

Copper-Catalyzed Three-Component Synthesis of 5-Acetamidoimidazoles From Carbodiimides, Acyl Chlorides and Isocyanides

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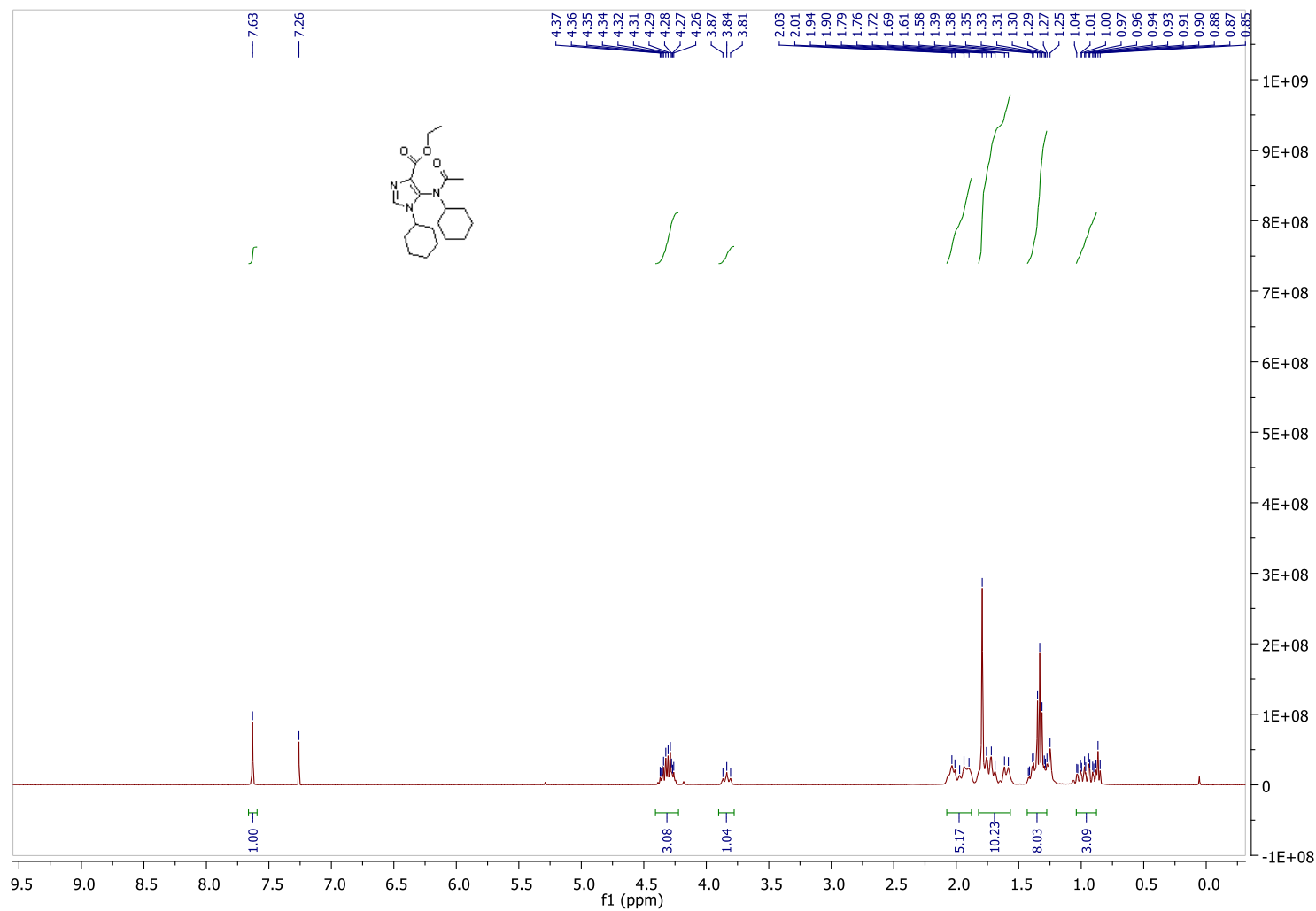
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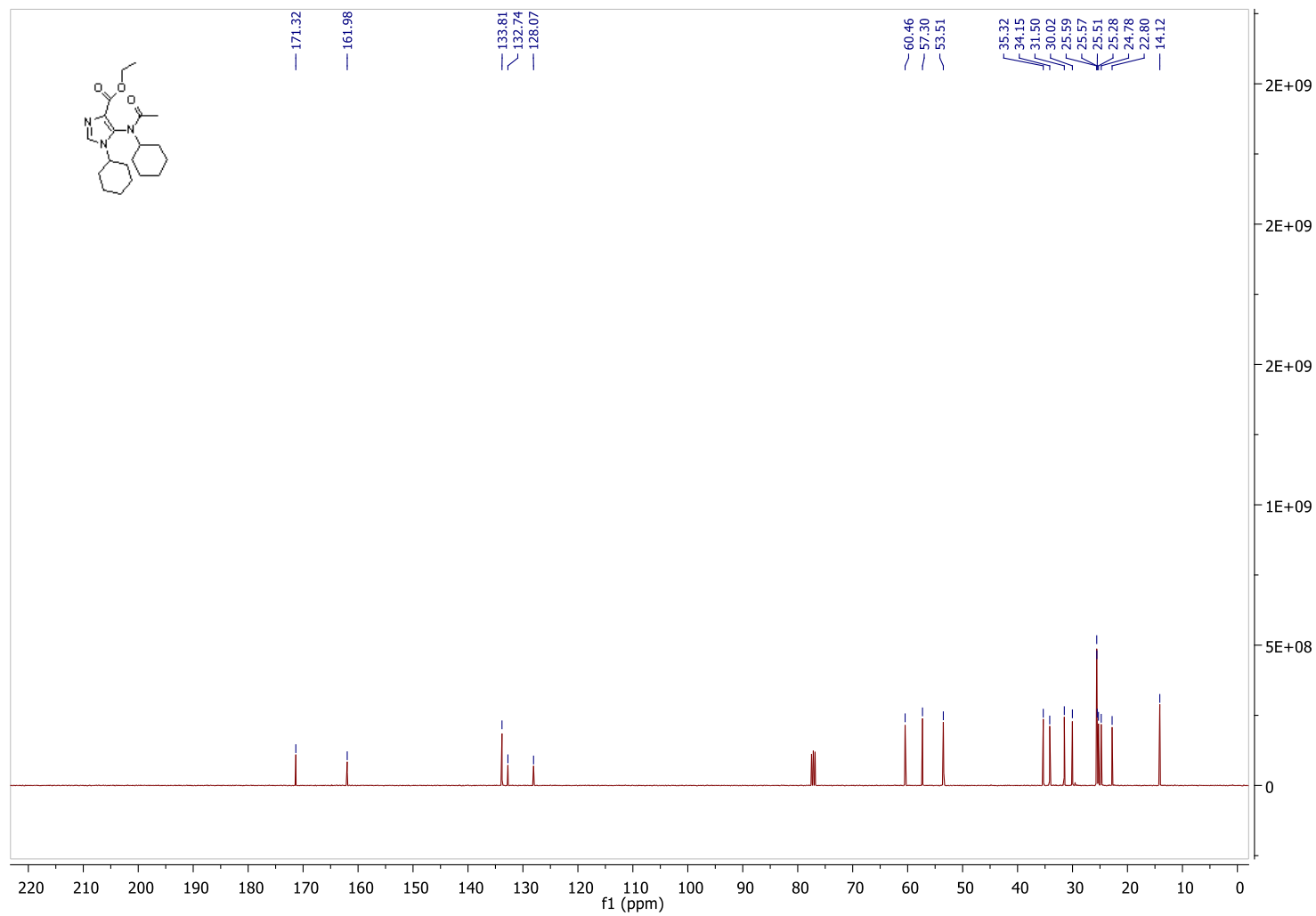
^c Current address: UCB S.A., Chemin du Foriest, 1420 Braine l'Alleud, Belgium

Copies of ^1H and ^{13}C NMR Spectra:

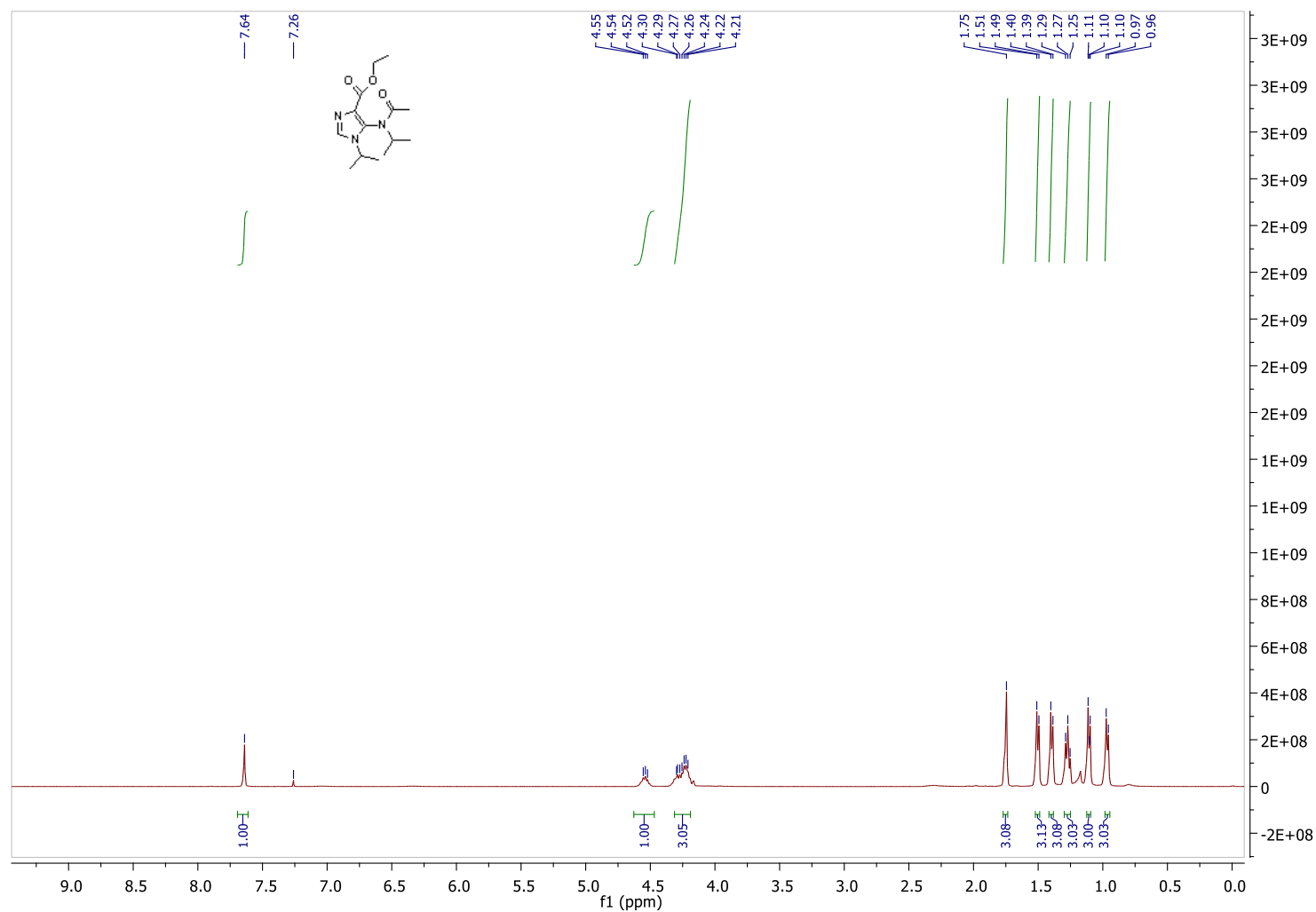
^1H NMR spectra of ethyl 1-cyclohexyl-5-(N-cyclohexylacetamido)-1H-imidazole-4-carboxylate (10a)



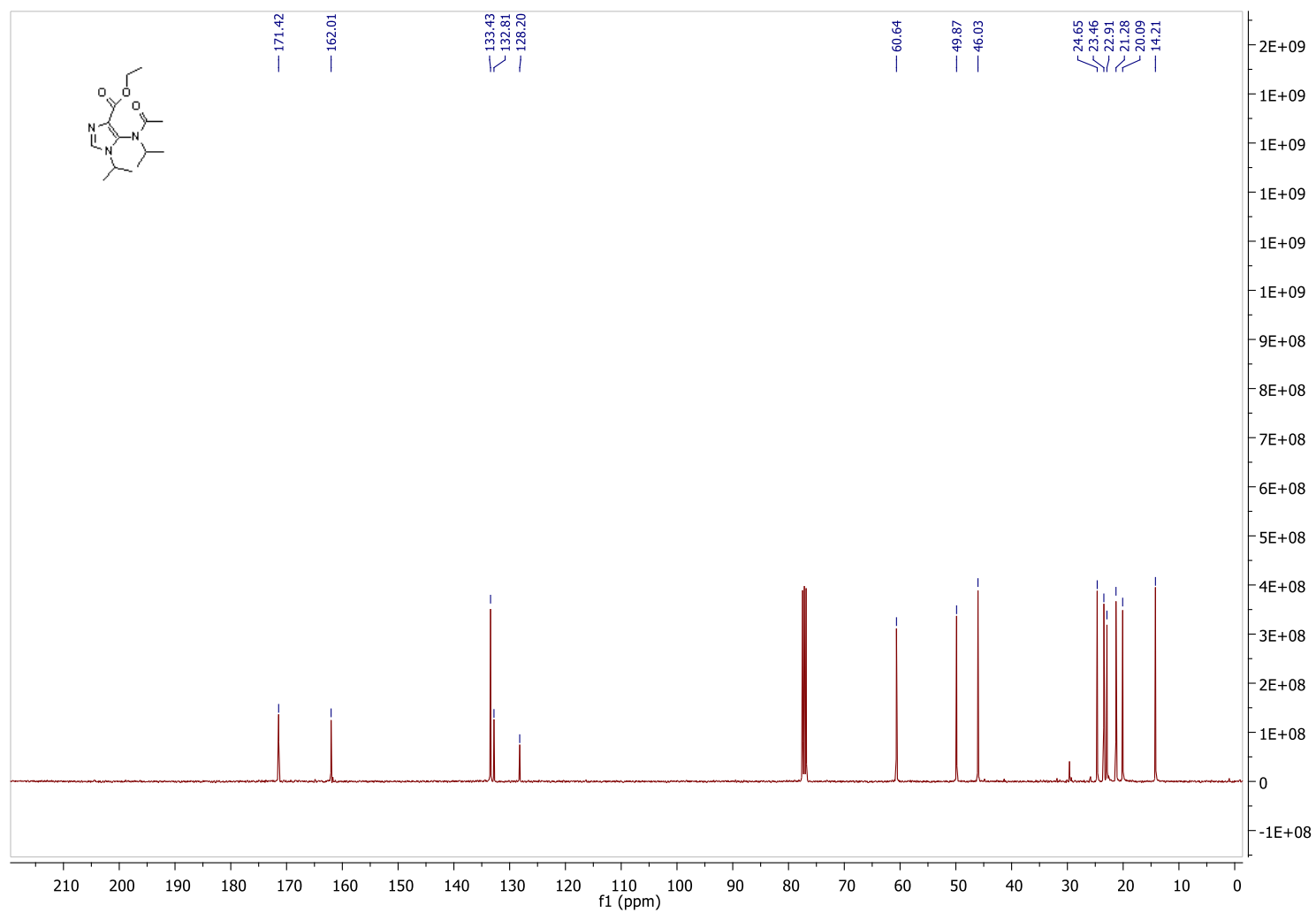
^{13}C NMR spectra of ethyl 1-cyclohexyl-5-(N-cyclohexylacetamido)-1H-imidazole-4-carboxylate (10a)



