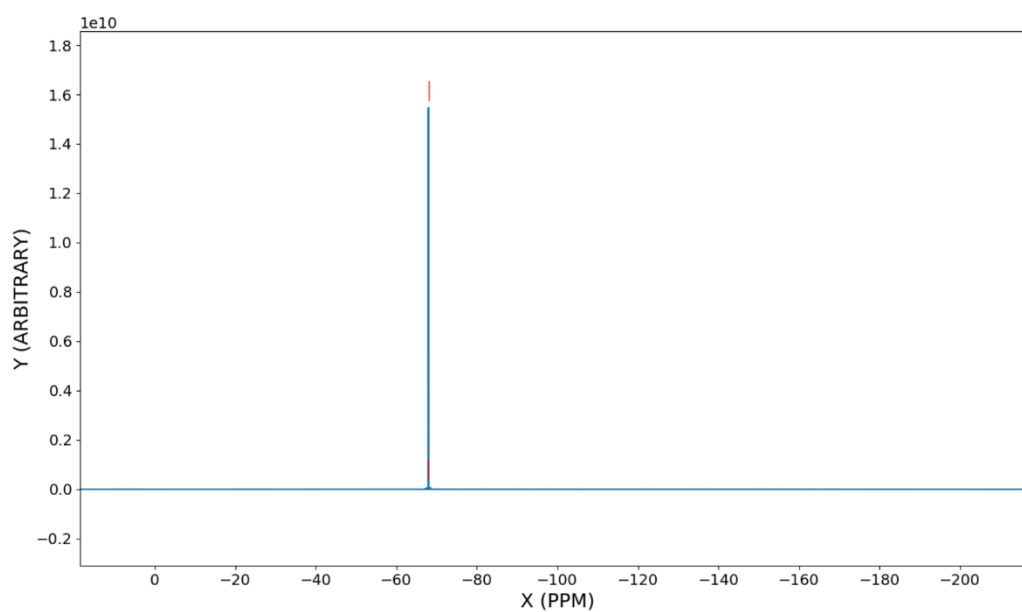
CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)



CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

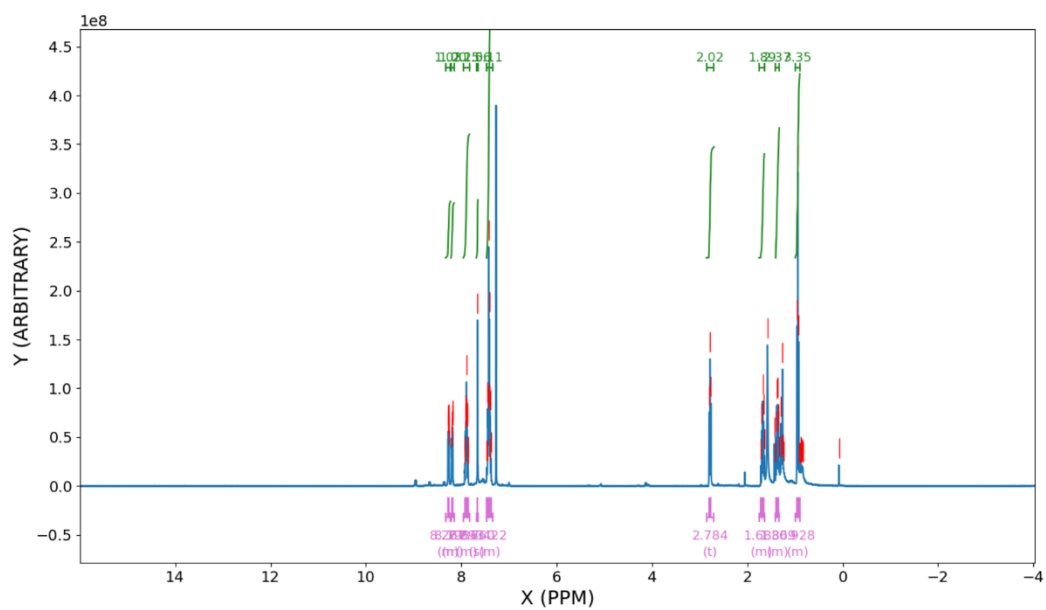


CHMO:0000597 | ^{19}F nuclear magnetic resonance spectroscopy (^{19}F NMR)

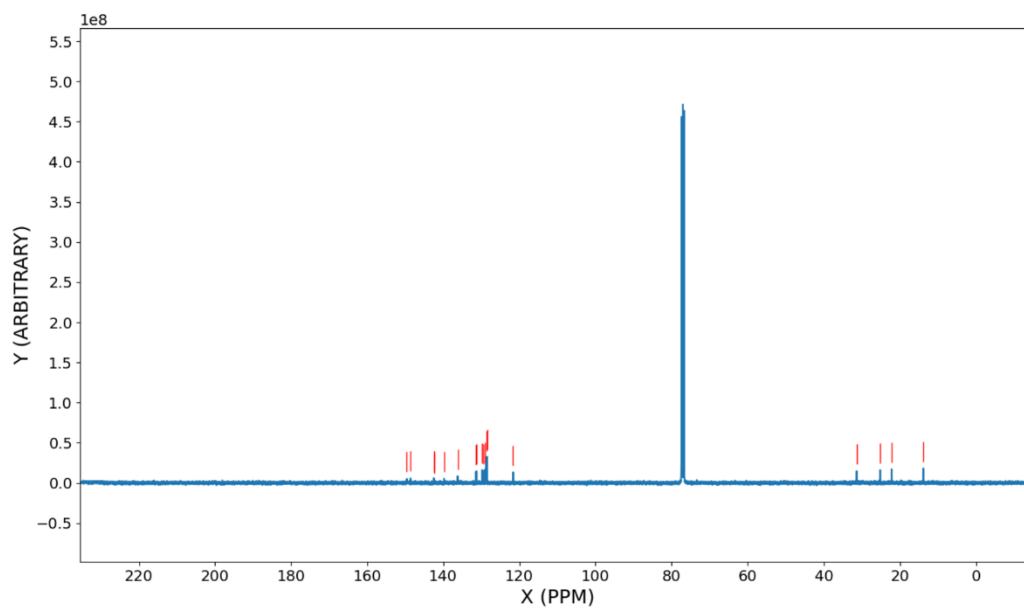


[15d] 2-(4-Butyl-1*H*-1,2,3-triazol-1-yl)-3-phenylquinoxaline

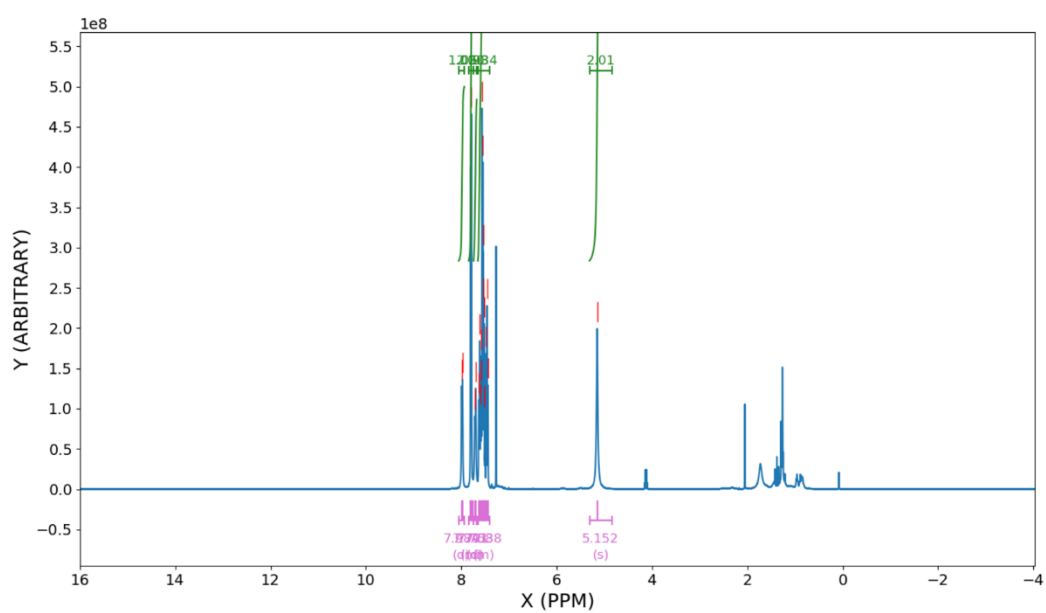
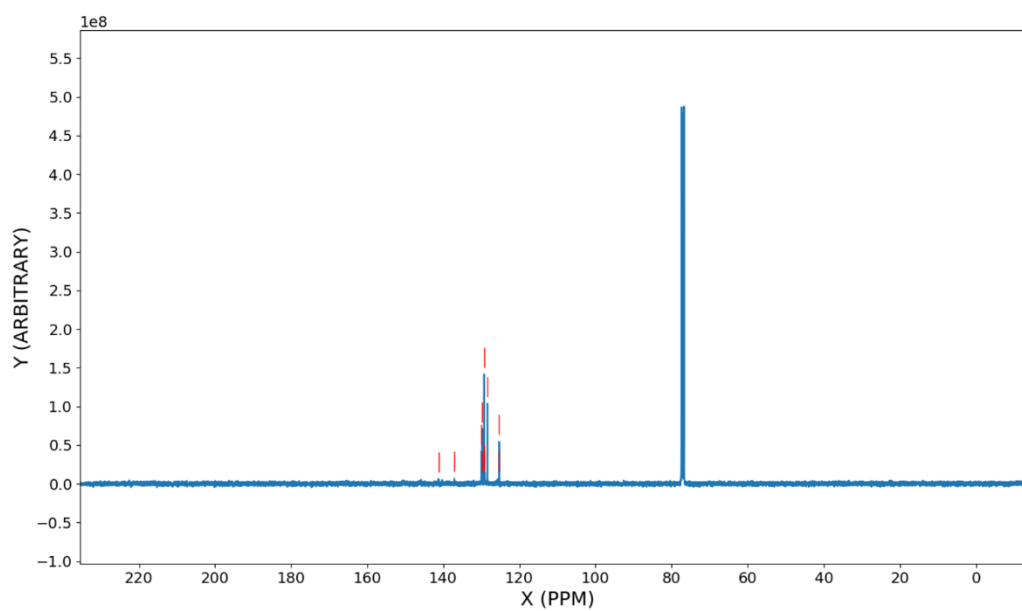
CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)



CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

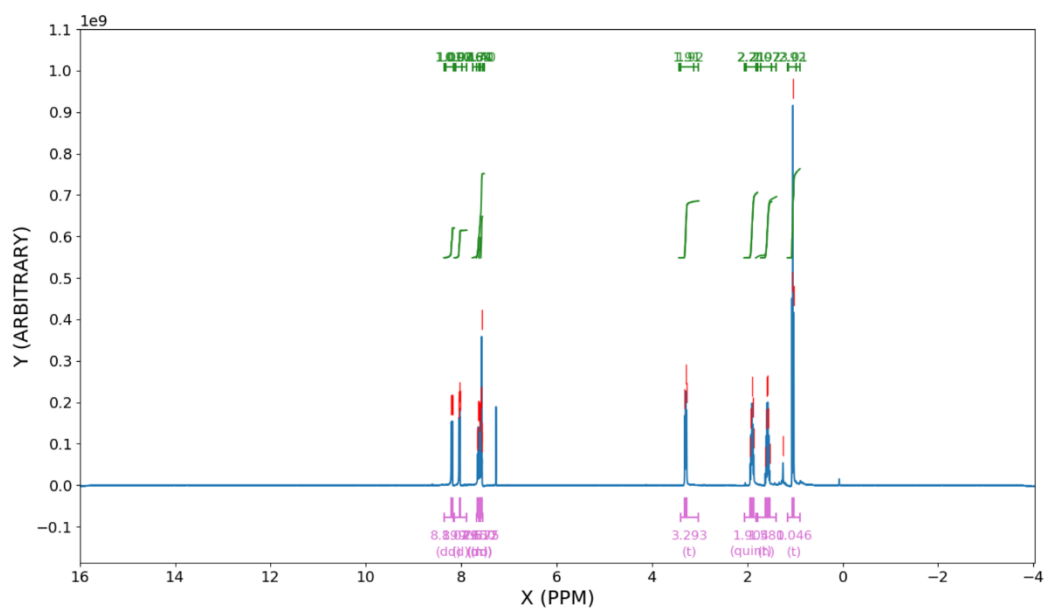


[17d] 3-Phenylquinoxalin-2-amine

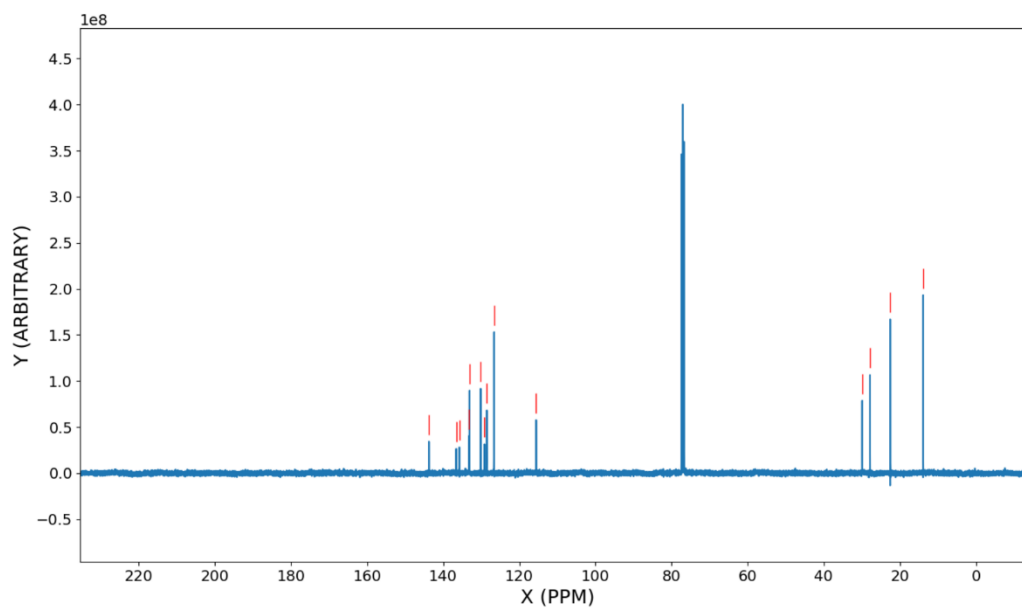
CHMO:0000593 | ¹H nuclear magnetic resonance spectroscopy (¹H NMR)CHMO:0000595 | ¹³C nuclear magnetic resonance spectroscopy (¹³C NMR)