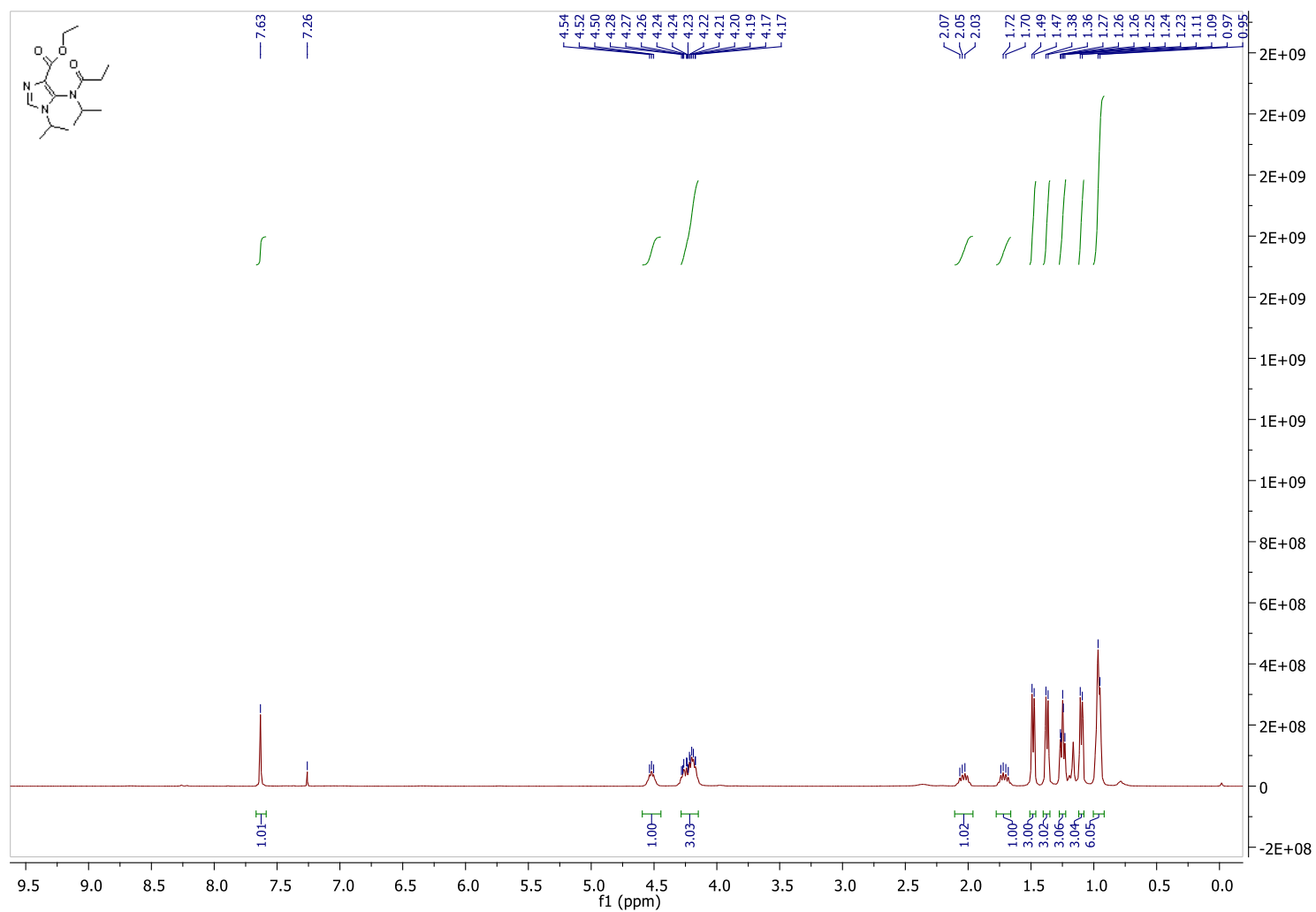
^1H NMR spectra of ethyl 1-isopropyl-5-(*N*-isopropylacetamido)-1*H*-imidazole-4-carboxylate (10b)



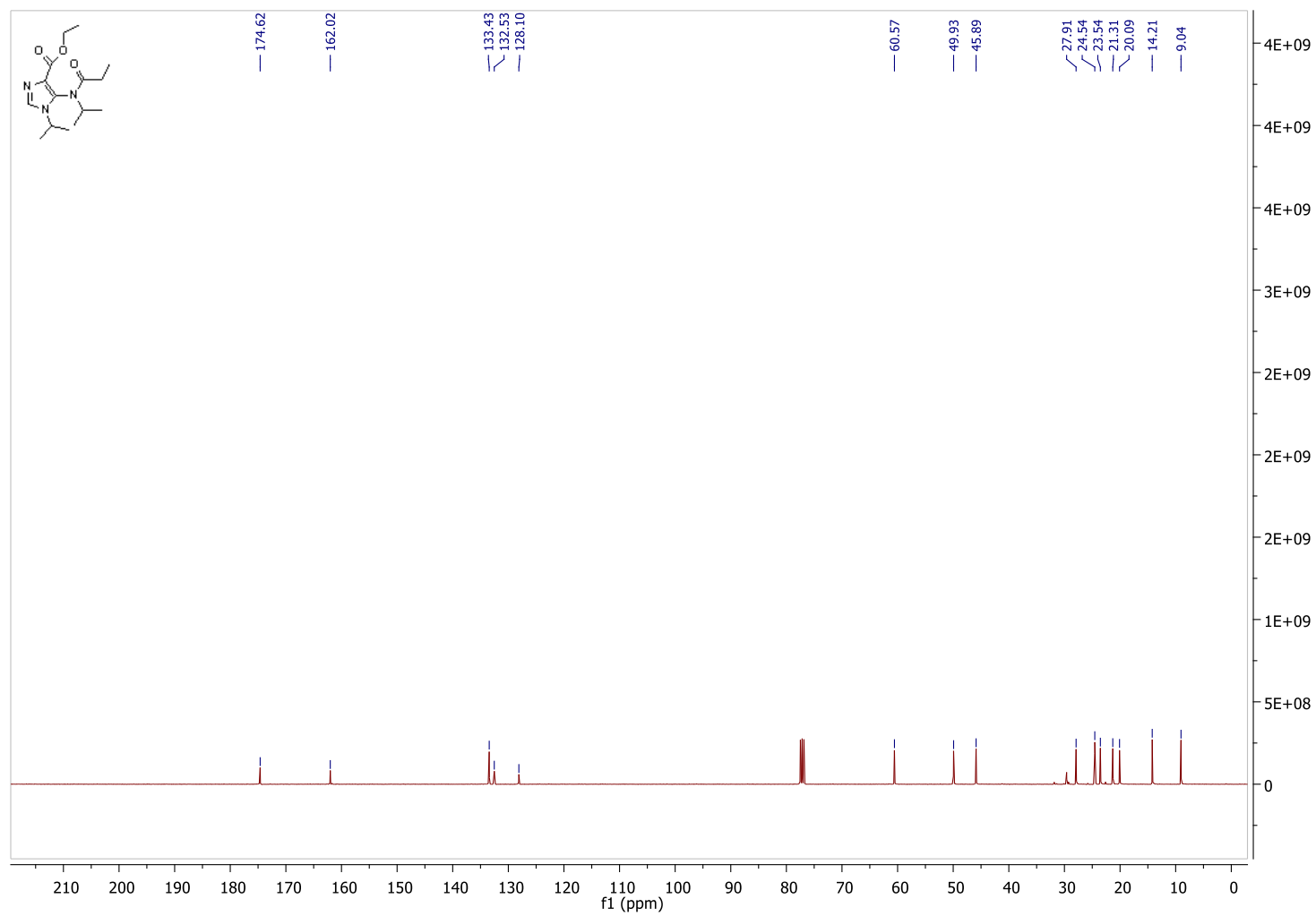
^{13}C NMR spectra of ethyl 1-isopropyl-5-(*N*-isopropylacetamido)-1*H*-imidazole-4-carboxylate (10b)



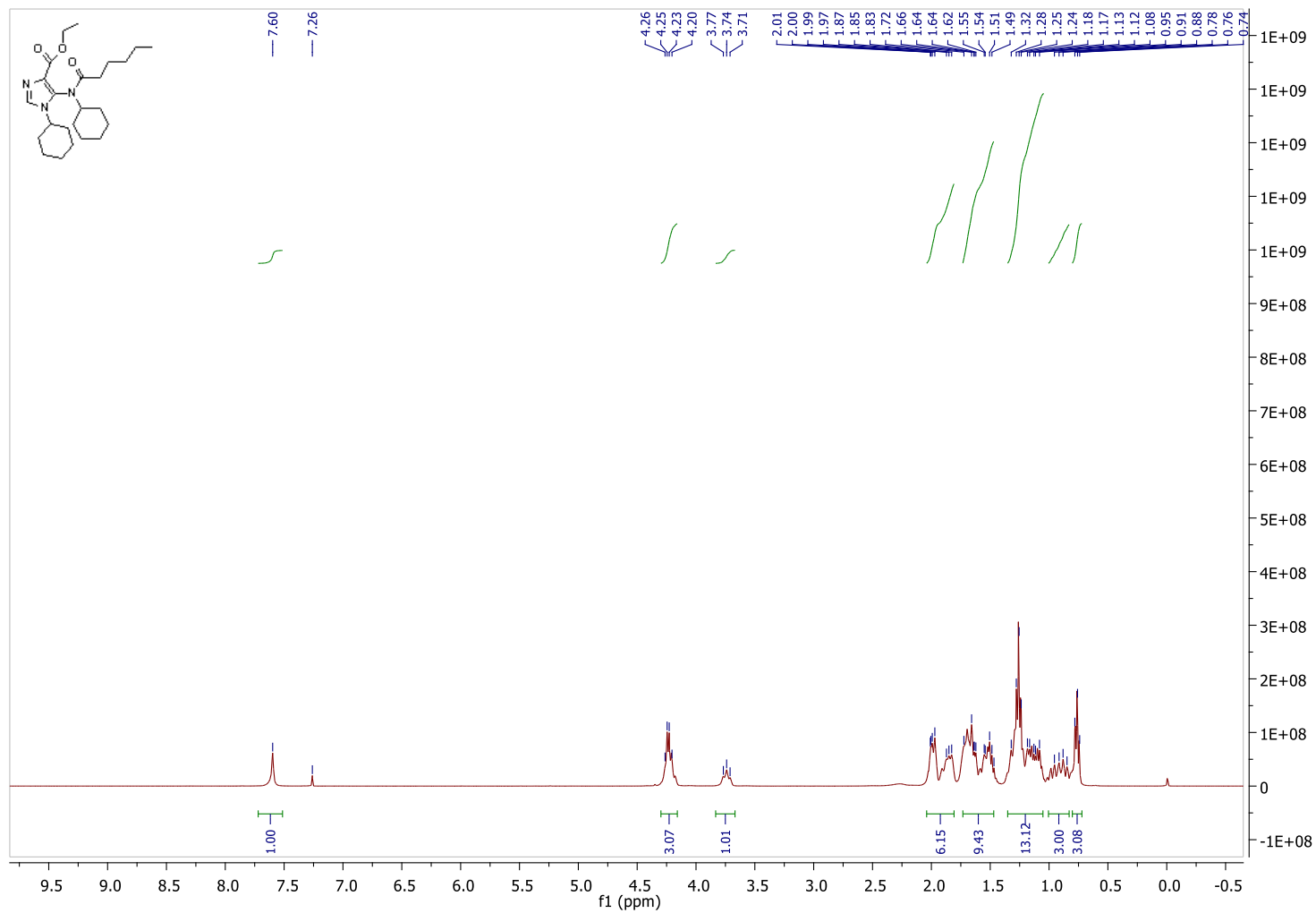
¹H NMR spectra of ethyl 1-isopropyl-5-(*N*-isopropylpropionamido)-1*H*-imidazole-4-carboxylat (10c)



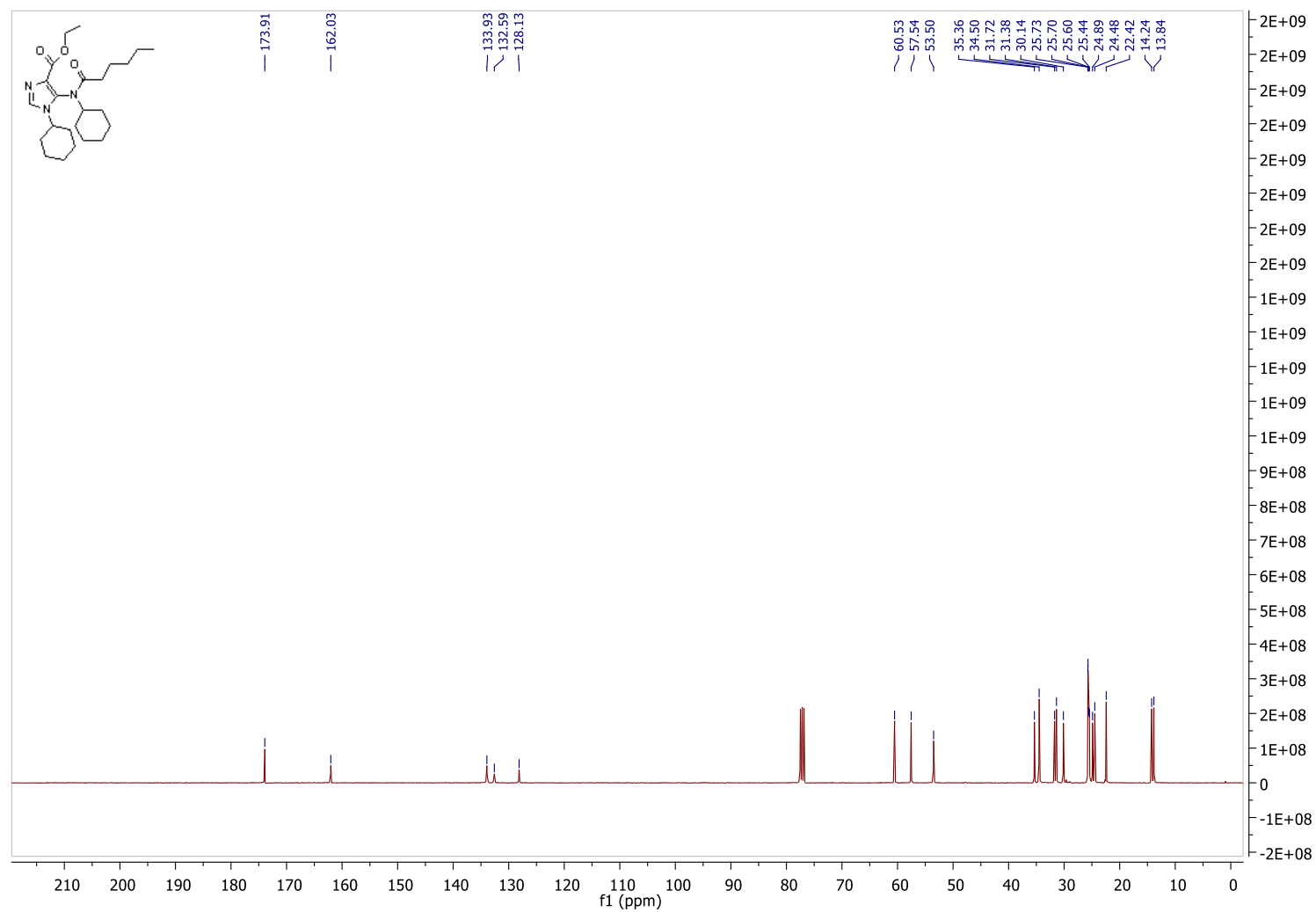
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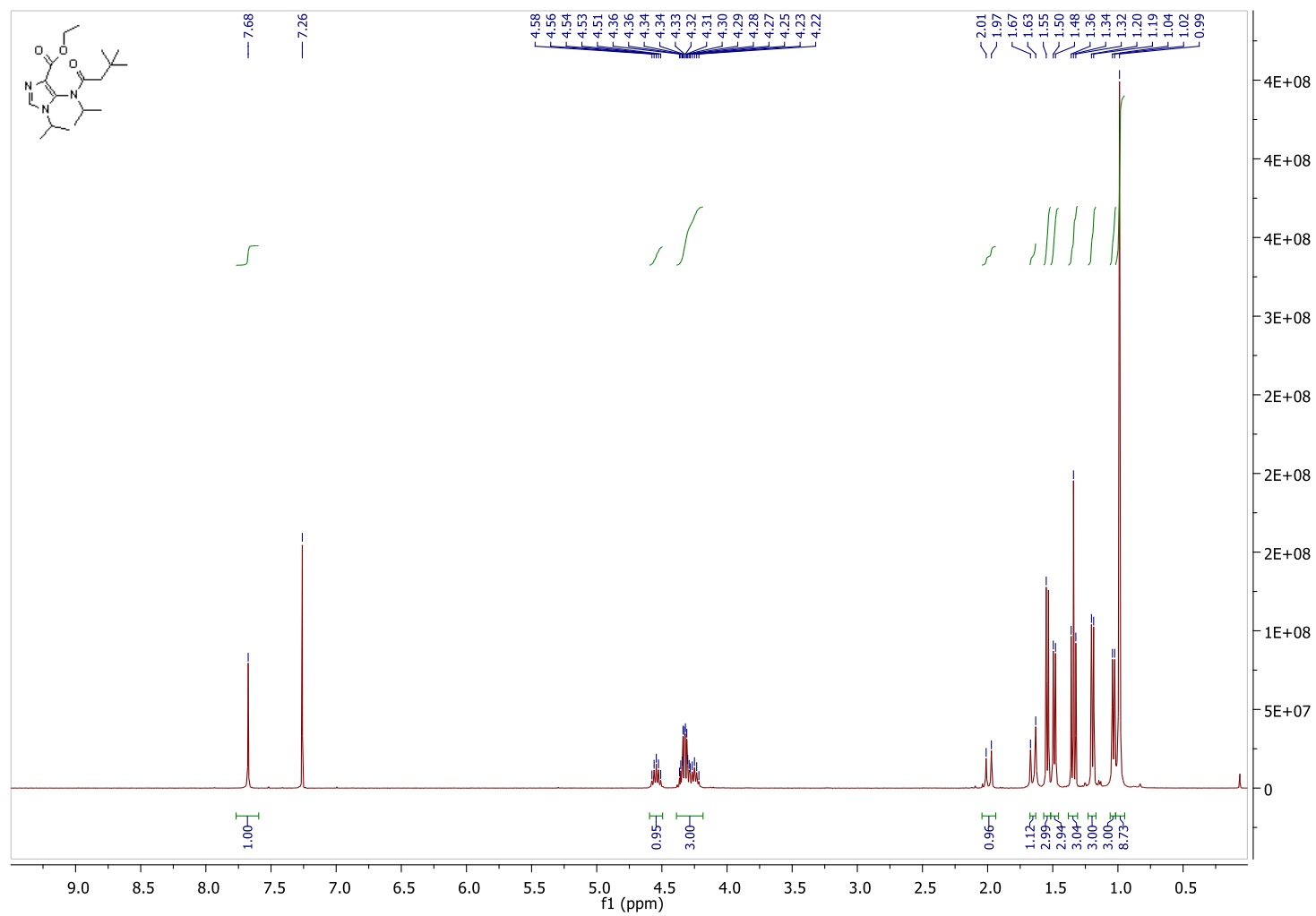
^1H NMR spectra of ethyl 1-cyclohexyl-5-(*N*-cyclohexylhexanamido)-1*H*-imidazole-4-carboxylate (10d)



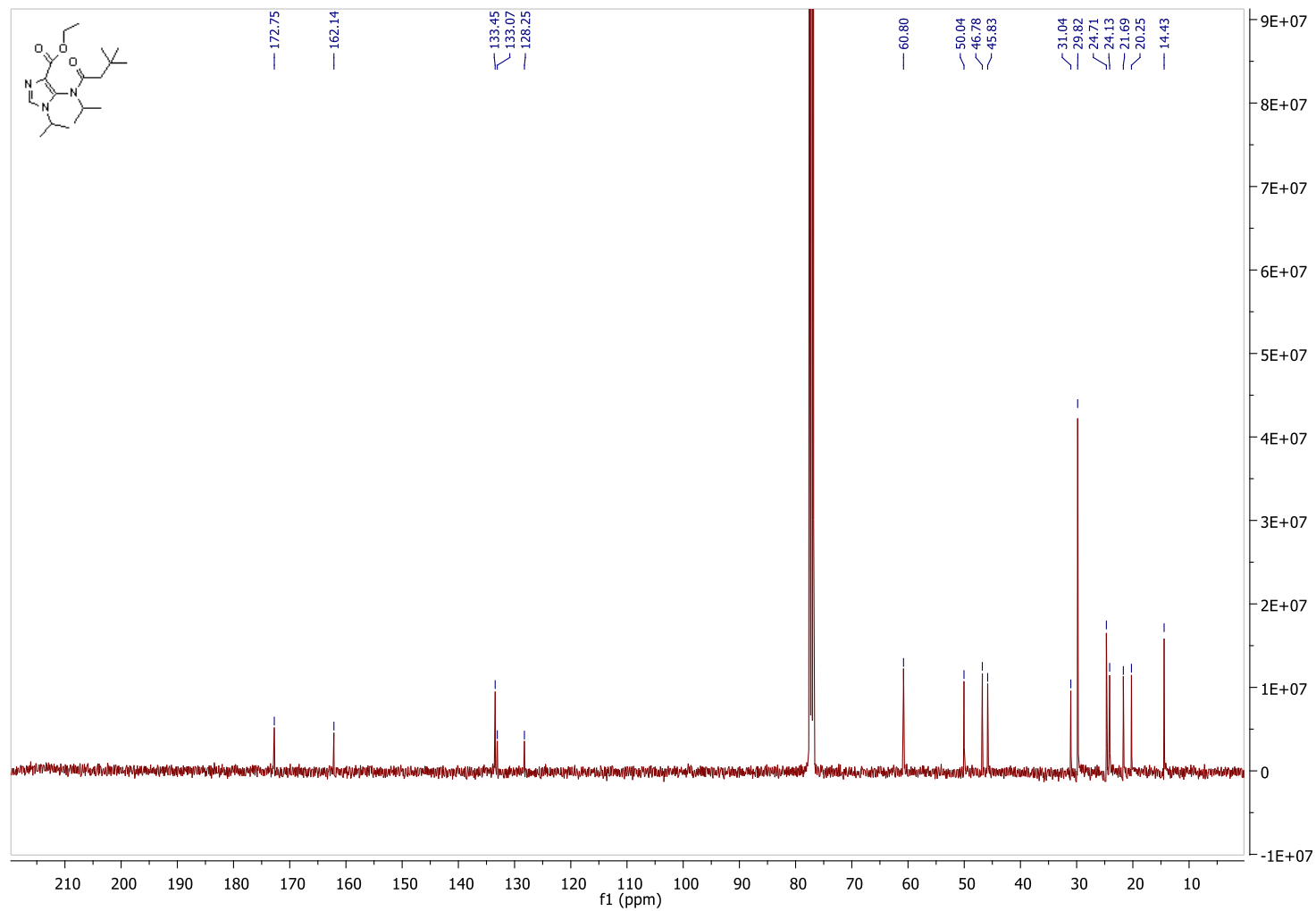
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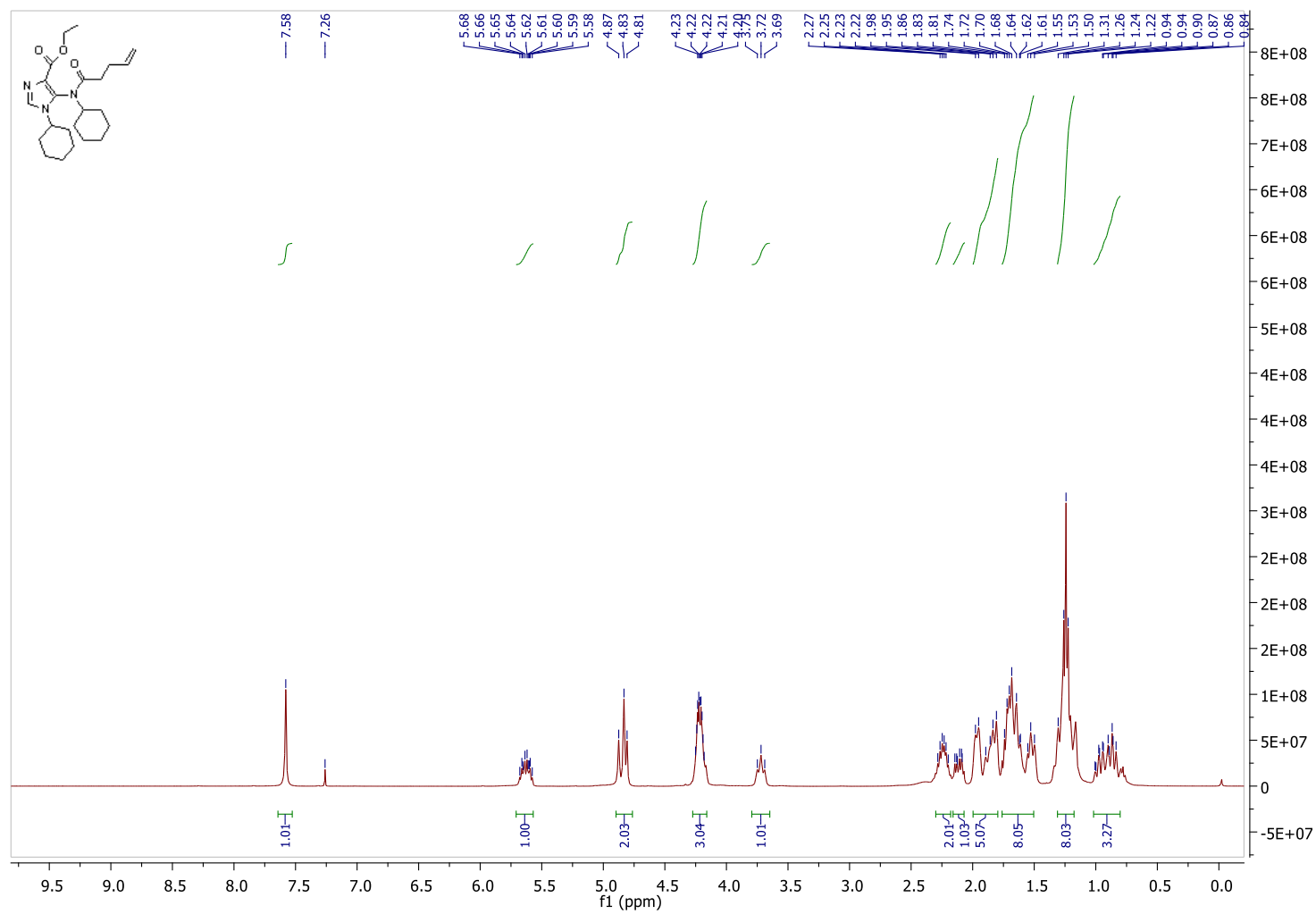
^1H NMR spectra of ethyl 1-isopropyl-5-(*N*-isopropyl-3,3-dimethylbutanamido)-1*H*-imidazole-4-carboxylate (10e)



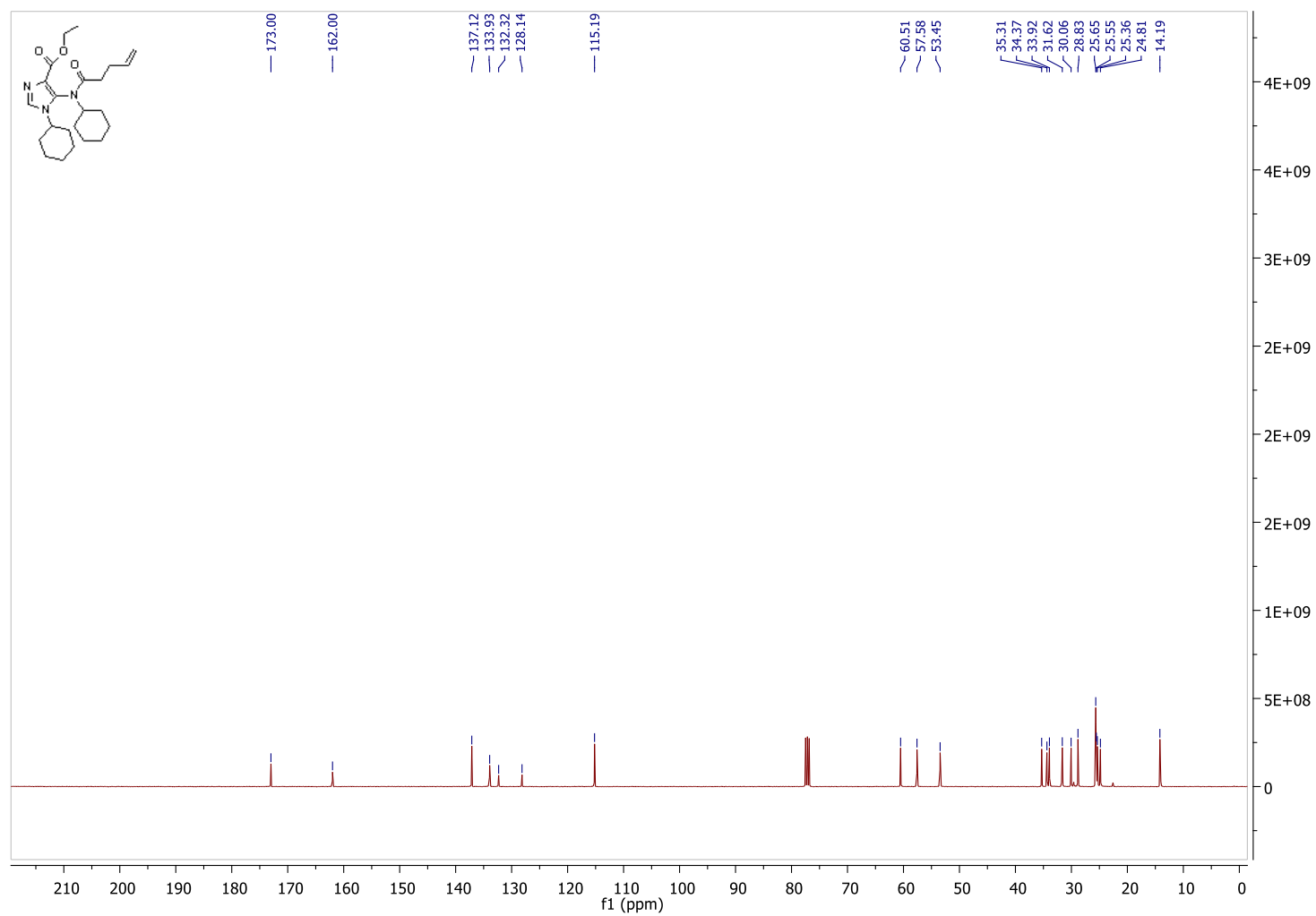
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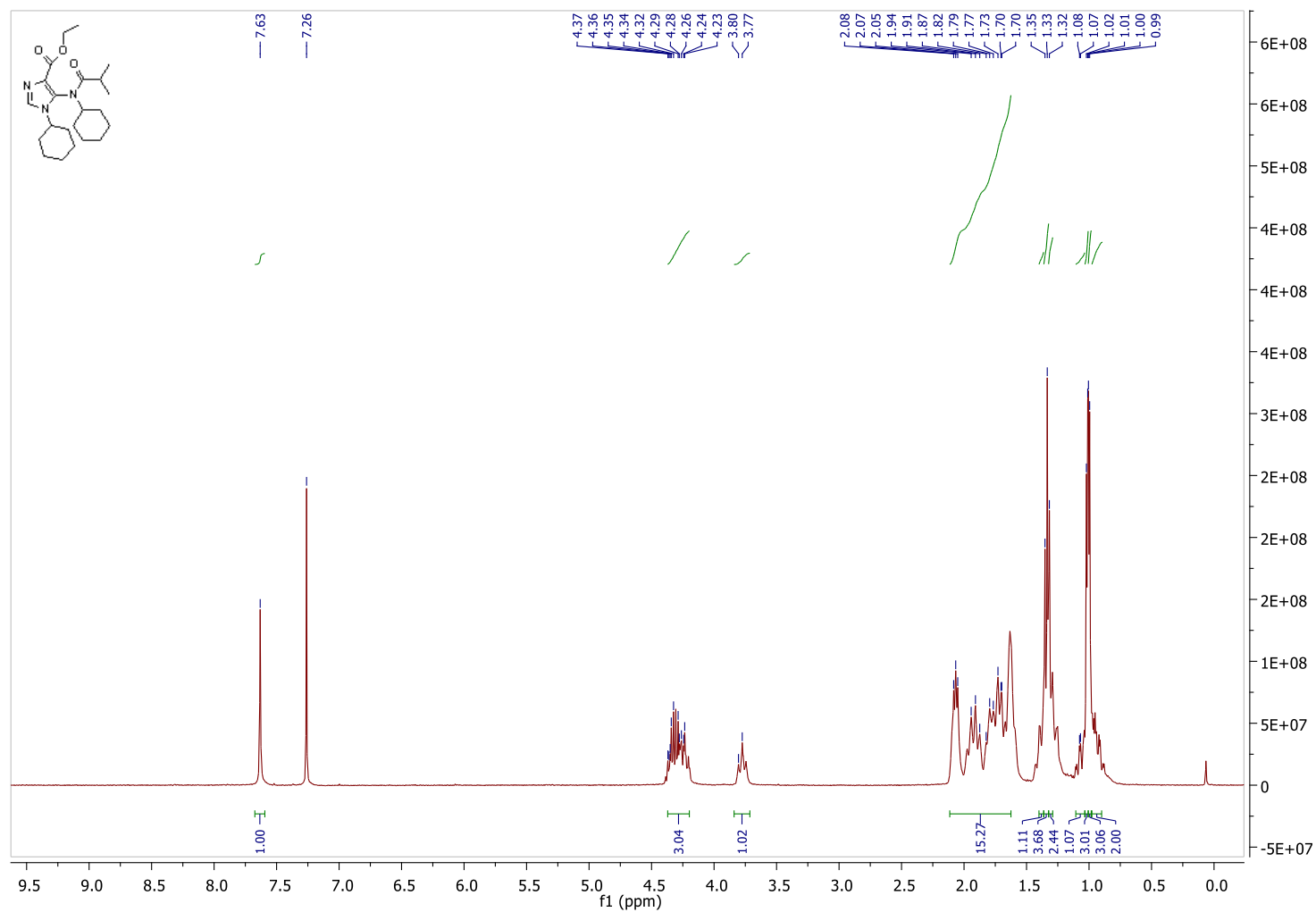
^1H NMR spectra of ethyl 1-cyclohexyl-5-(*N*-cyclohexylpent-4-enamido)-1*H*-imidazole-4-carboxylate (10f)