[16e] 1-Butyl-4-chloroimidazo[1,2-*a*]quinoxaline

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

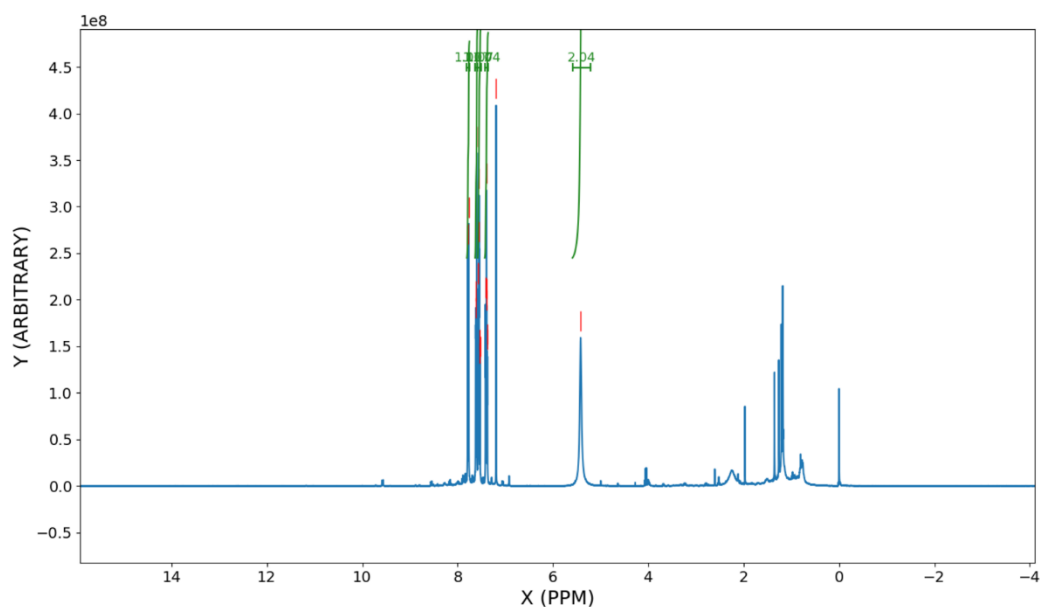


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)



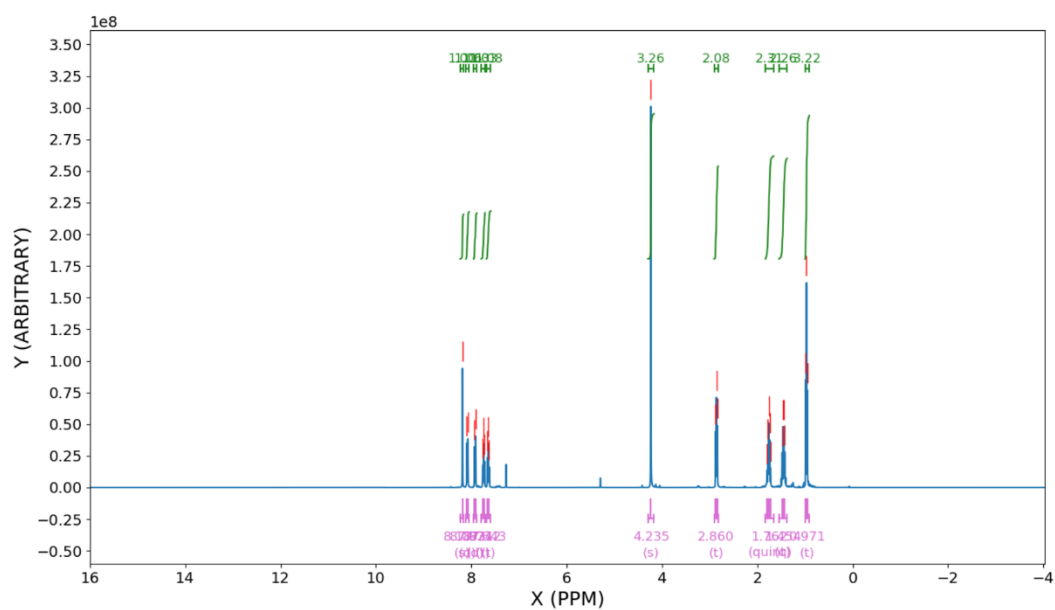
[17e] 3-Chloroquinoxalin-2-amine

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

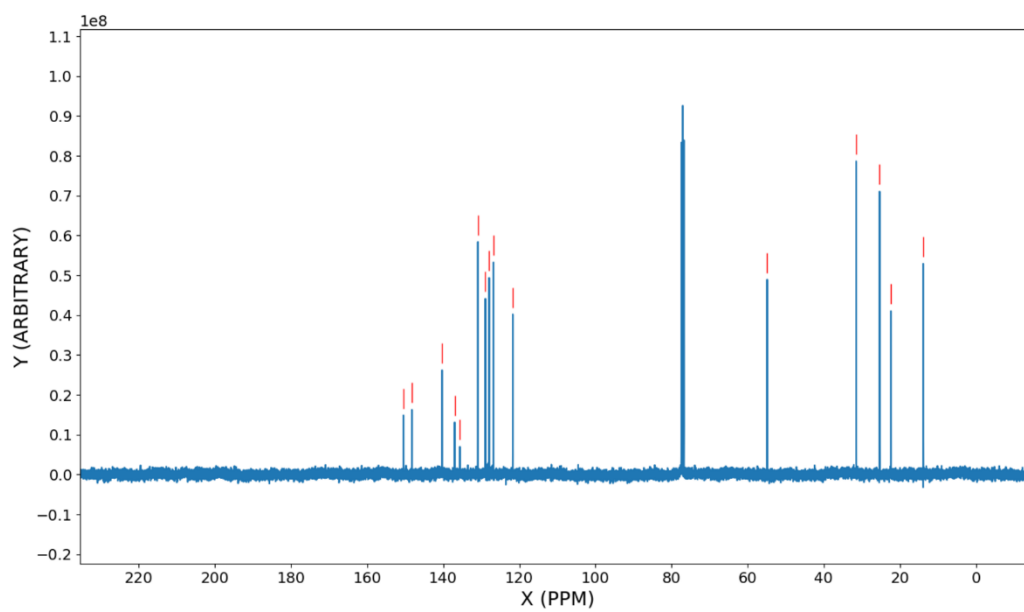


[15f] 2-(4-Butyl-1*H*-1,2,3-triazol-1-yl)-3-methoxyquinoxaline

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

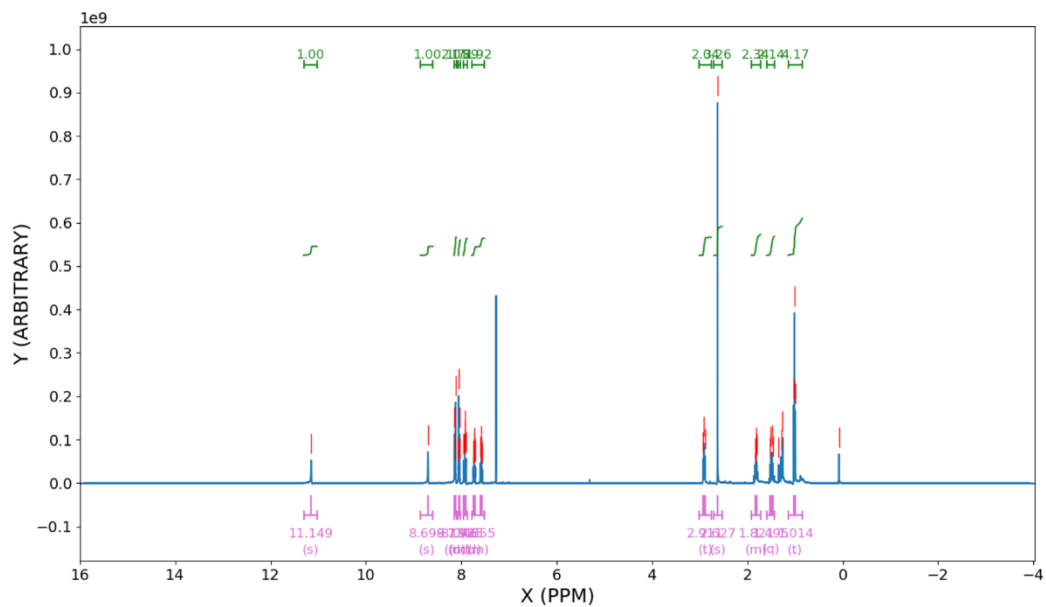


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

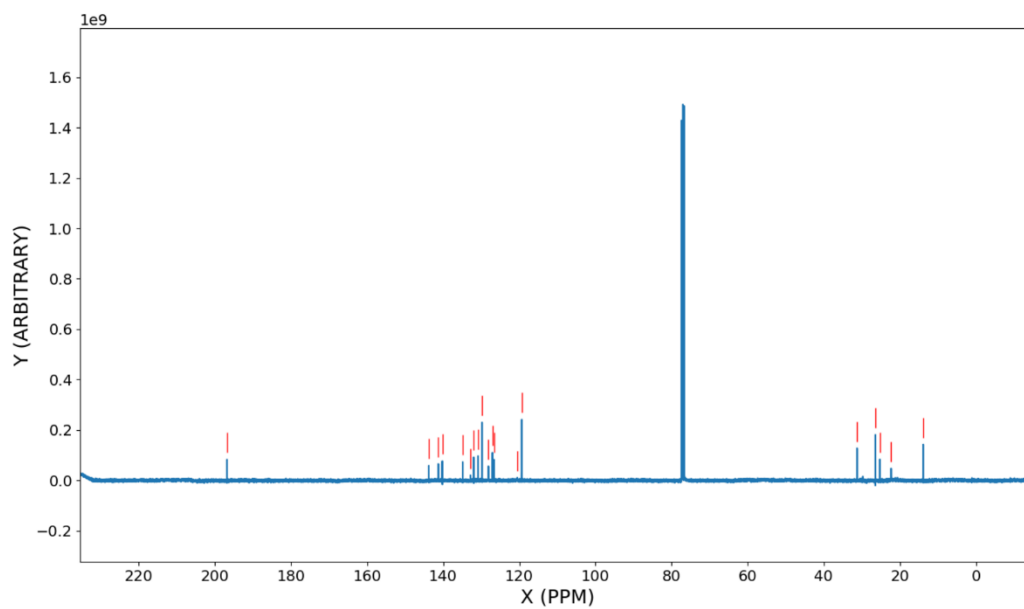


[15g] 1-(4-((3-(4-Butyl-1*H*-1,2,3-triazol-1-yl)quinoxalin-2-yl)amino)phenyl)ethan-1-one

CHMO:0000593 | ¹H nuclear magnetic resonance spectroscopy (¹H NMR)