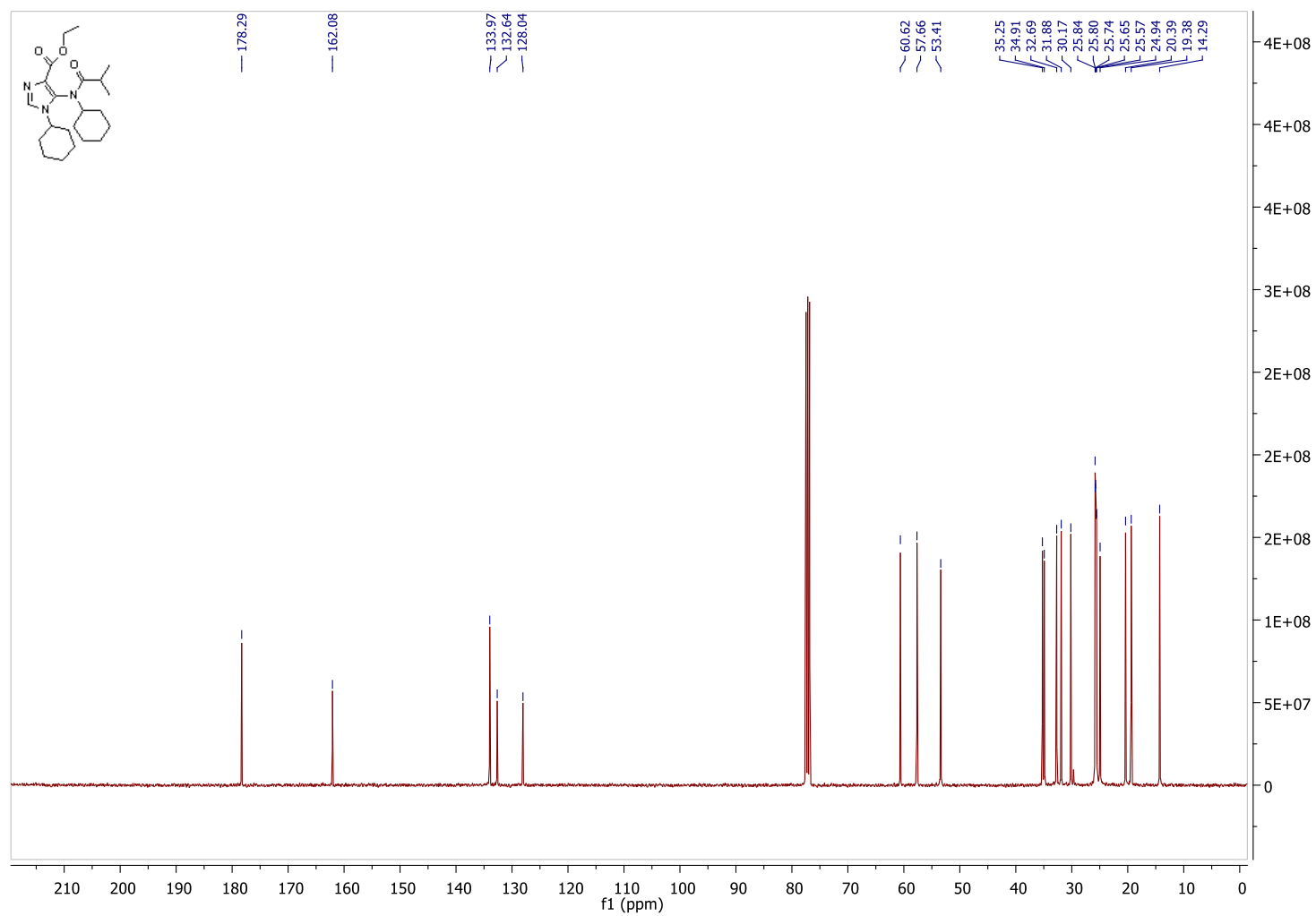
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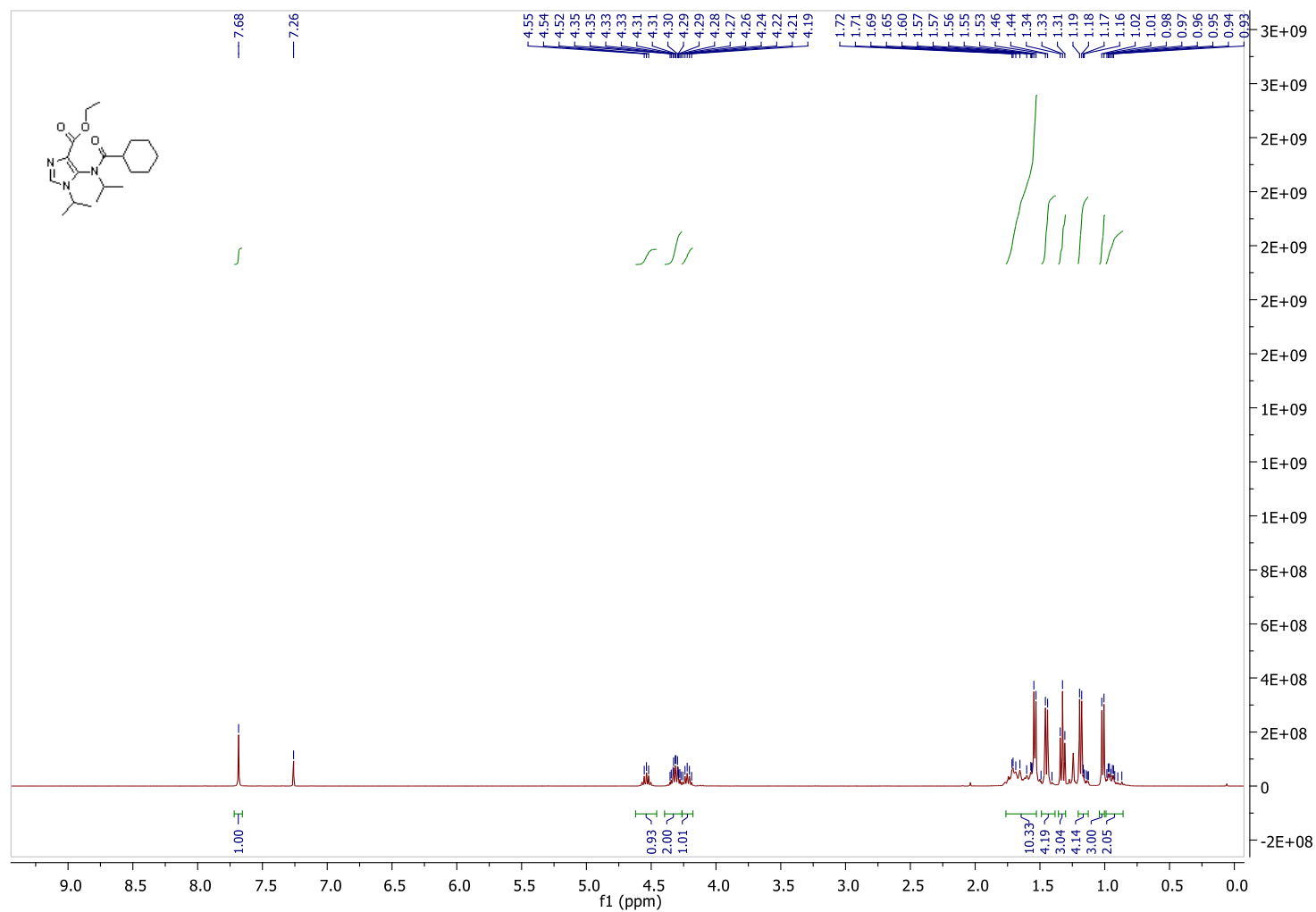
¹H NMR spectra of ethyl 1-cyclohexyl-5-(*N*-cyclohexylisobutyramido)-1*H*-imidazole-4-carboxylate (10g)



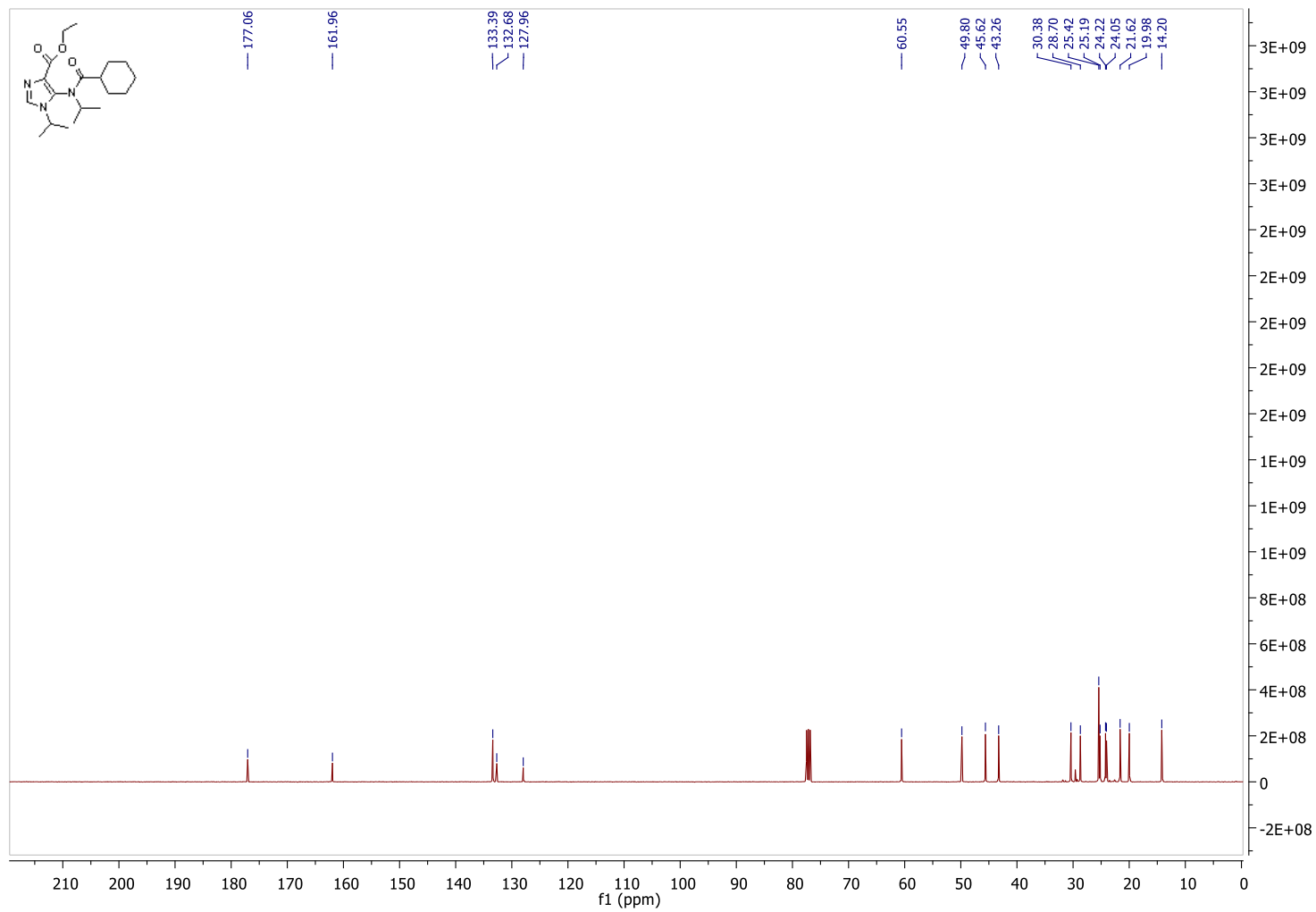
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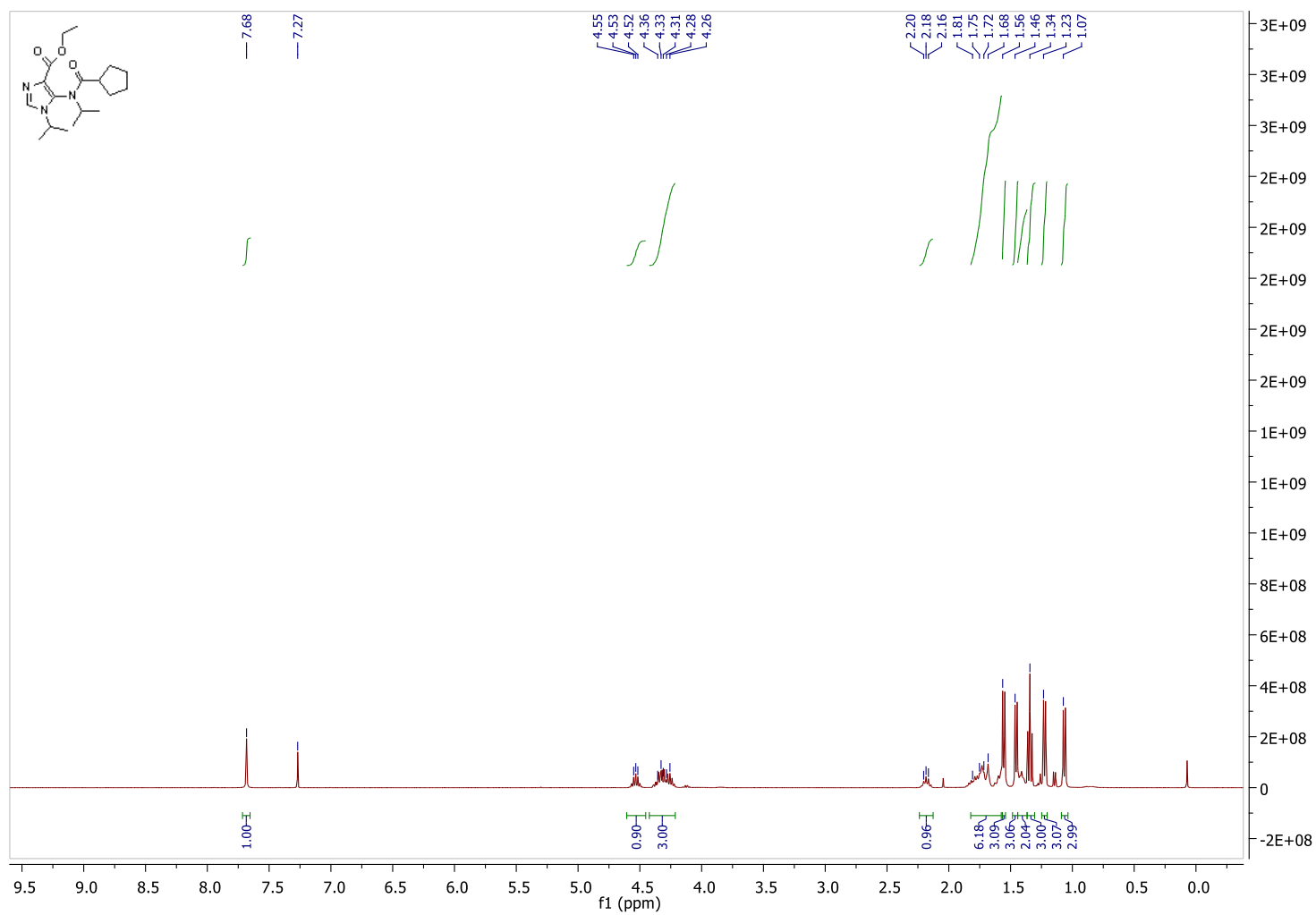
¹H NMR spectra of ethyl 1-isopropyl-5-(*N*-isopropylcyclohexanecarboxamido)-1*H*-imidazole-4-carboxylate (10h)



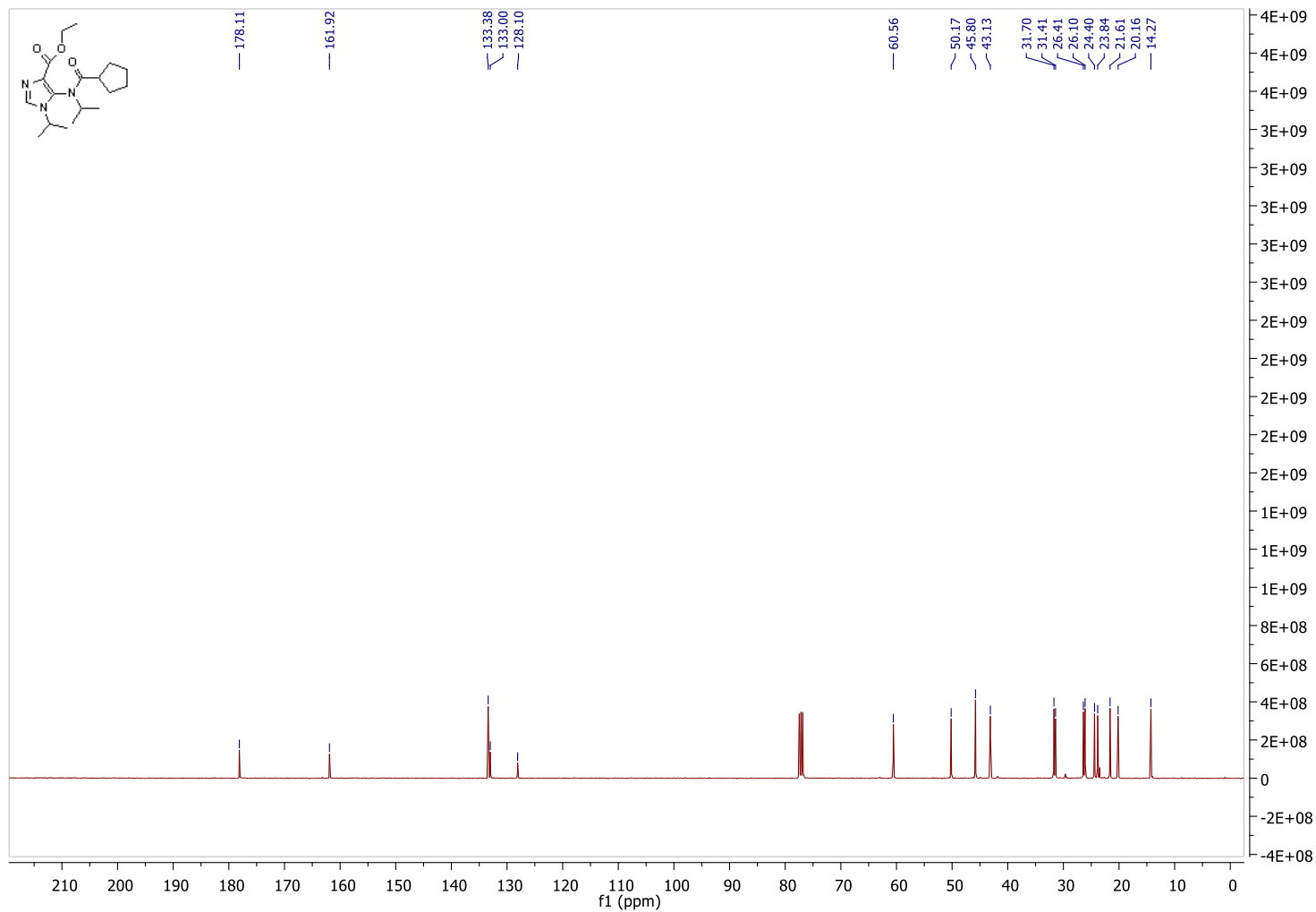
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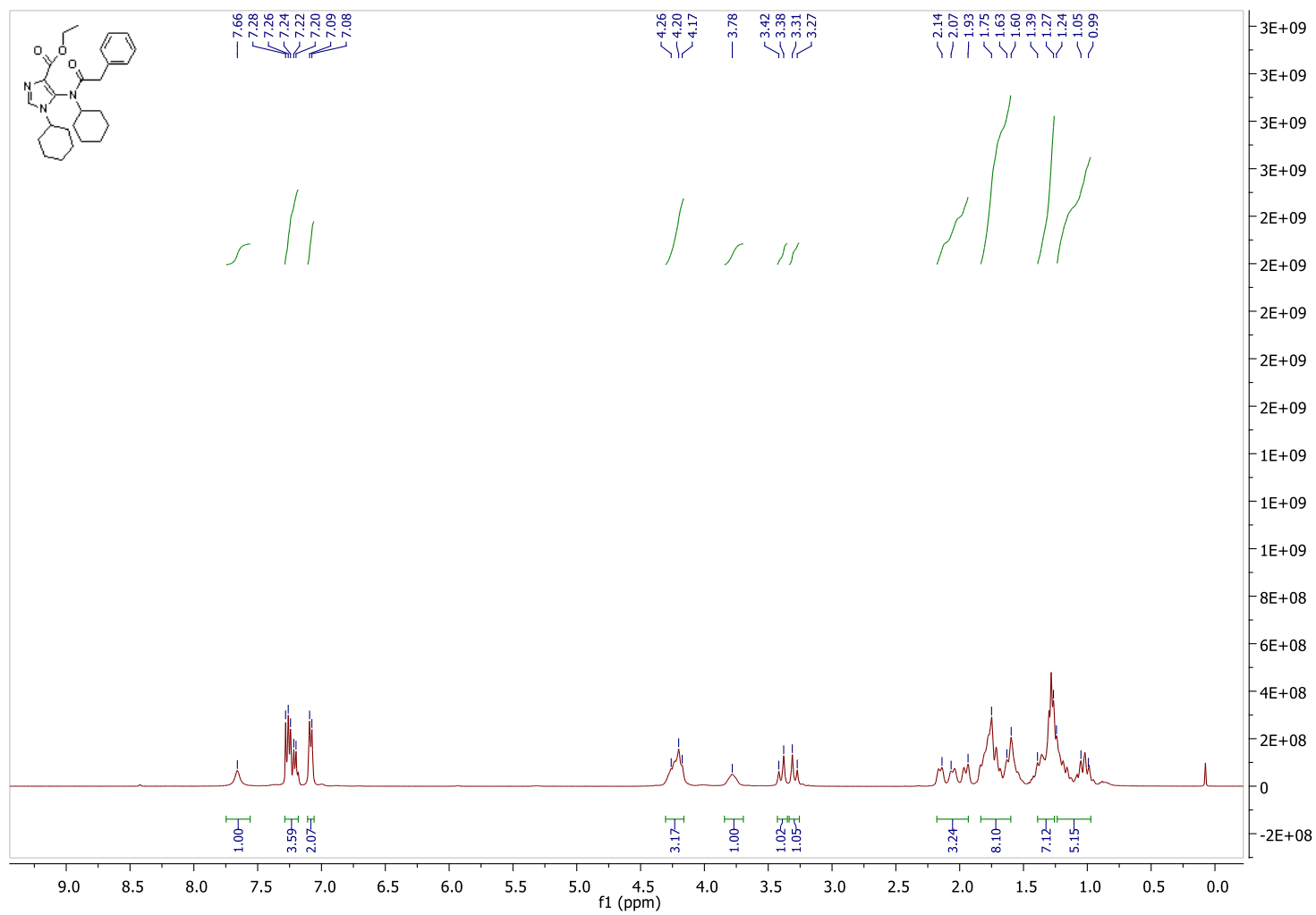
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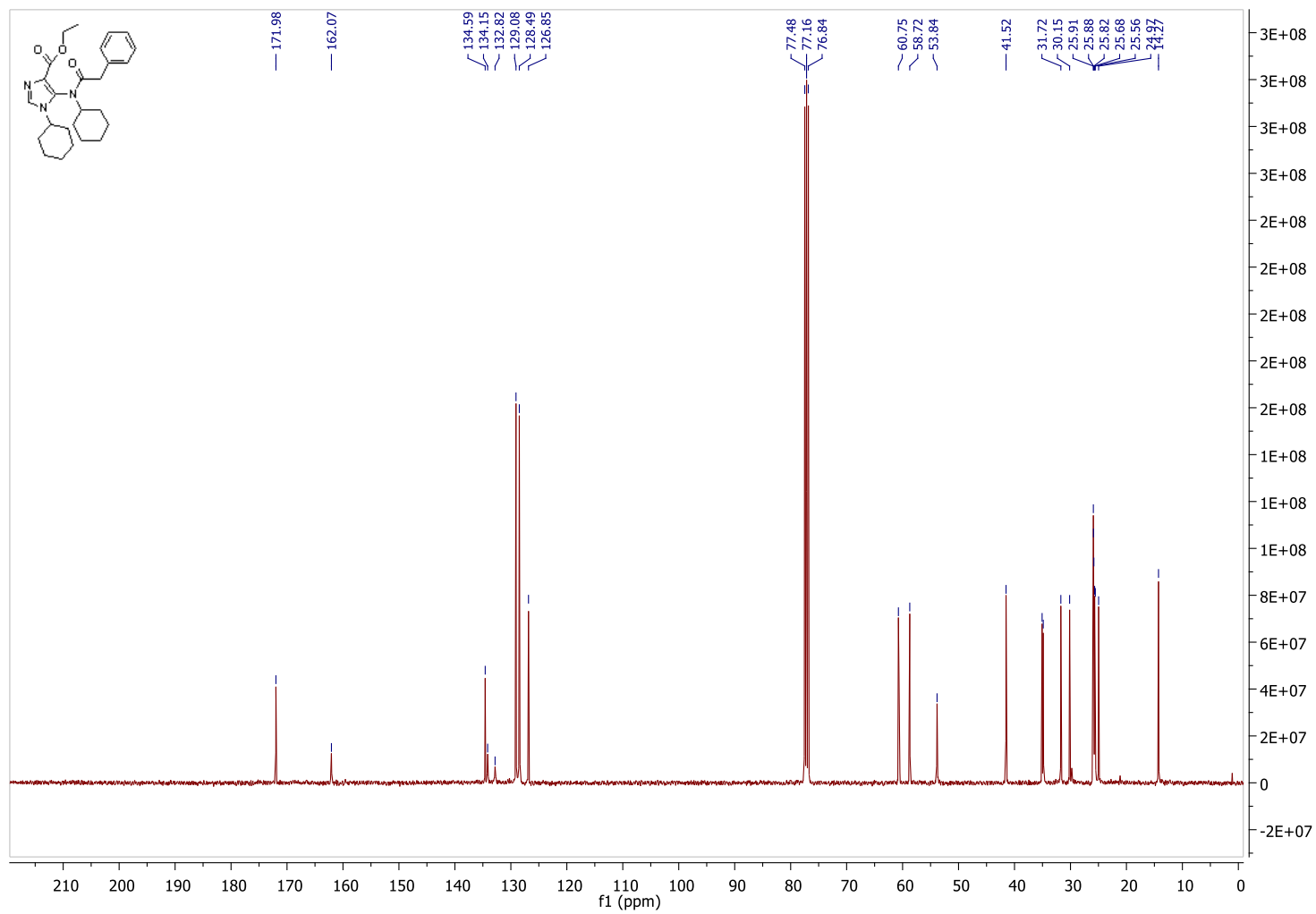
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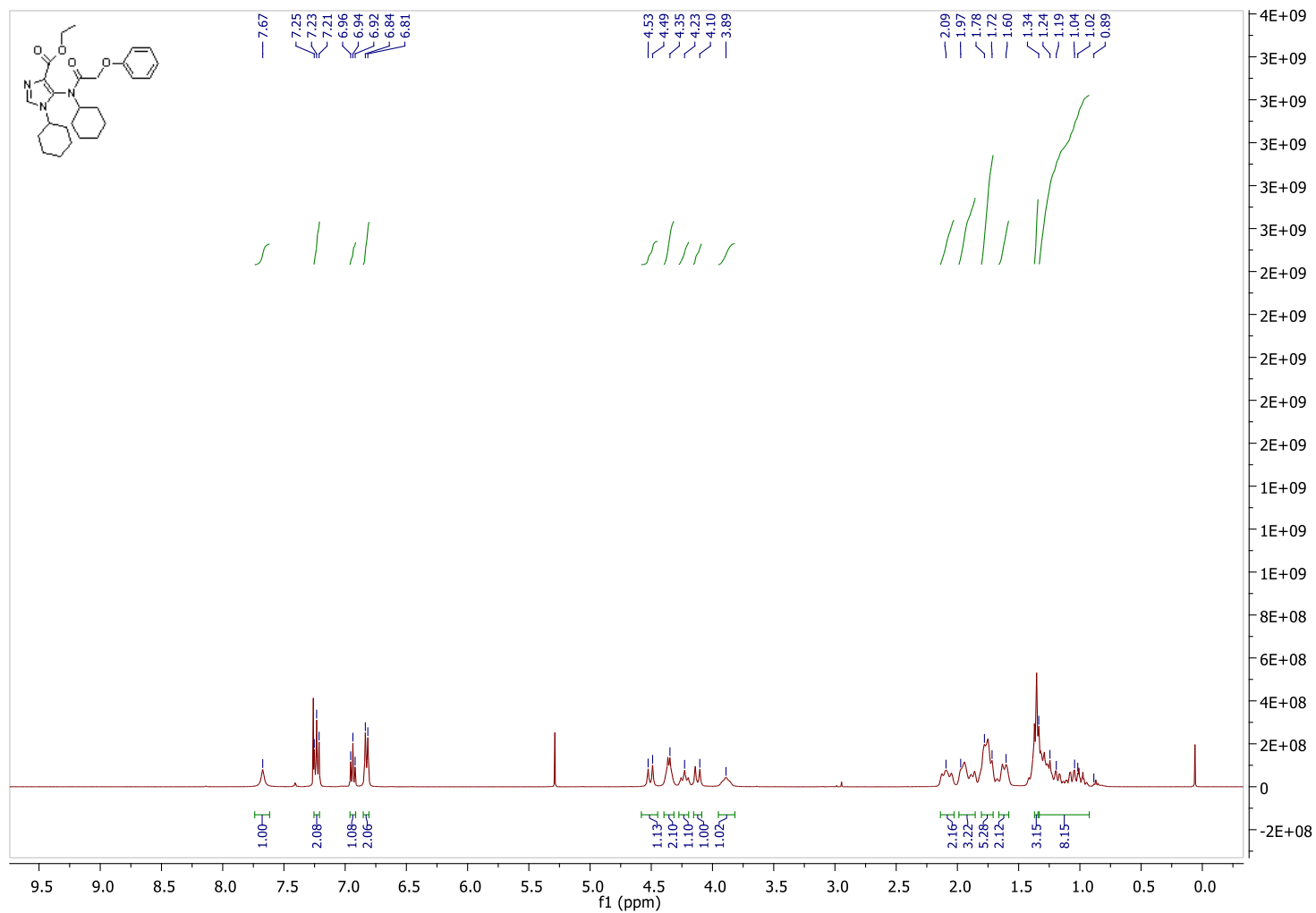
^1H NMR spectra of ethyl 1-cyclohexyl-5-(*N*-cyclohexyl-2-phenylacetamido)-1*H*-imidazole-4-carboxylate (10j)