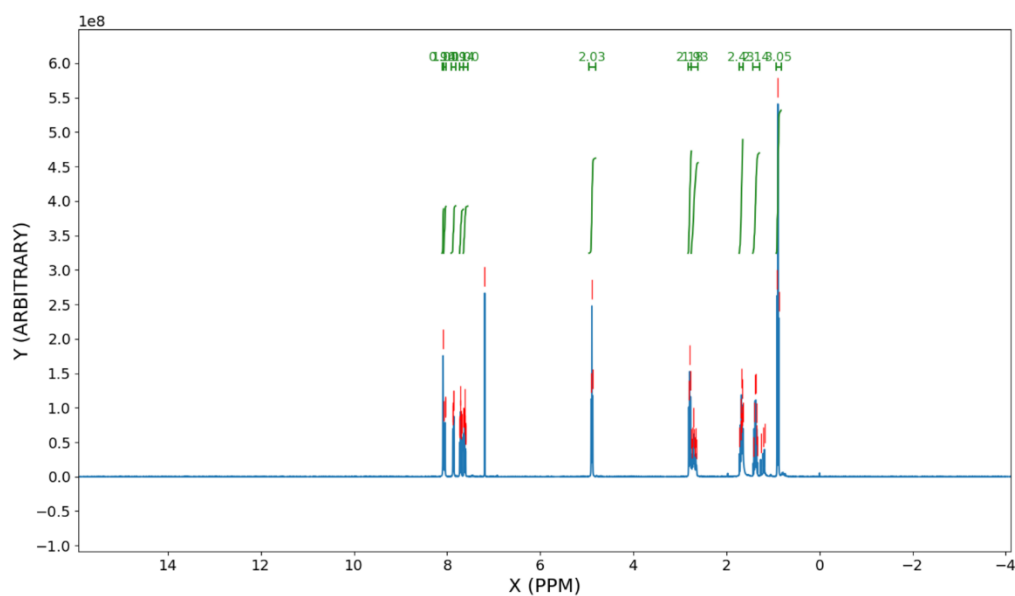
CHMO:0000595 | ¹³C nuclear magnetic resonance spectroscopy (¹³C NMR)



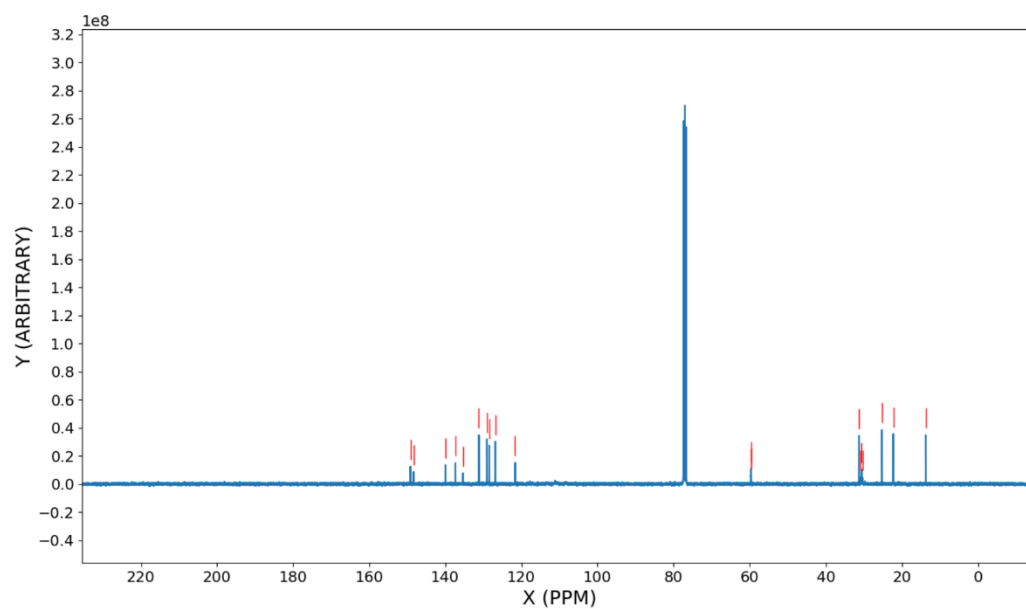
CHMO:0000593 | ¹H nuclear magnetic resonance spectroscopy (¹H NMR)

[15h] 2-(4-Butyl-1*H*-1,2,3-triazol-1-yl)-3-((3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl)oxy)quinoxaline

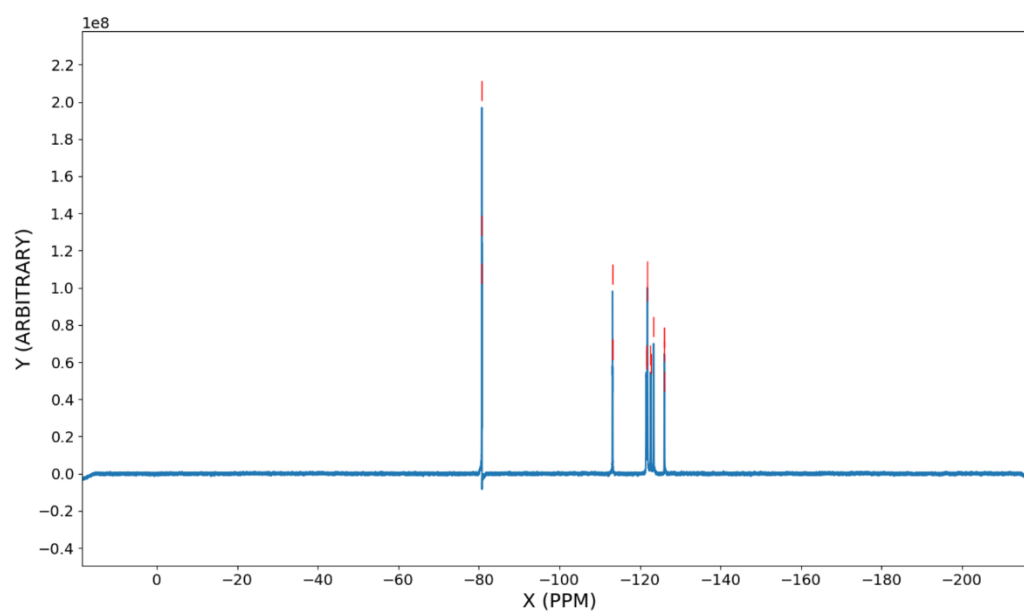
CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)



CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

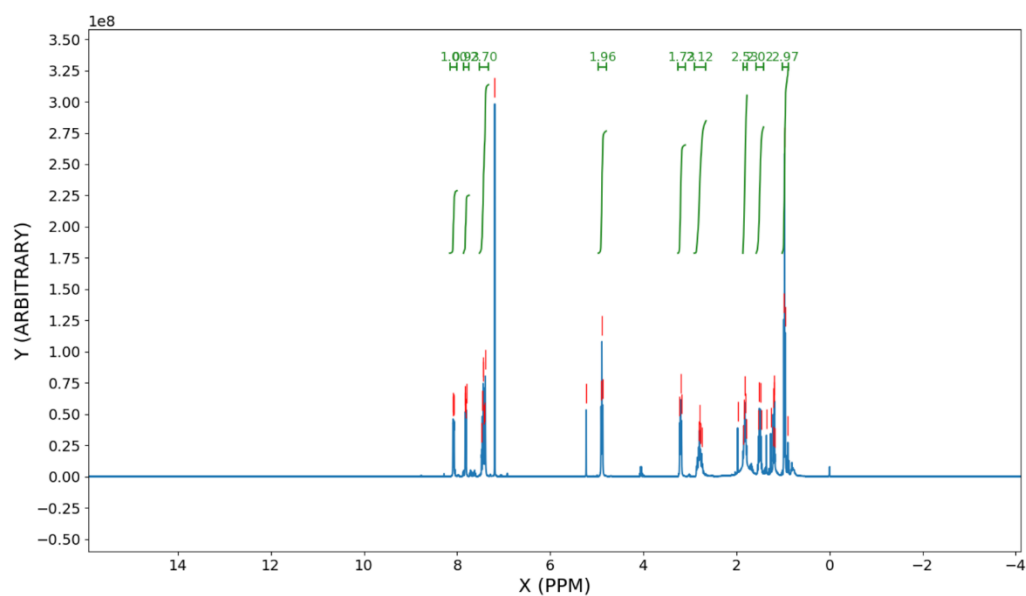


CHMO:0000597 | ^{19}F nuclear magnetic resonance spectroscopy (^{19}F NMR)

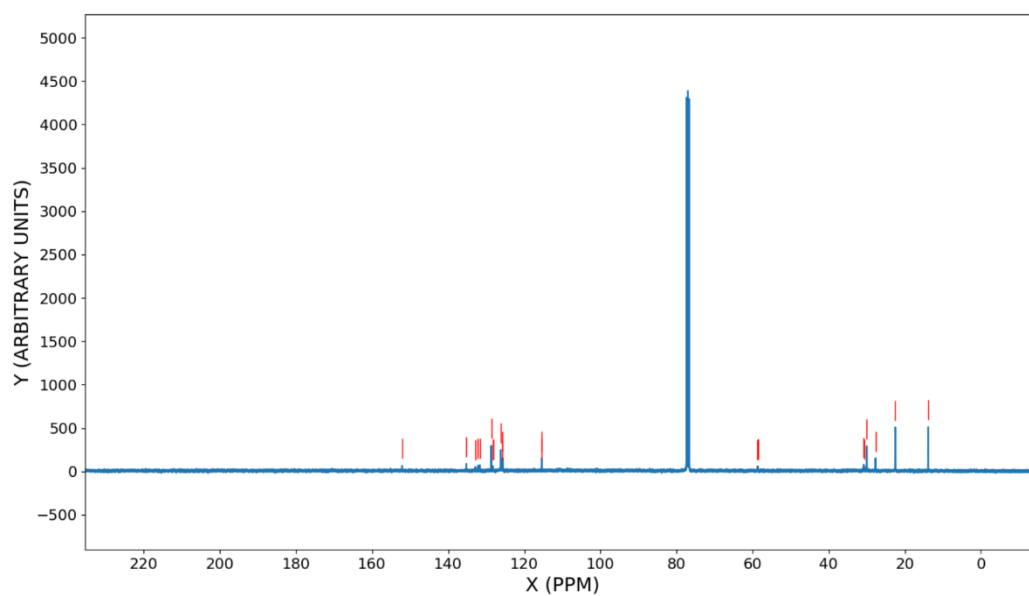


[16h] 1-Butyl-4-((3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl)oxy)imidazo[1,2-*a*]quinoxaline

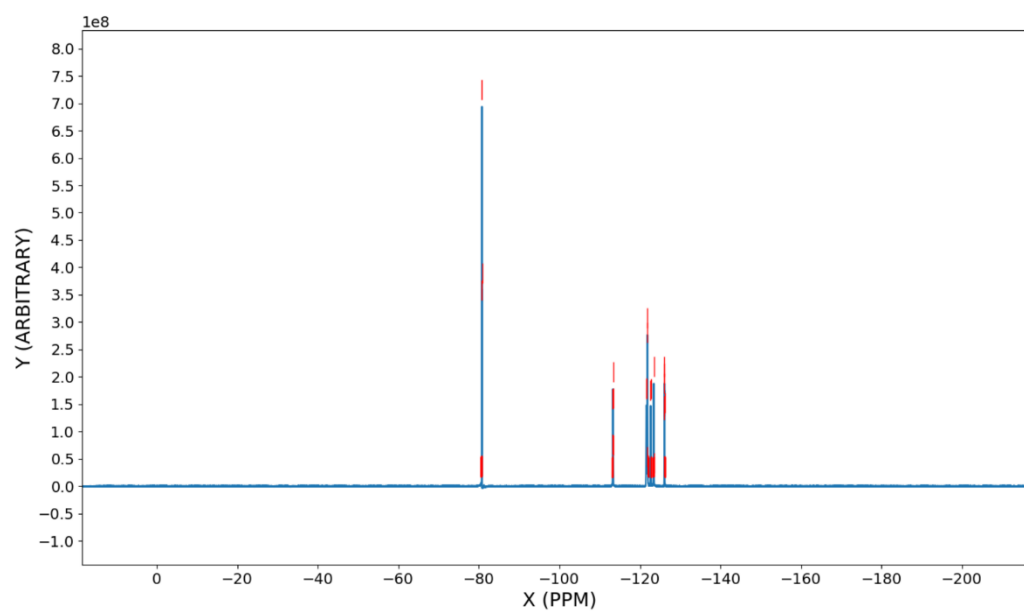
CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)



CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

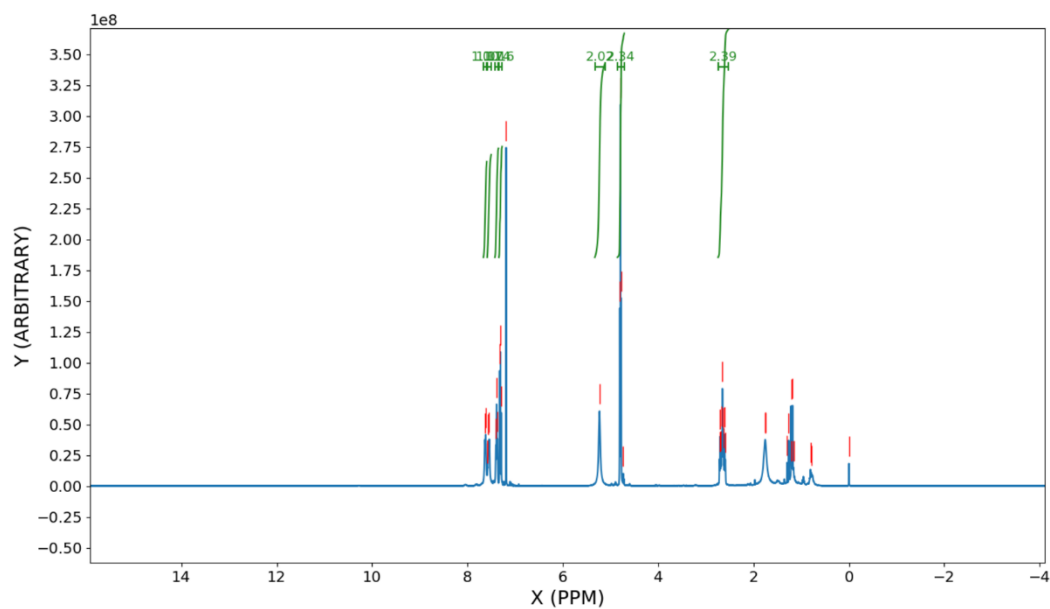


CHMO:0000597 | ^{19}F nuclear magnetic resonance spectroscopy (^{19}F NMR)

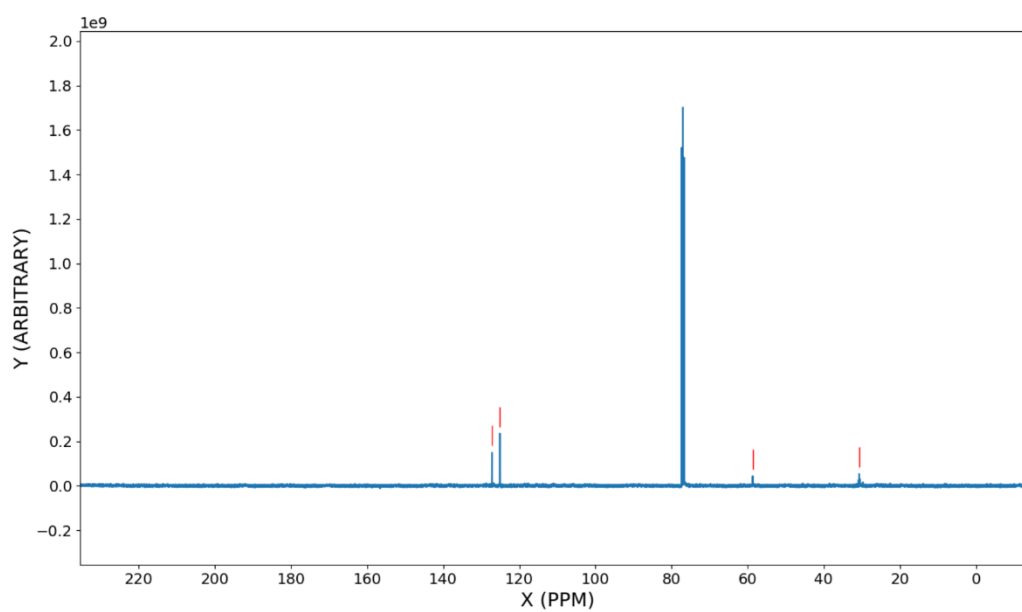


[17h] 3-((3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-
Heptafluorodecyl)oxy)quinoxalin-2-amine

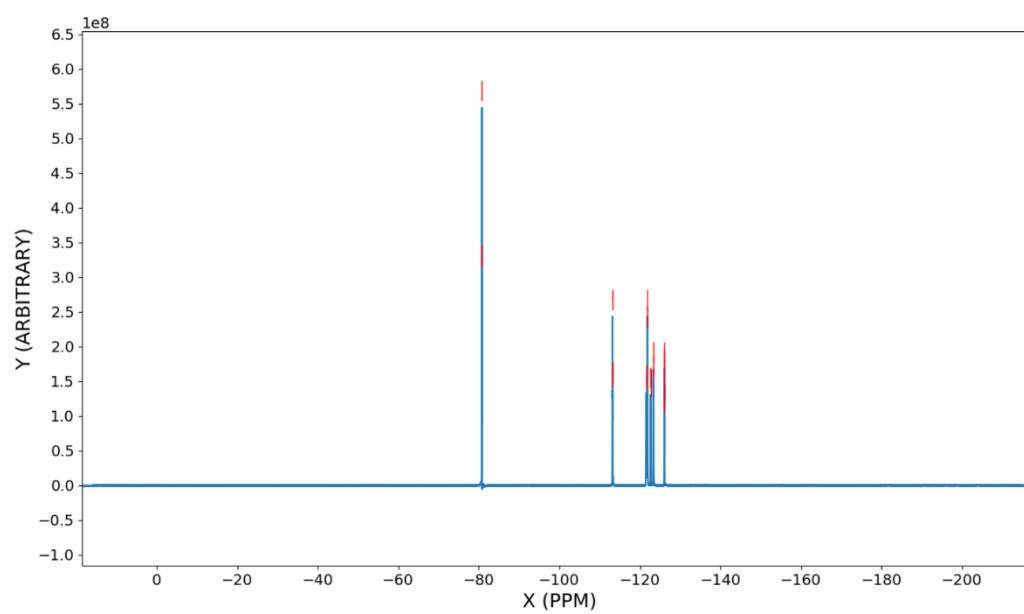
CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)



CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

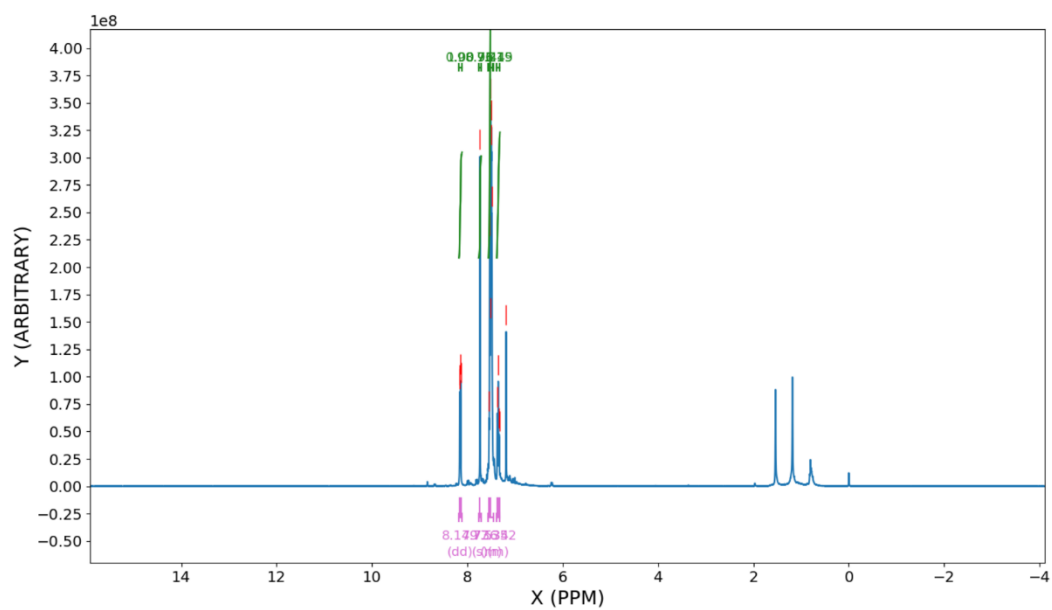


CHMO:0000597 | ^{19}F nuclear magnetic resonance spectroscopy (^{19}F NMR)



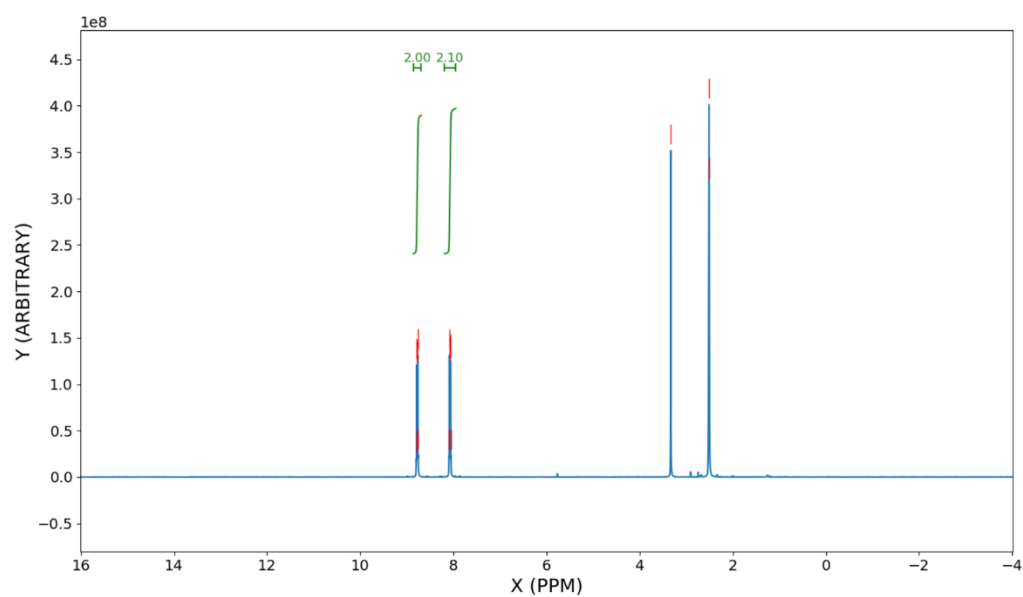
[S9] 1-Phenyl-4-(trifluoromethyl)imidazo[1,2-*a*]quinoxaline