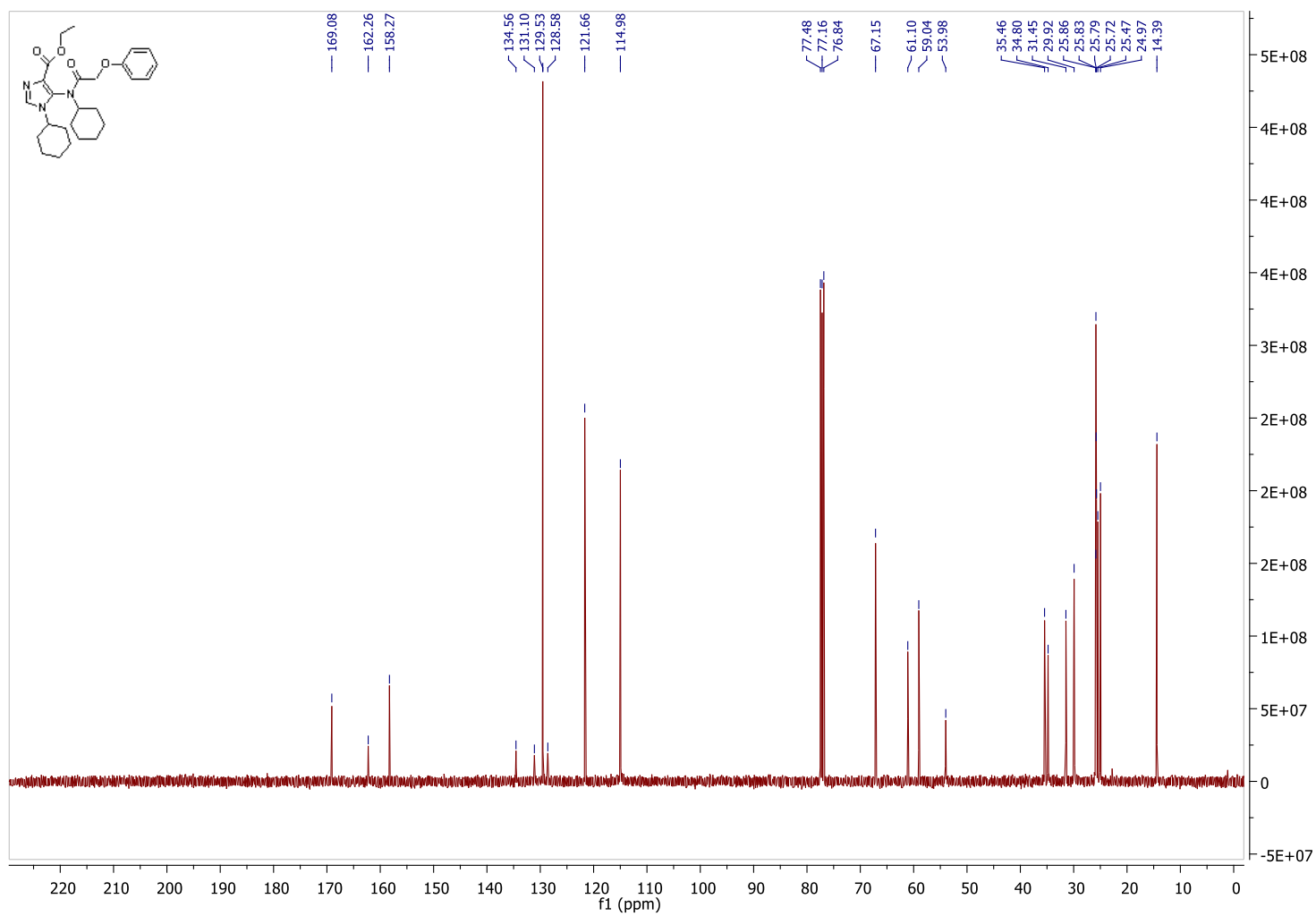
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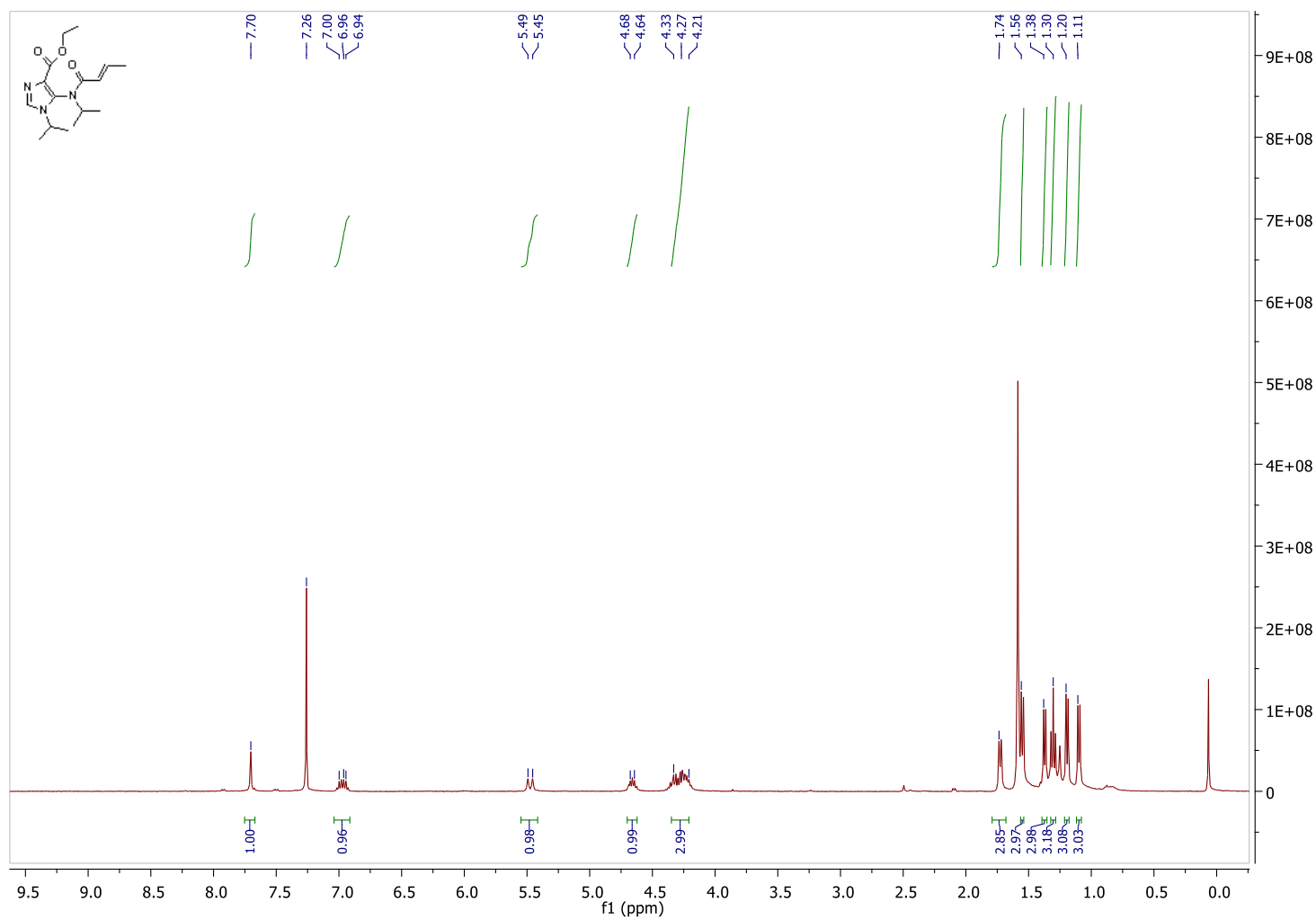
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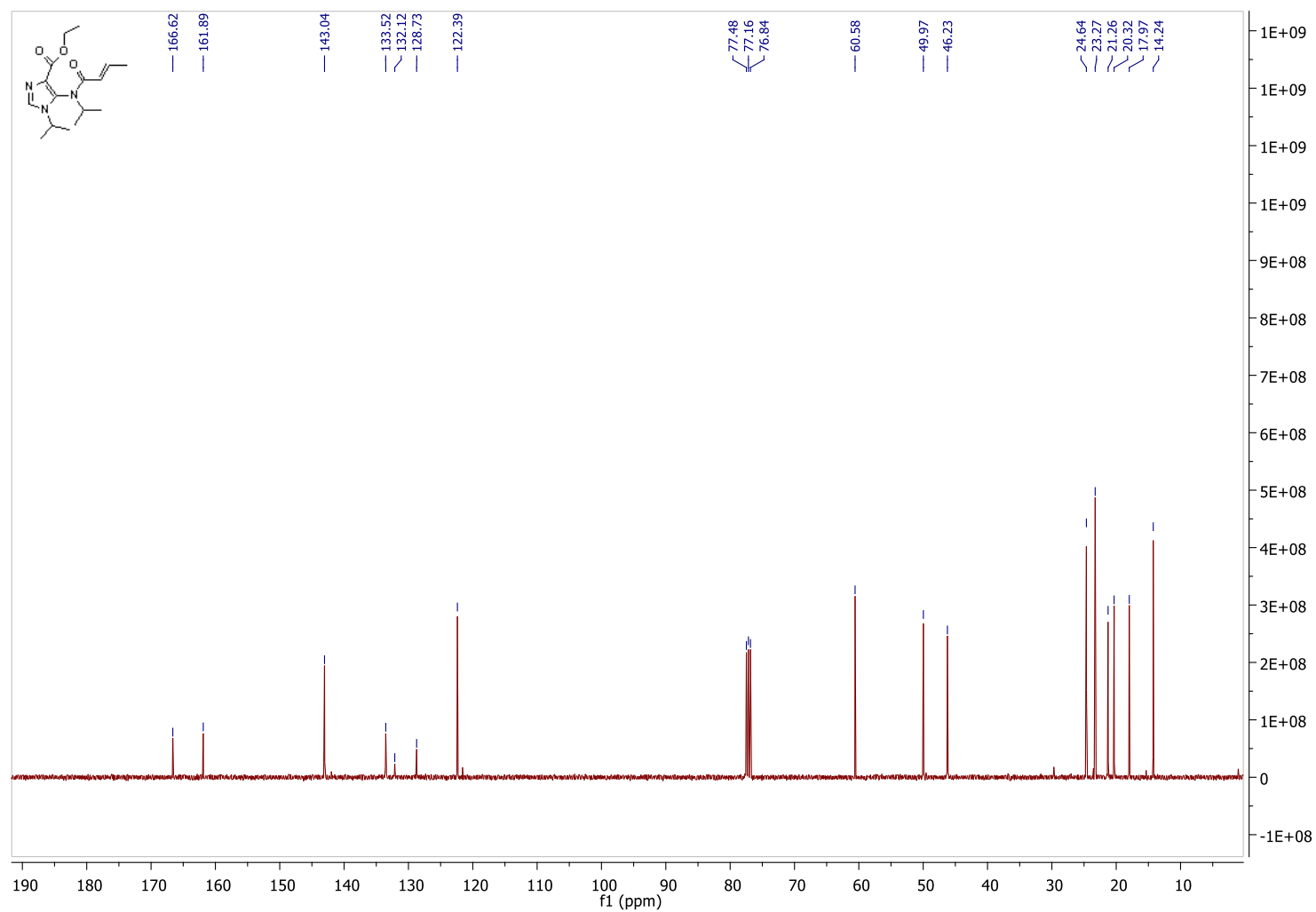
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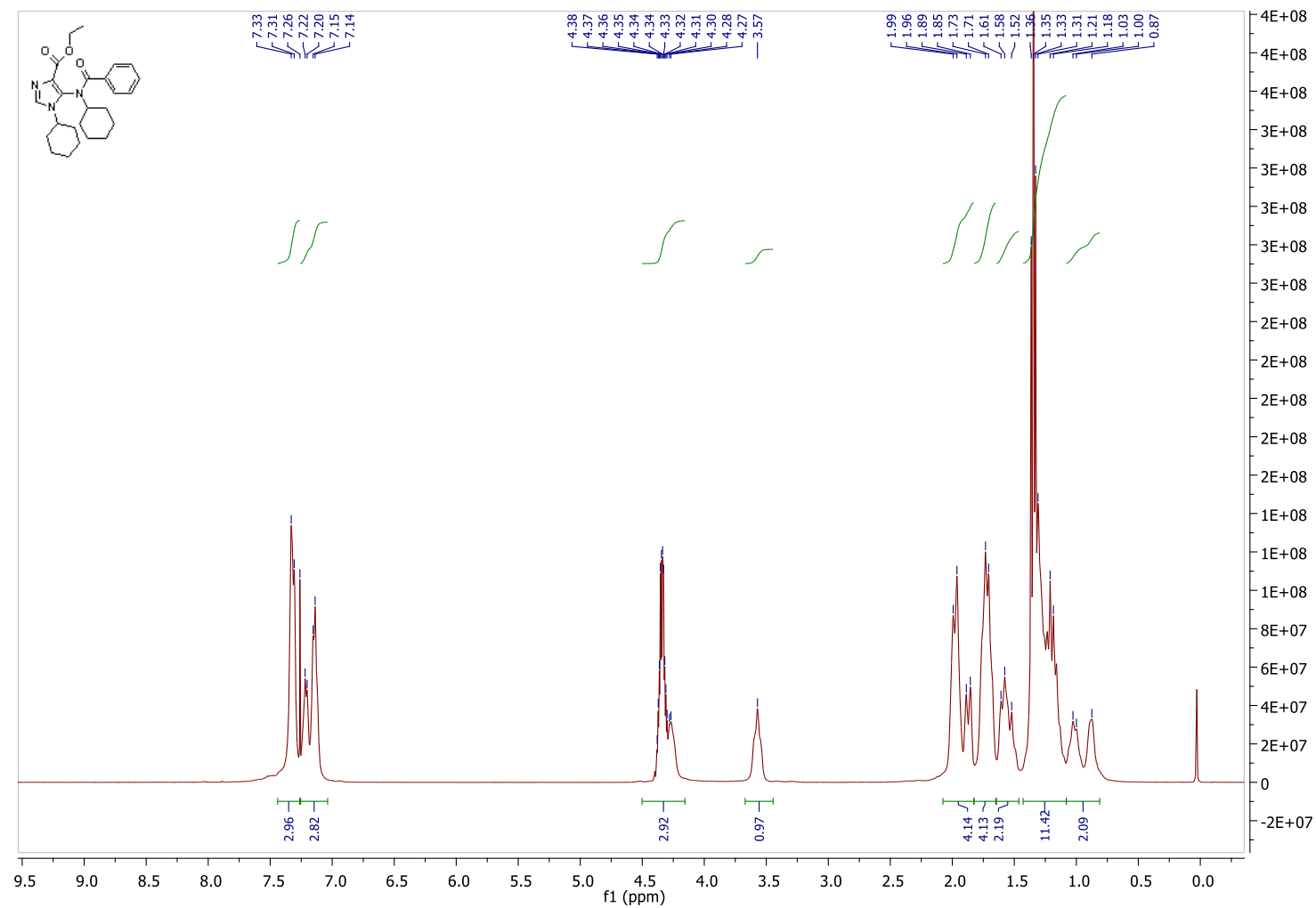
¹H NMR spectra of (*E*)-ethyl 1-isopropyl-5-(*N*-isopropylbut-2-enamido)-1*H*-imidazole-4-carboxylate (10l)