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

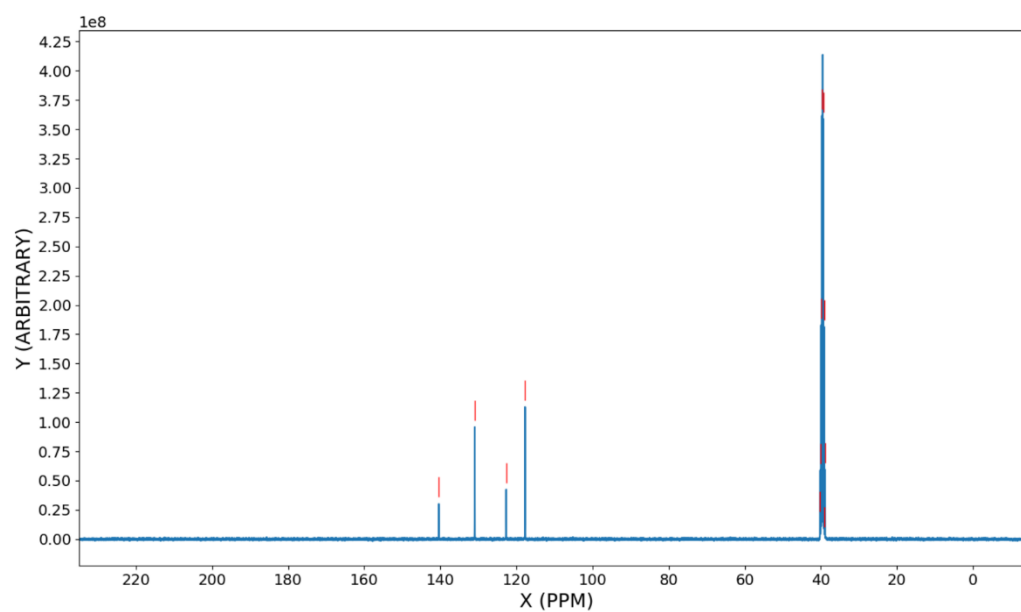


[24] Bis(tetrazolo)[1,5-*a*:5',1'-*c*]quinoxaline

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

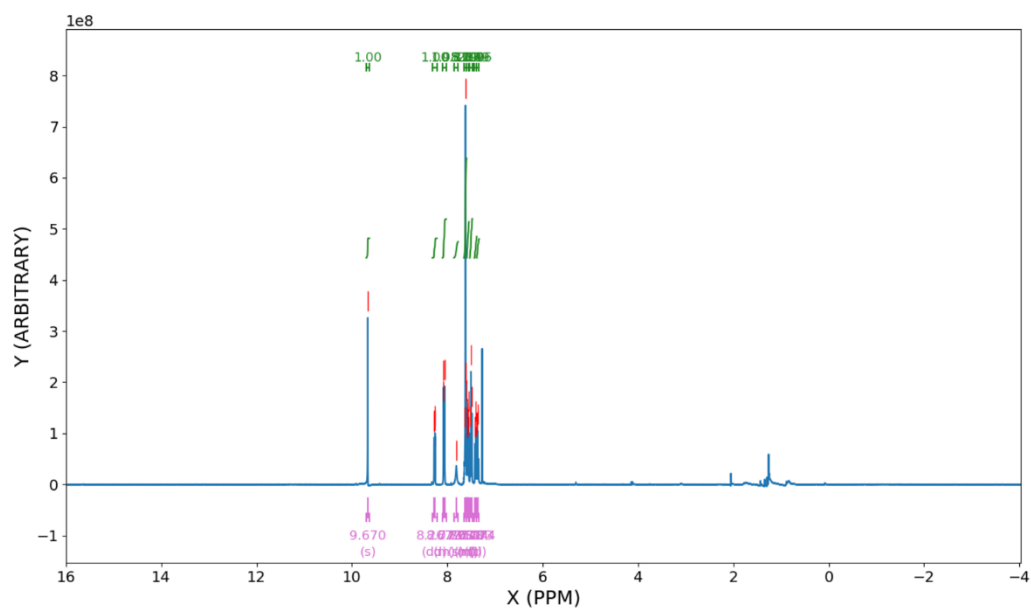


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

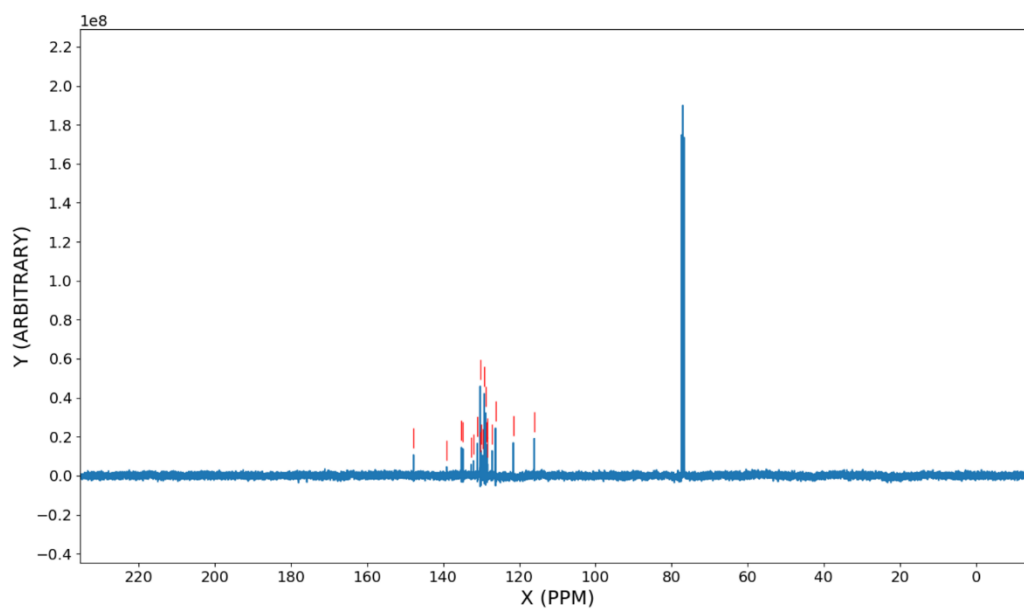


[25a] 1-Phenyl-4-(4-phenyl-1*H*-1,2,3-triazol-1-yl)imidazo[1,2-*a*]quinoxaline

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

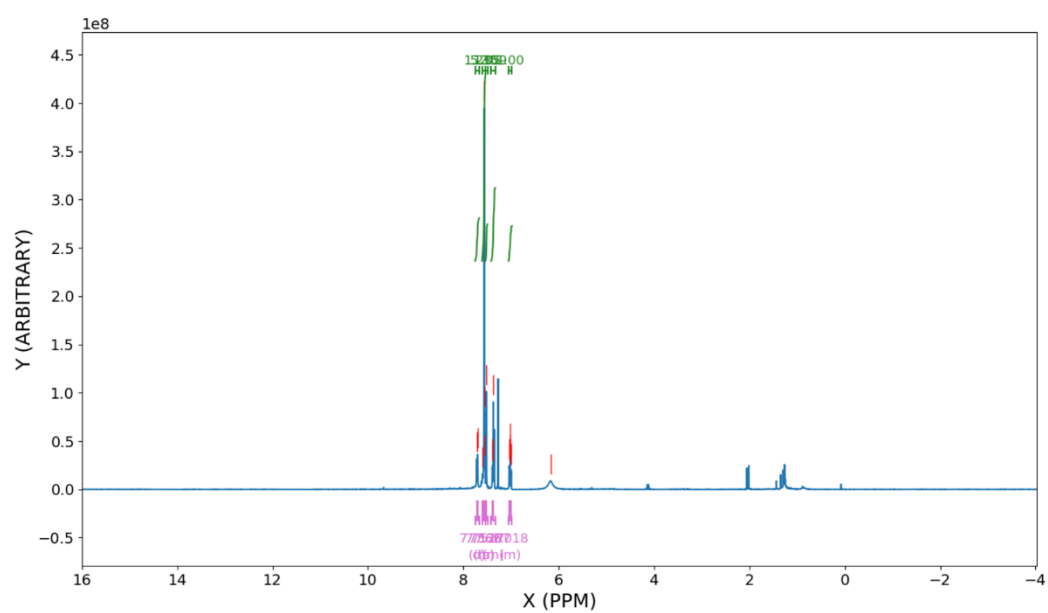


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

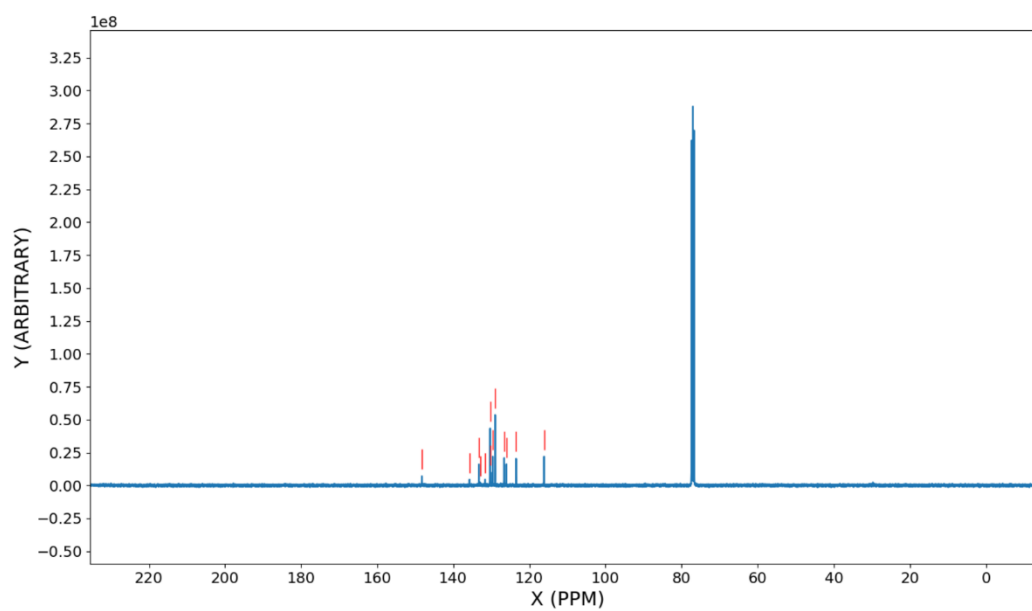


[S5a] 1-Phenylimidazo[1,2-*a*]quinoxalin-4-amine

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

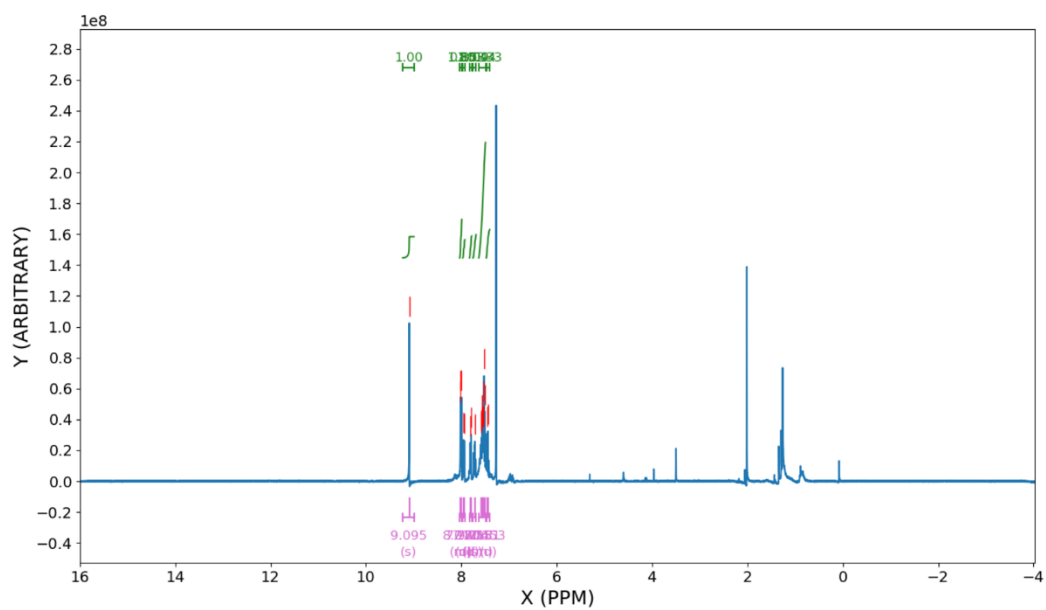


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

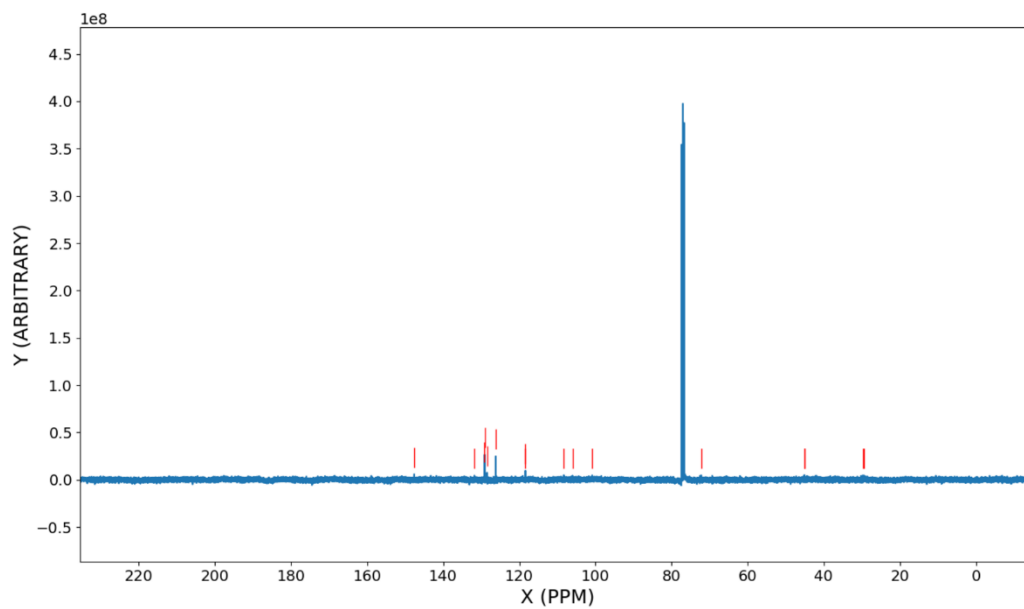


[S6a] 3-(4-Phenyl-1*H*-1,2,3-triazol-1-yl)quinoxalin-2-amine

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

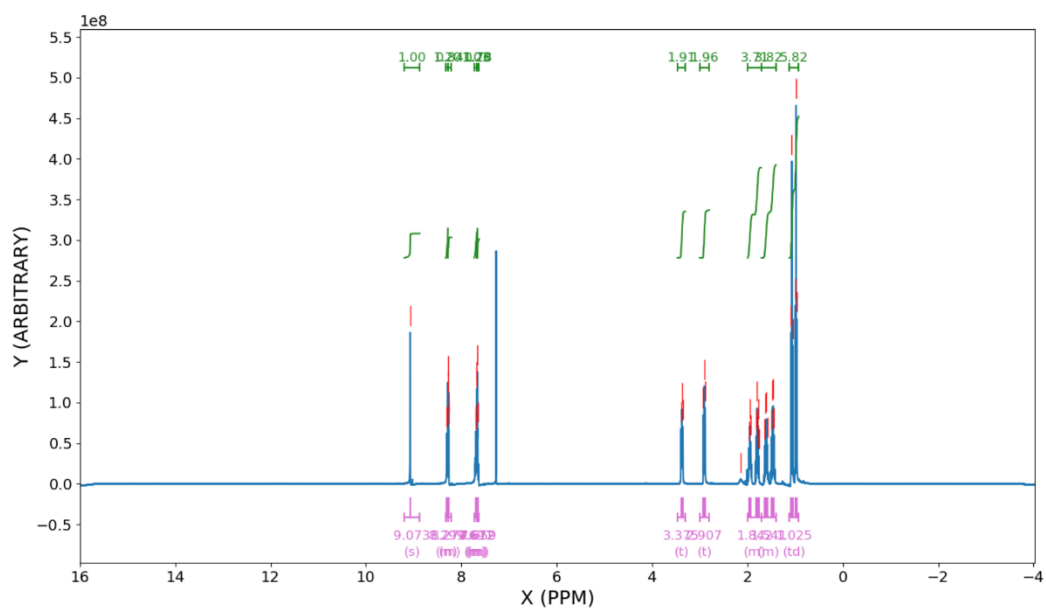


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

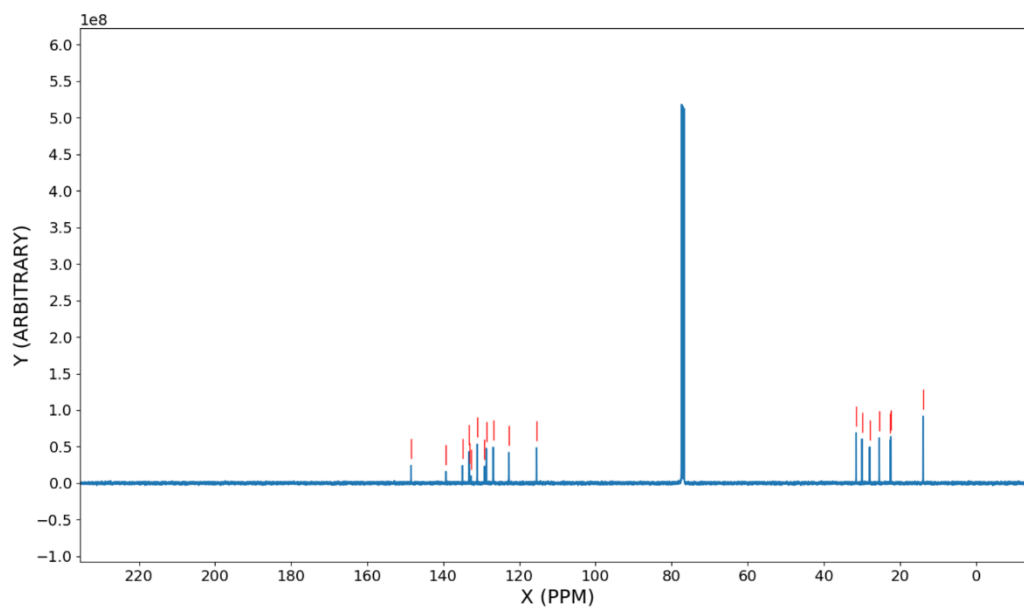


[25b] 1-Butyl-4-(4-butyl-1*H*-1,2,3-triazol-1-yl)imidazo[1,2-*a*]quinoxaline

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

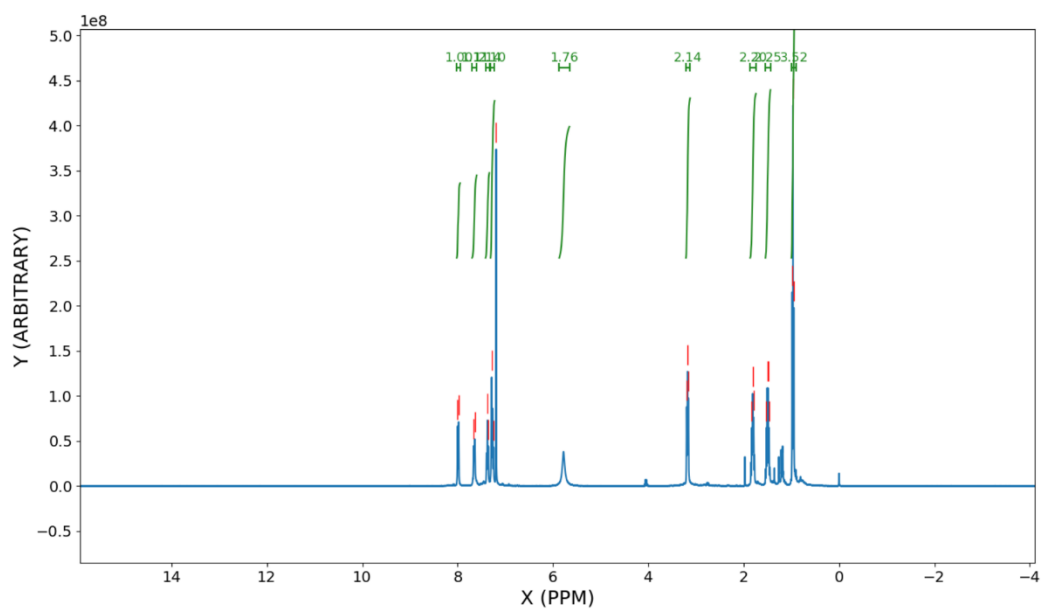


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

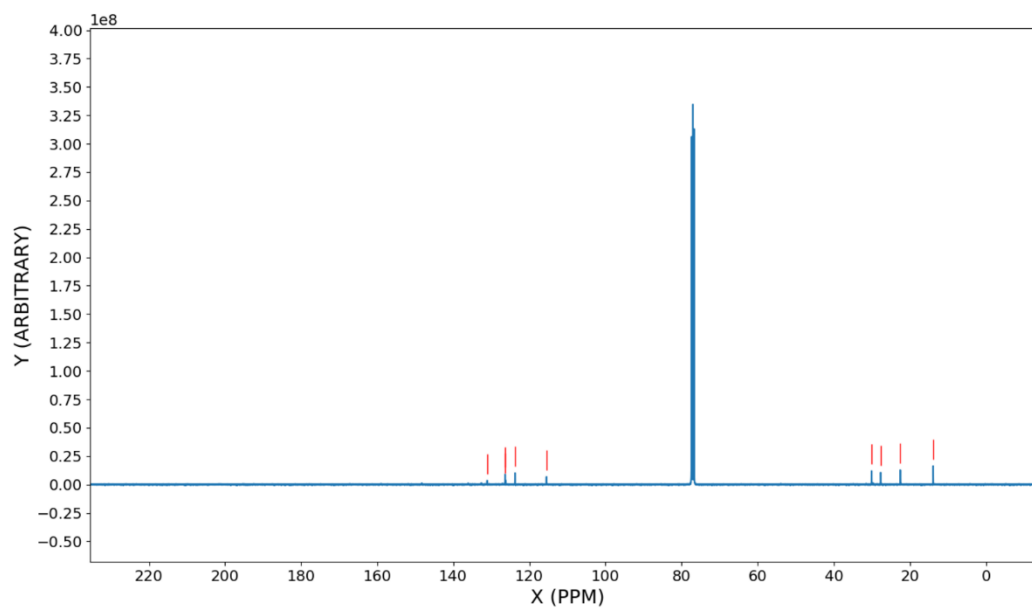


[S5b] 1-Butylimidazo[1,2-*a*]quinoxalin-4-amine

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

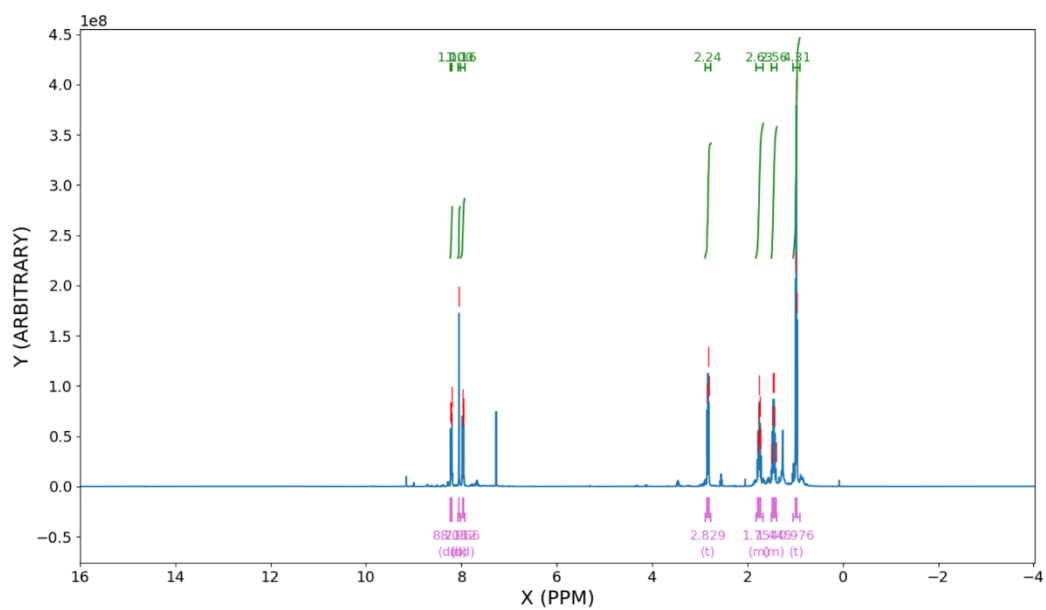


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

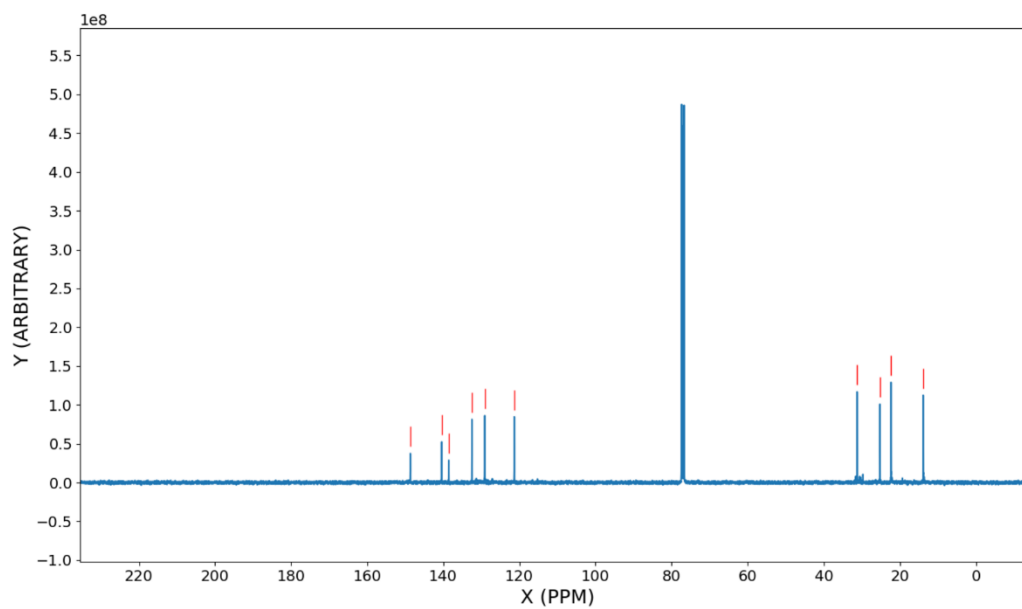


[S7b] 2,3-Bis(4-butyl-1*H*-1,2,3-triazol-1-yl)quinoxaline