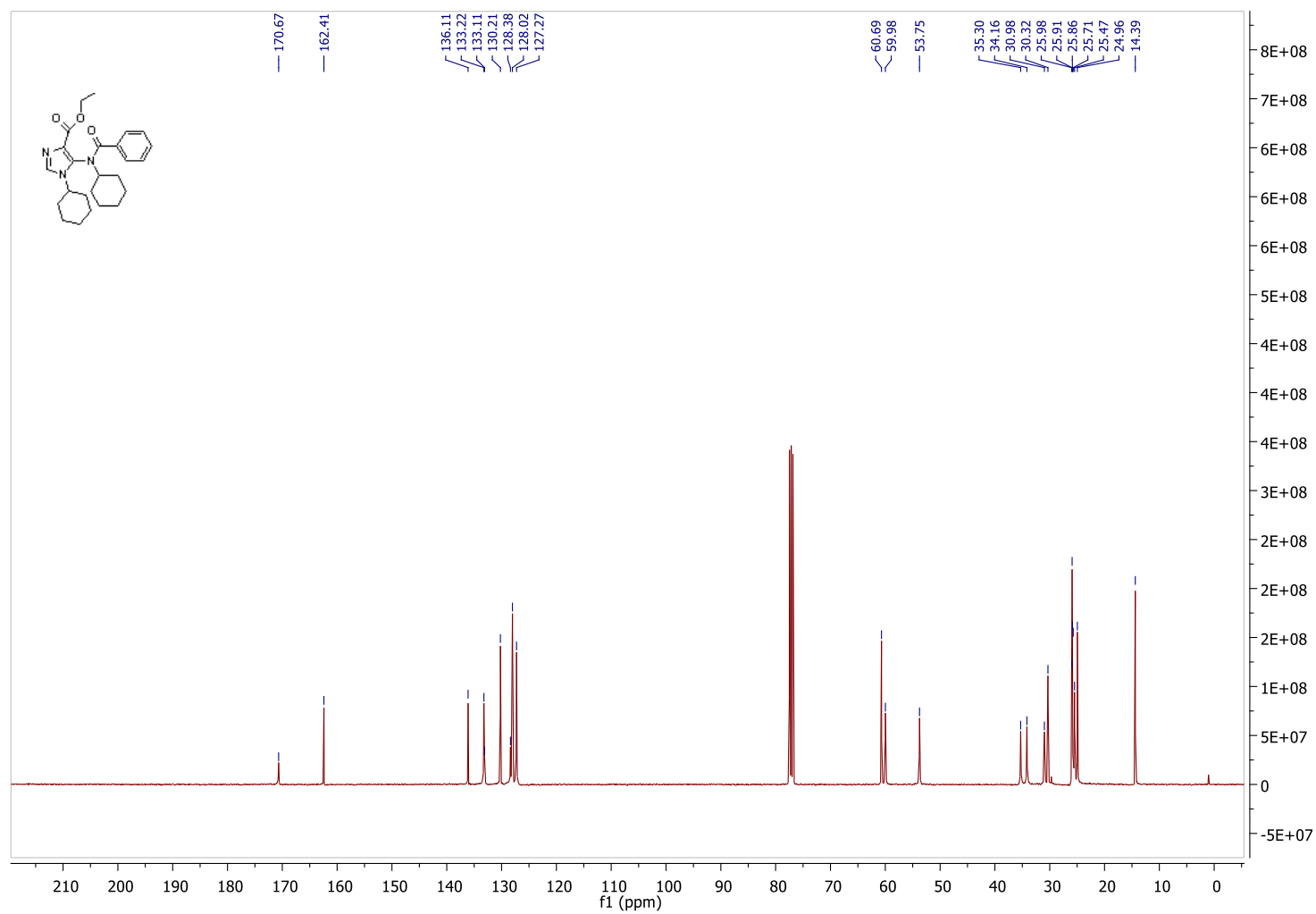
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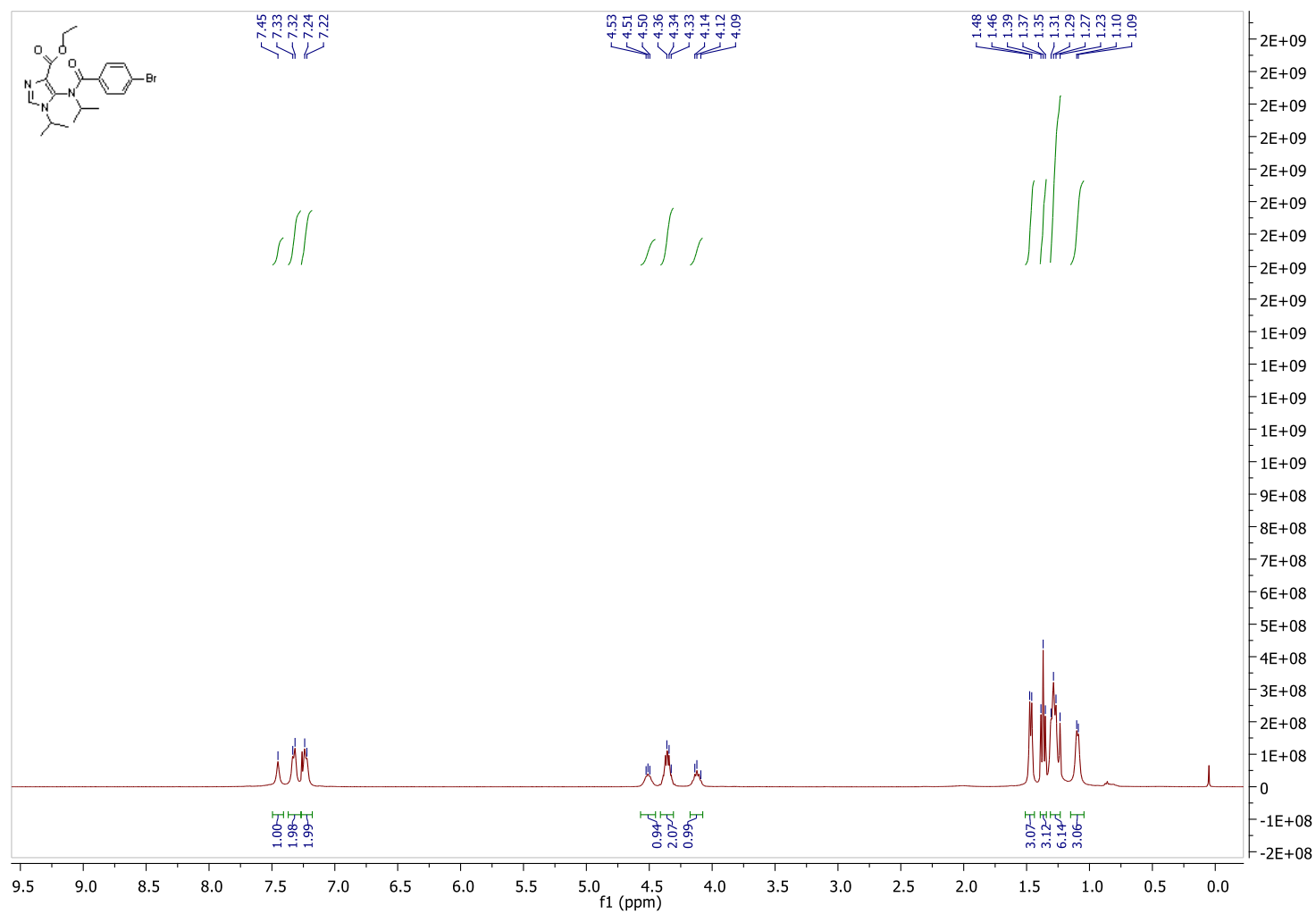
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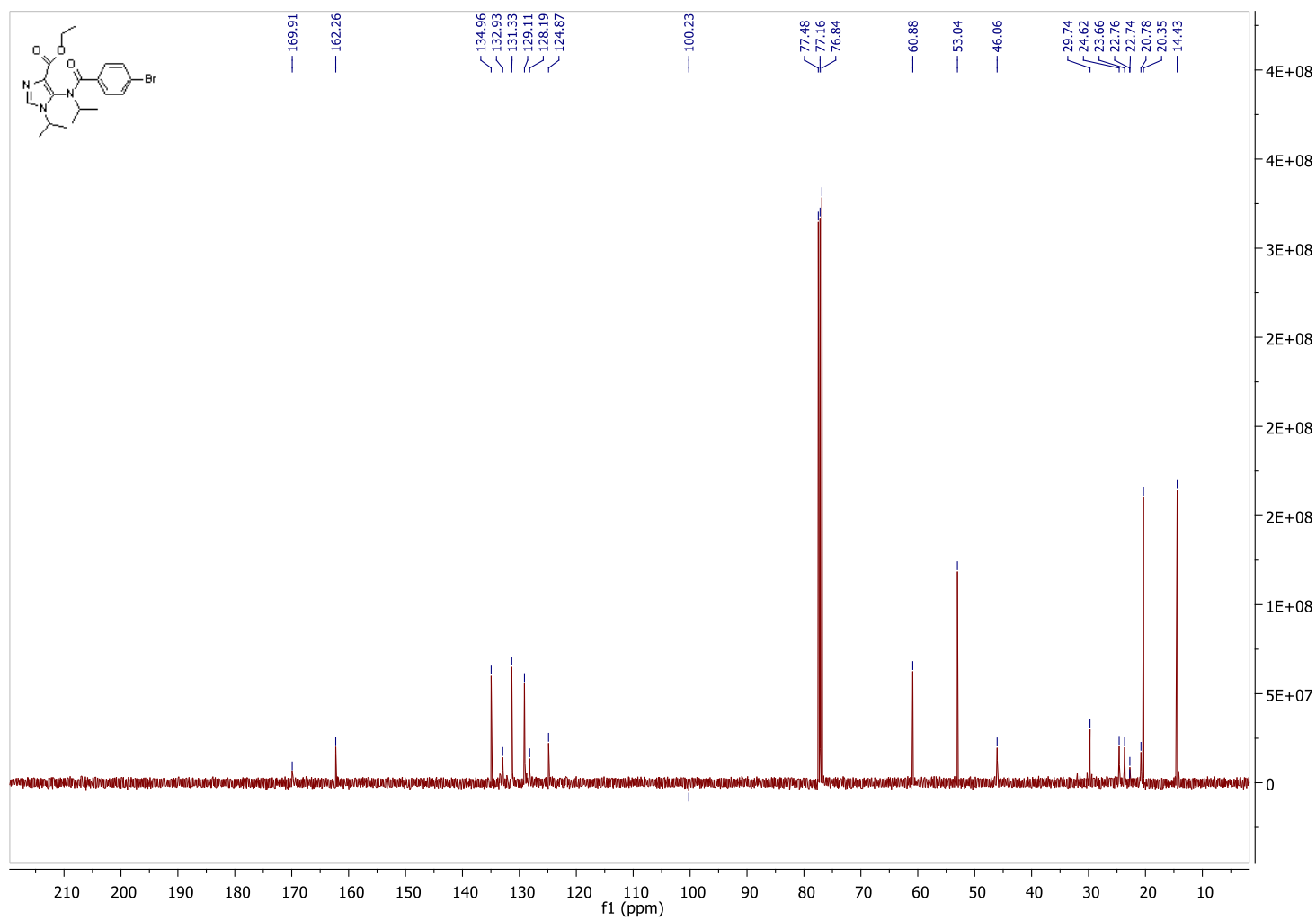
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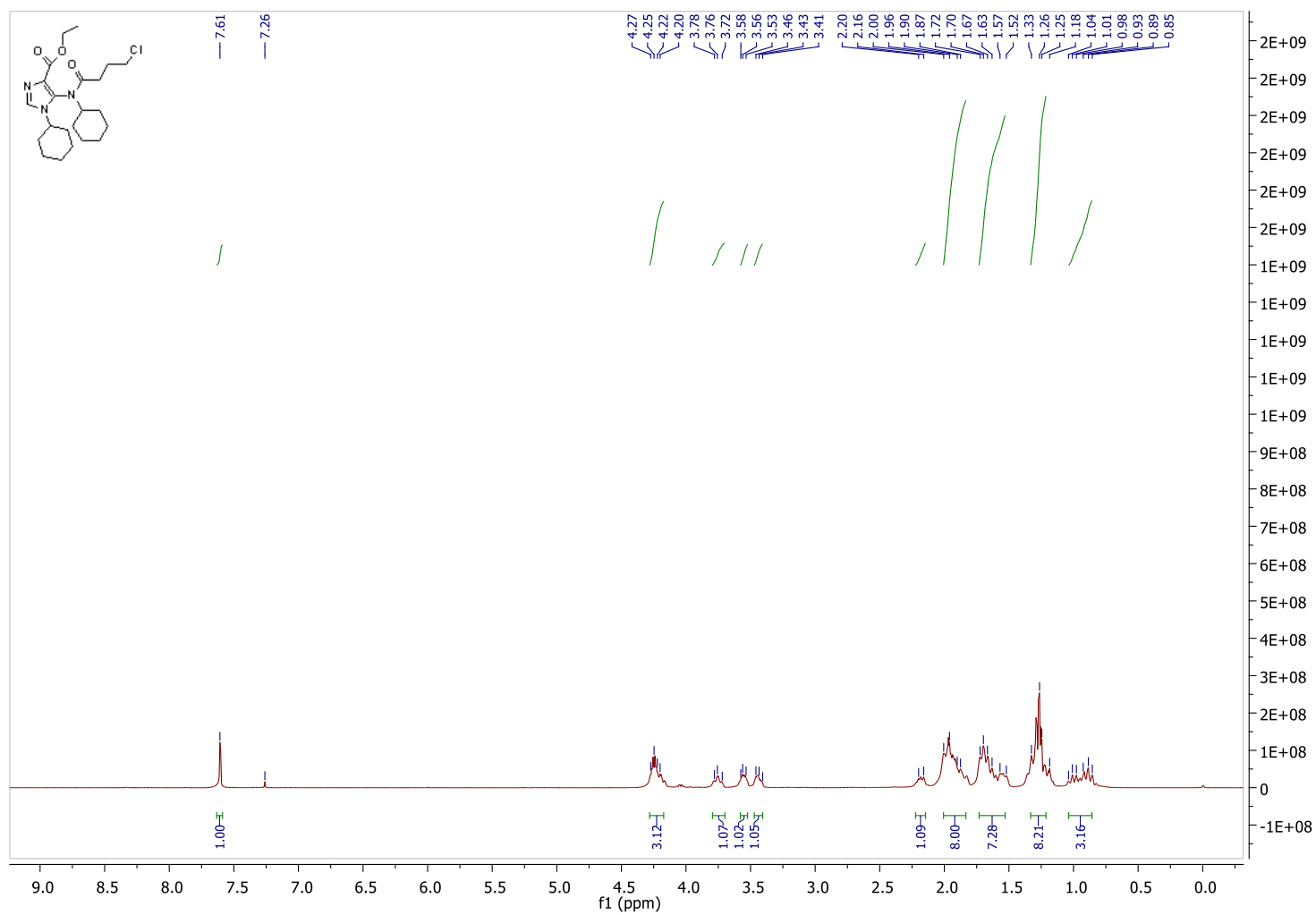
¹H NMR spectra of ethyl 5-(4-bromo-*N*-isopropylbenzamido)-1-isopropyl-1*H*-imidazole-4-carboxylate (10n)



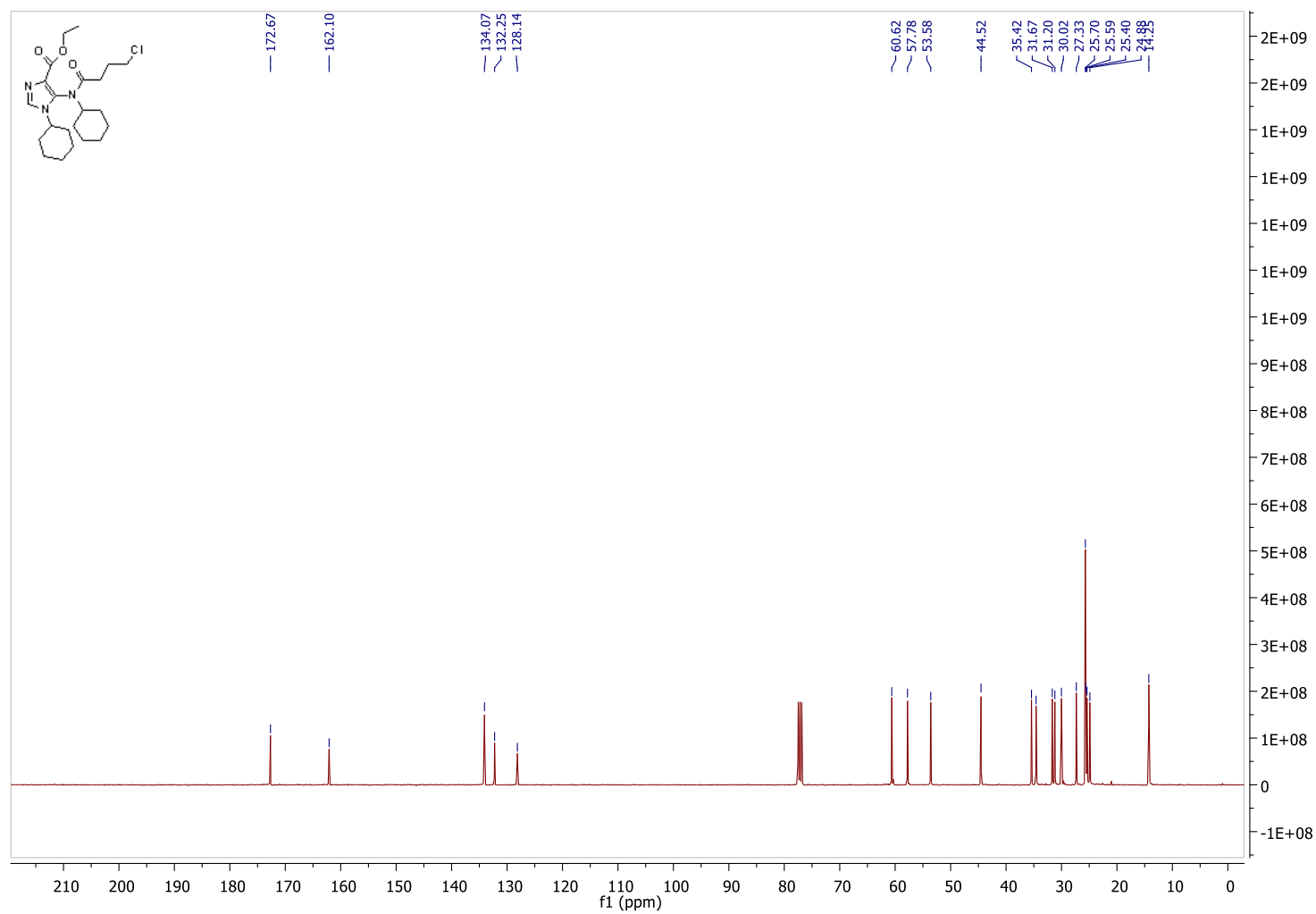
^{13}C NMR spectra ethyl 5-(4-bromo-*N*-isopropylbenzamido)-1-isopropyl-1*H*-imidazole-4-carboxylate (10n)