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

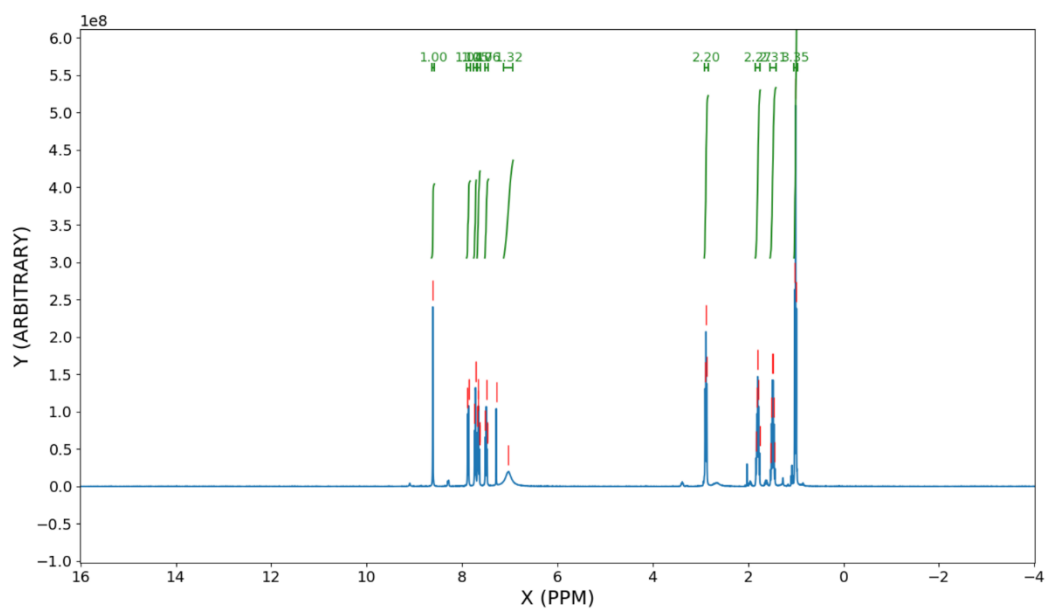


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

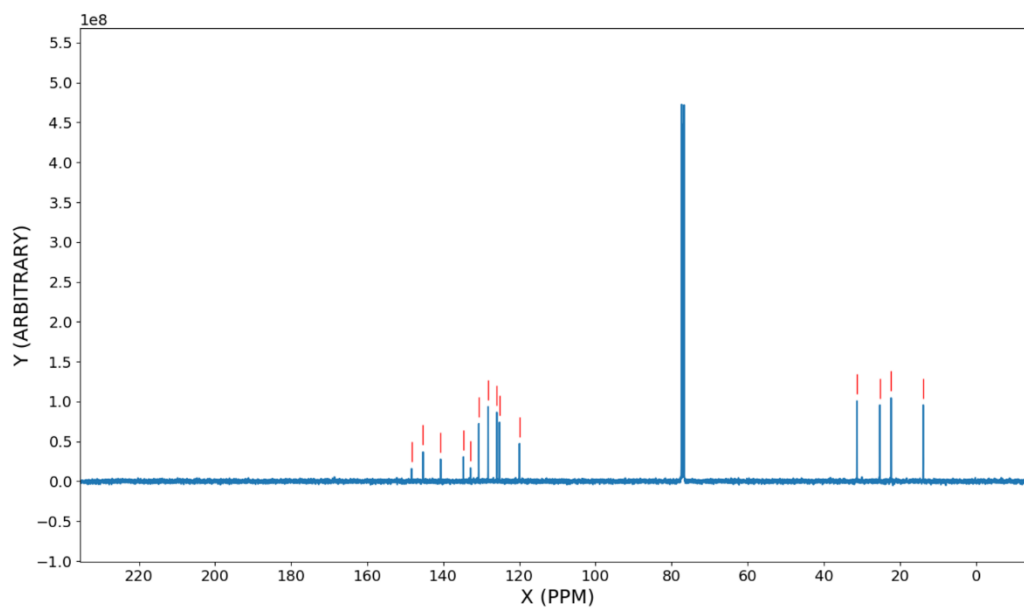


[S6b] 3-(4-Butyl-1*H*-1,2,3-triazol-1-yl)quinoxalin-2-amine

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

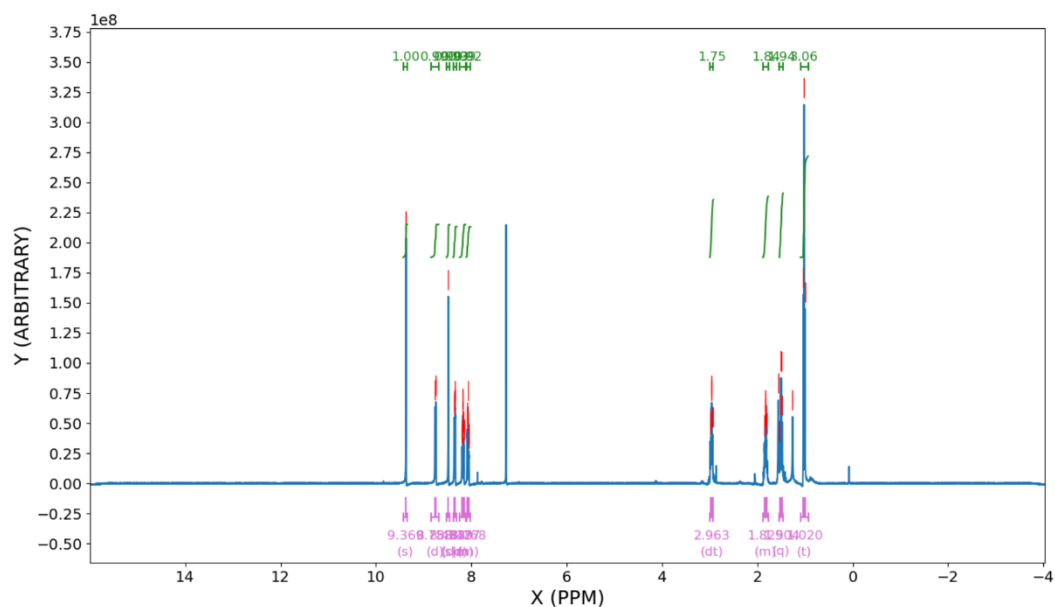


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

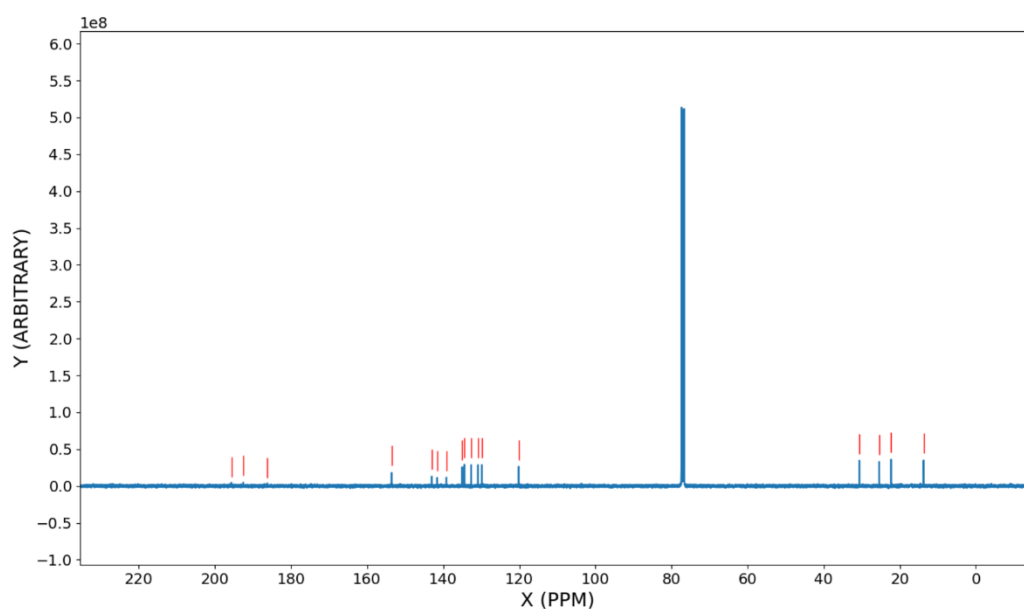


[27a] 2-(4-Butyl-1*H*-1,2,3-triazol-1-yl)quinoxalinetricarbonylrhenium(I)-bromide

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

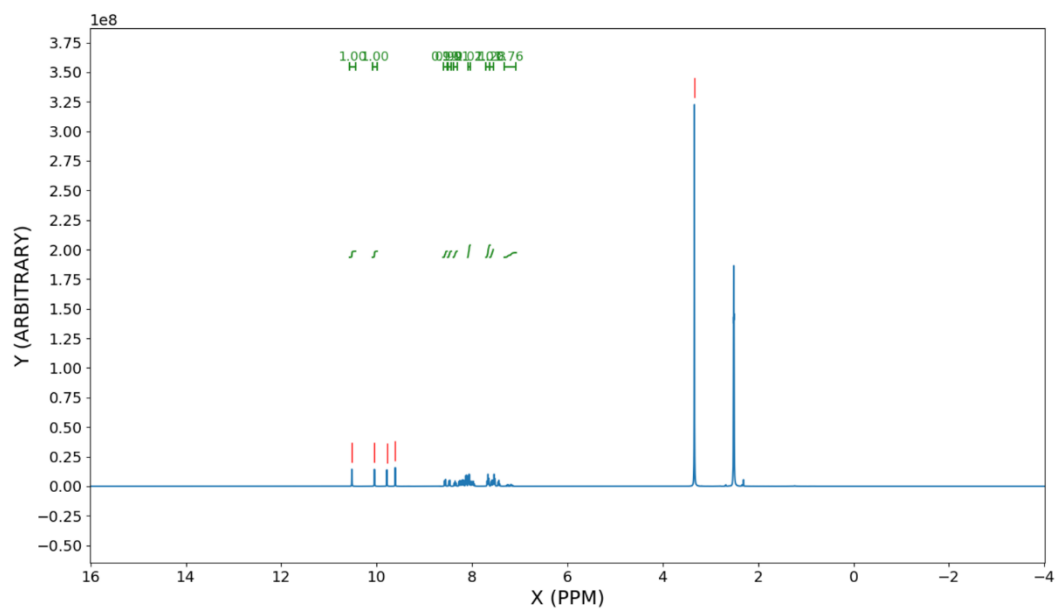


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

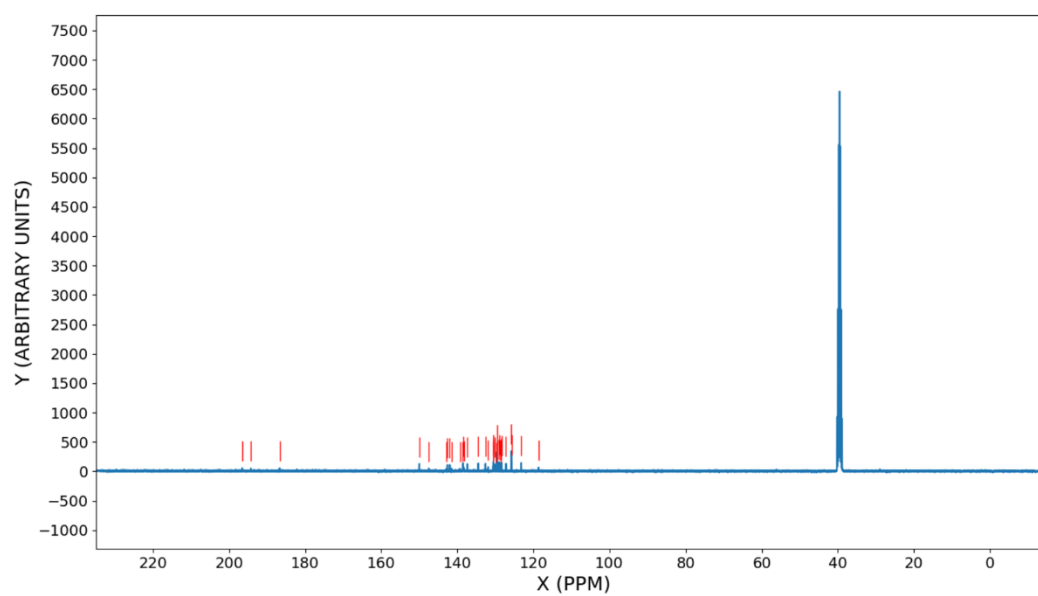


[27b] [(2-(4-Phenyl-1*H*-1,2,3-triazol-1-yl)quinoxaline)]bromotricarbonylrhenium(I)

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

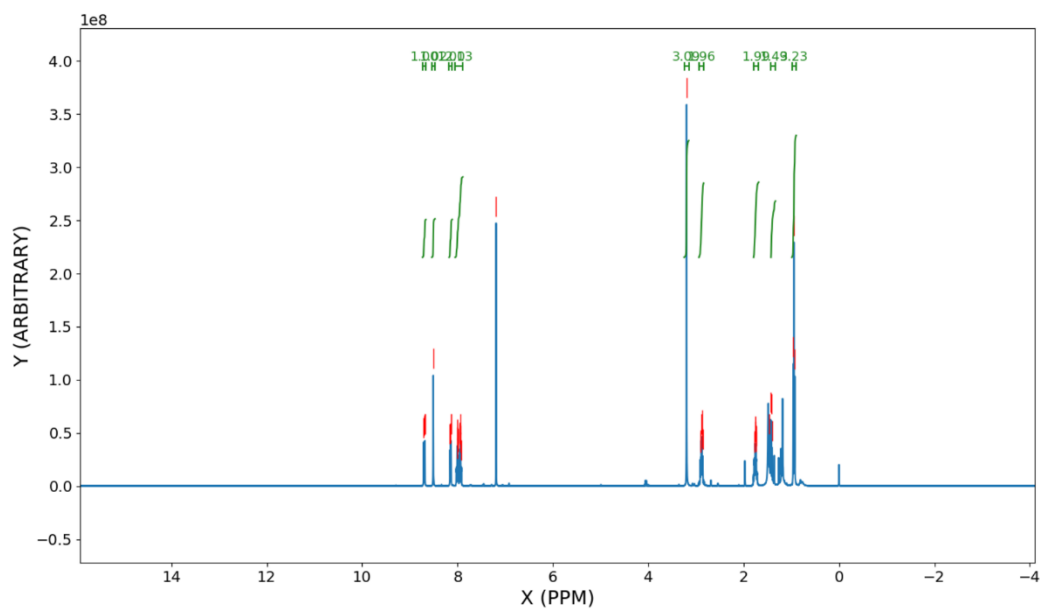


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

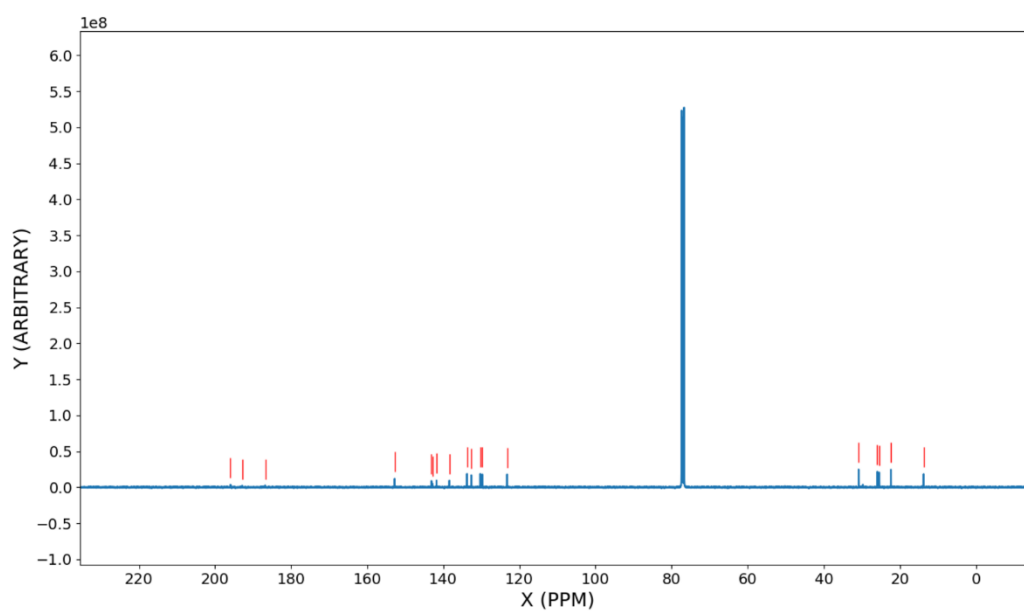


[27c] [2-(4-Butyl-1*H*-1,2,3-triazol-1-yl)-3-methylquinoxaline]bromotricarbonylrhenium(I)

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

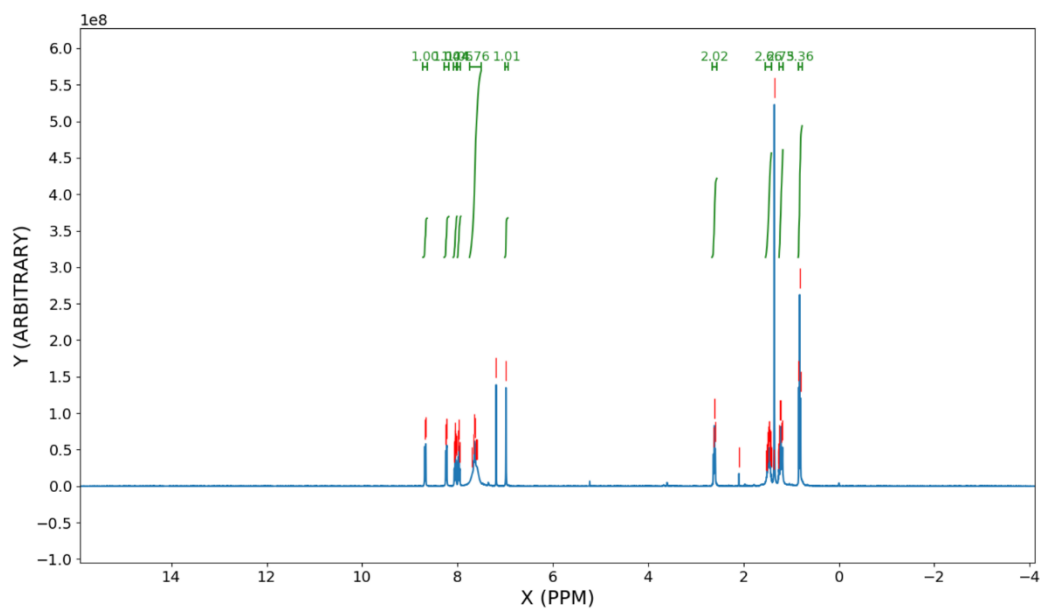


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

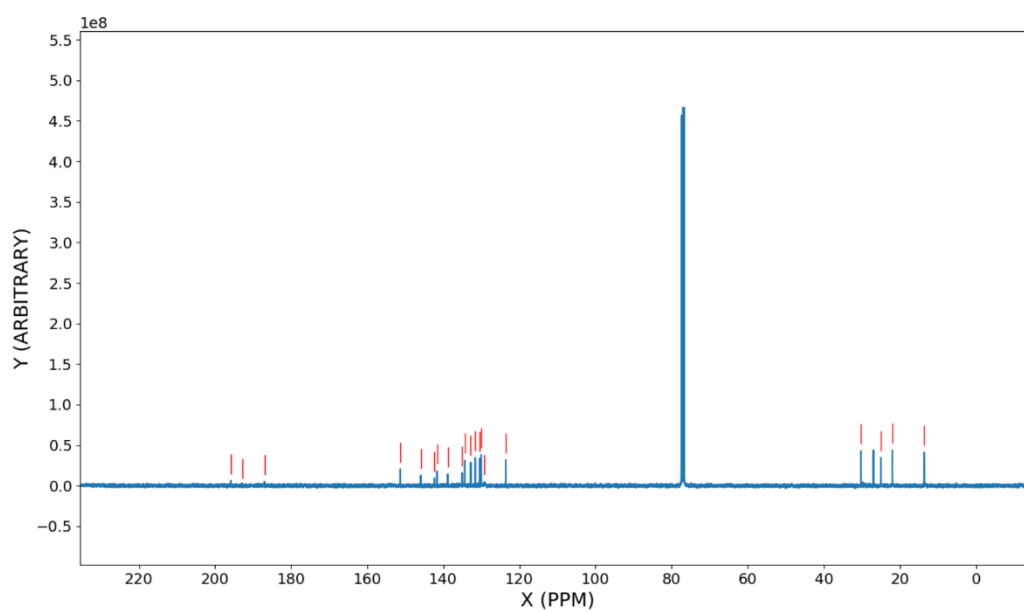


[27d] [2-(4-Butyl-1*H*-1,2,3-triazol-1-yl)-3-phenylquinoxaline]bromotricarbonylrhenium(I)

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

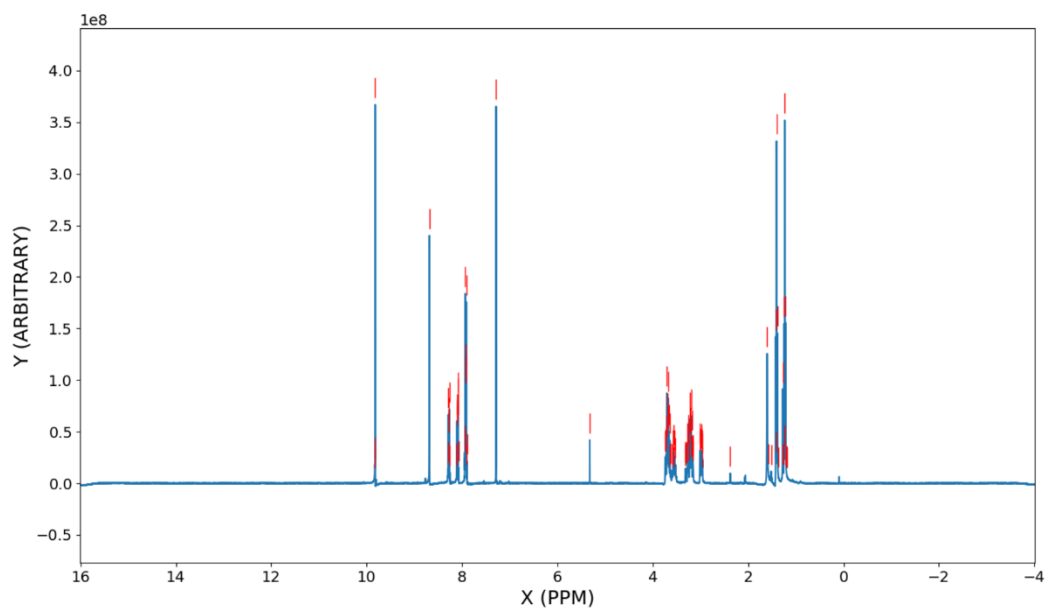


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

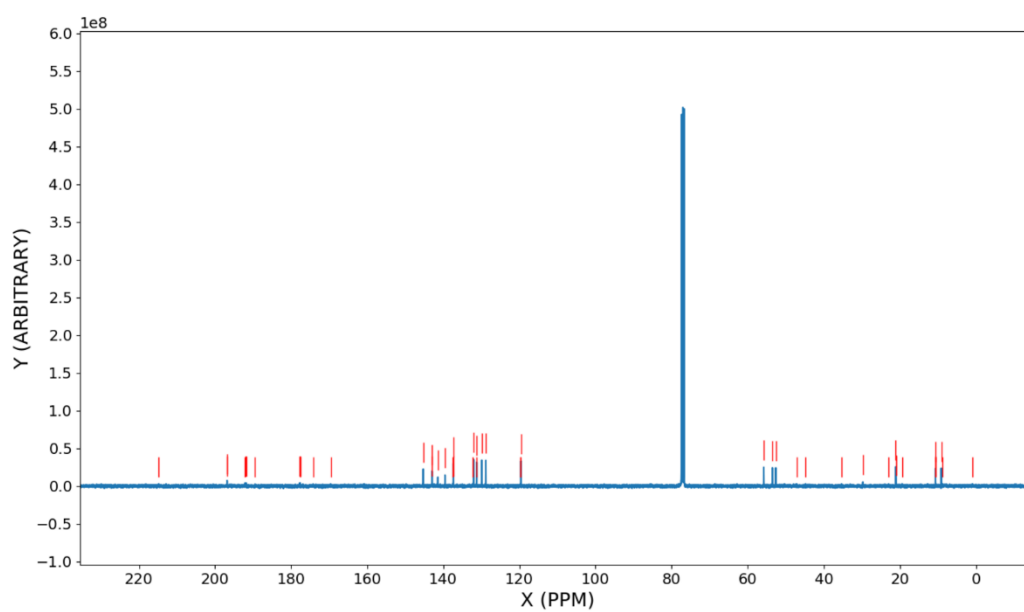


[29] [N,N-Diethyl-2-(1-(quinoxalin-2-yl)-1*H*-1,2,3-triazol-4-yl)ethan-1-amine]bromotricarbonylrhenium(I)

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)

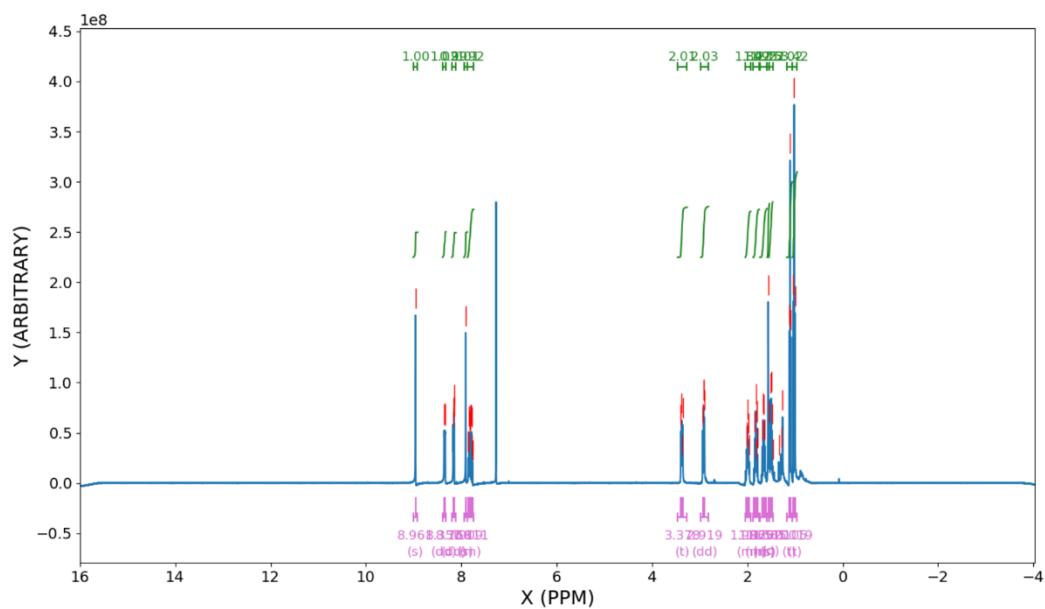


CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)



[30] [1-Butyl-4-(4-butyl-1*H*-1,2,3-triazol-1-yl)imidazo[1,2-*a*]quinoxaline]bromotricarbonylrhenium(I)

CHMO:0000593 | ^1H nuclear magnetic resonance spectroscopy (^1H NMR)



CHMO:0000595 | ^{13}C nuclear magnetic resonance spectroscopy (^{13}C NMR)