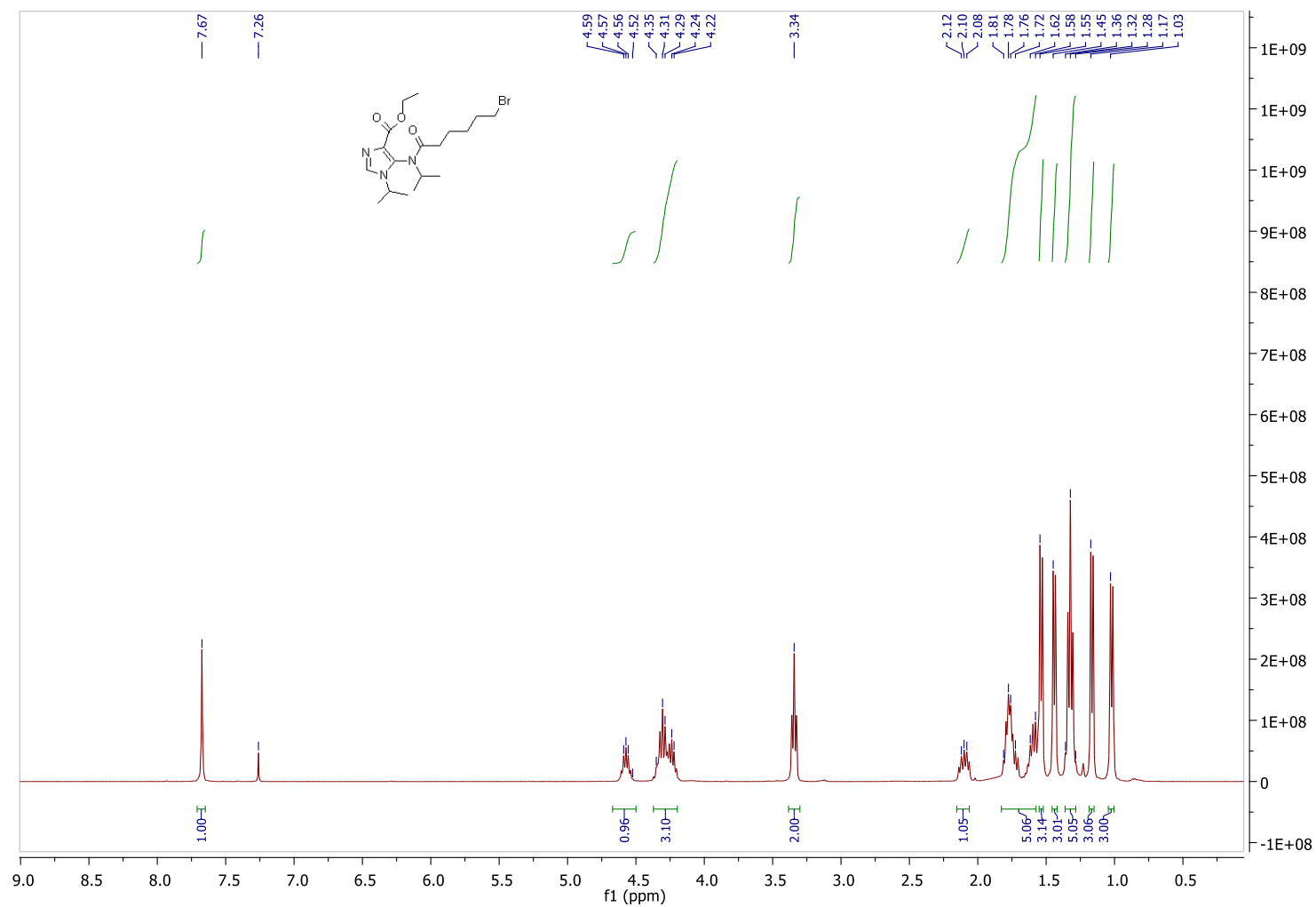
^1H NMR spectra of ethyl 5-(4-chloro-*N*-cyclohexylbutanamido)-1-cyclohexyl-1*H*-imidazole-4-carboxylate (10o)



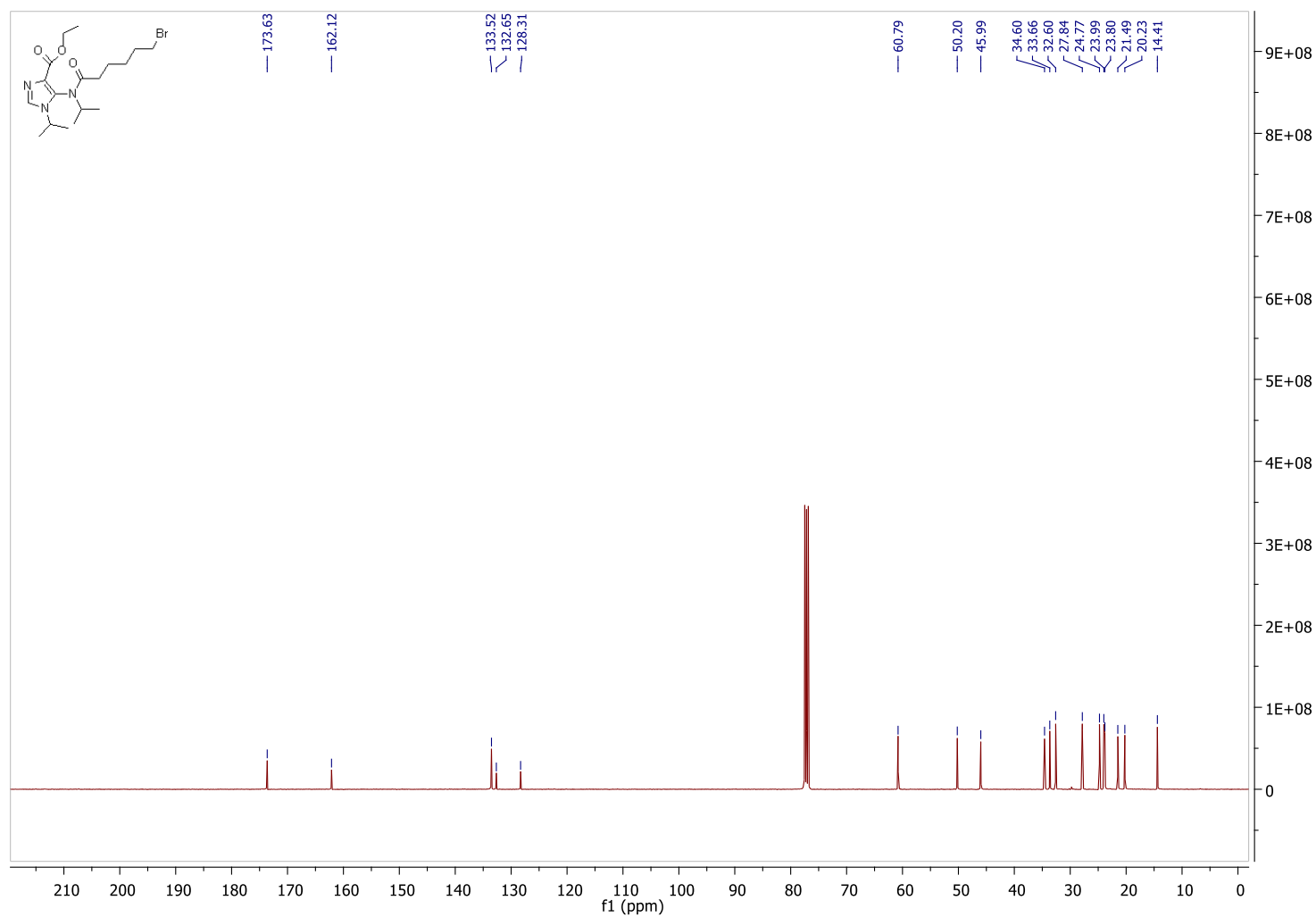
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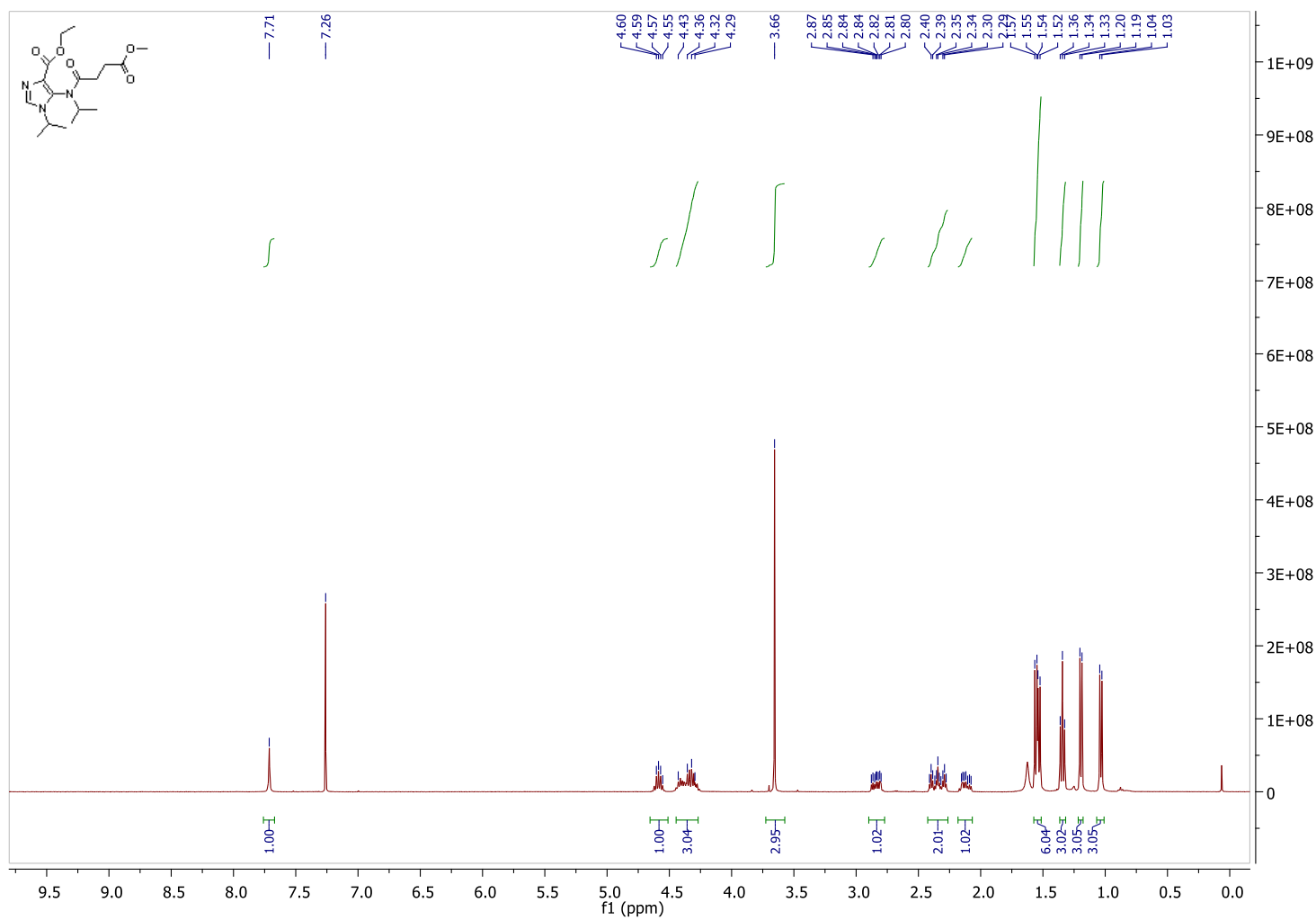
^1H NMR spectra of ethyl 5-(6-bromo-*N*-isopropylhexanamido)-1-isopropyl-1*H*-imidazole-4-carboxylate (10p)



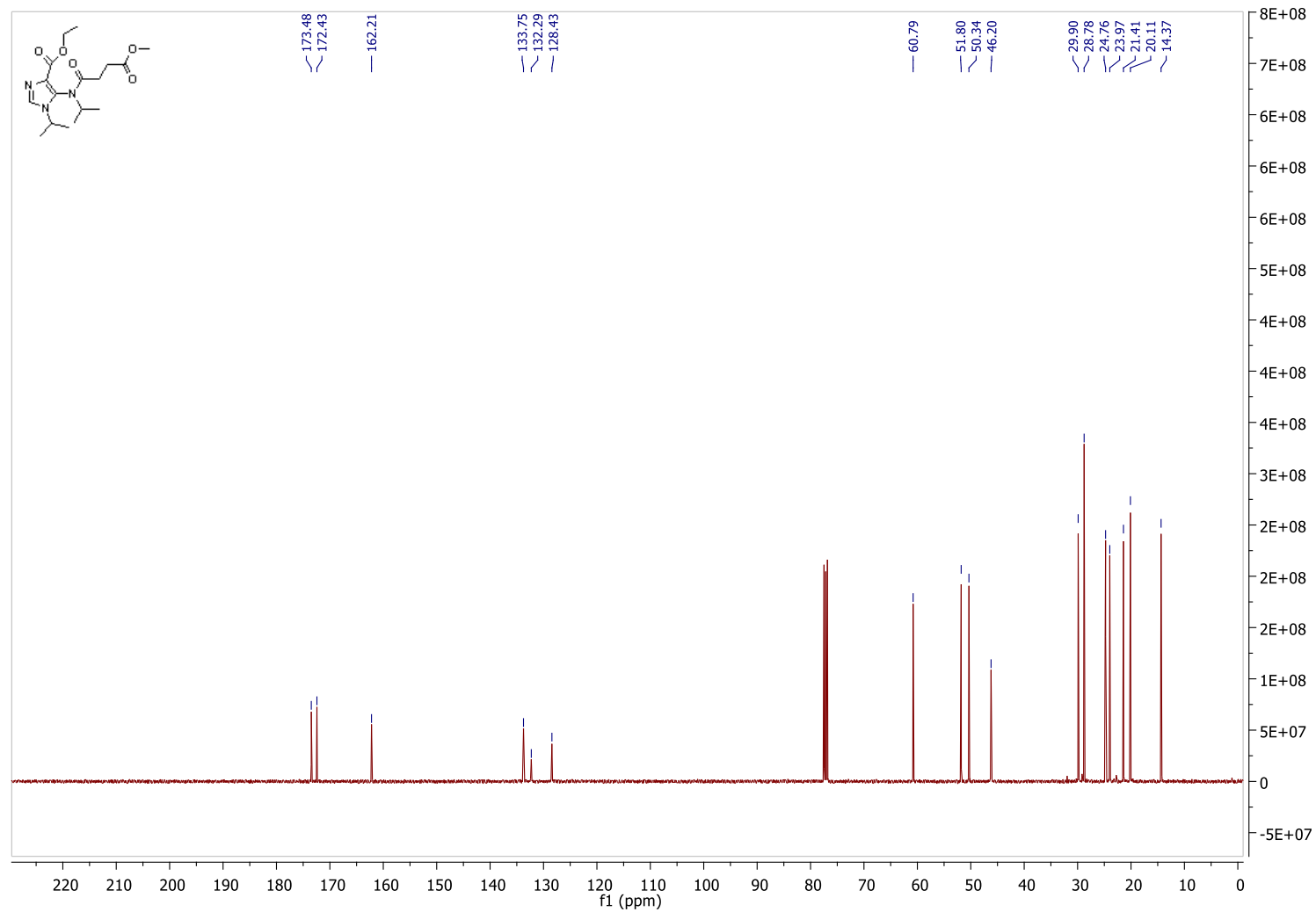
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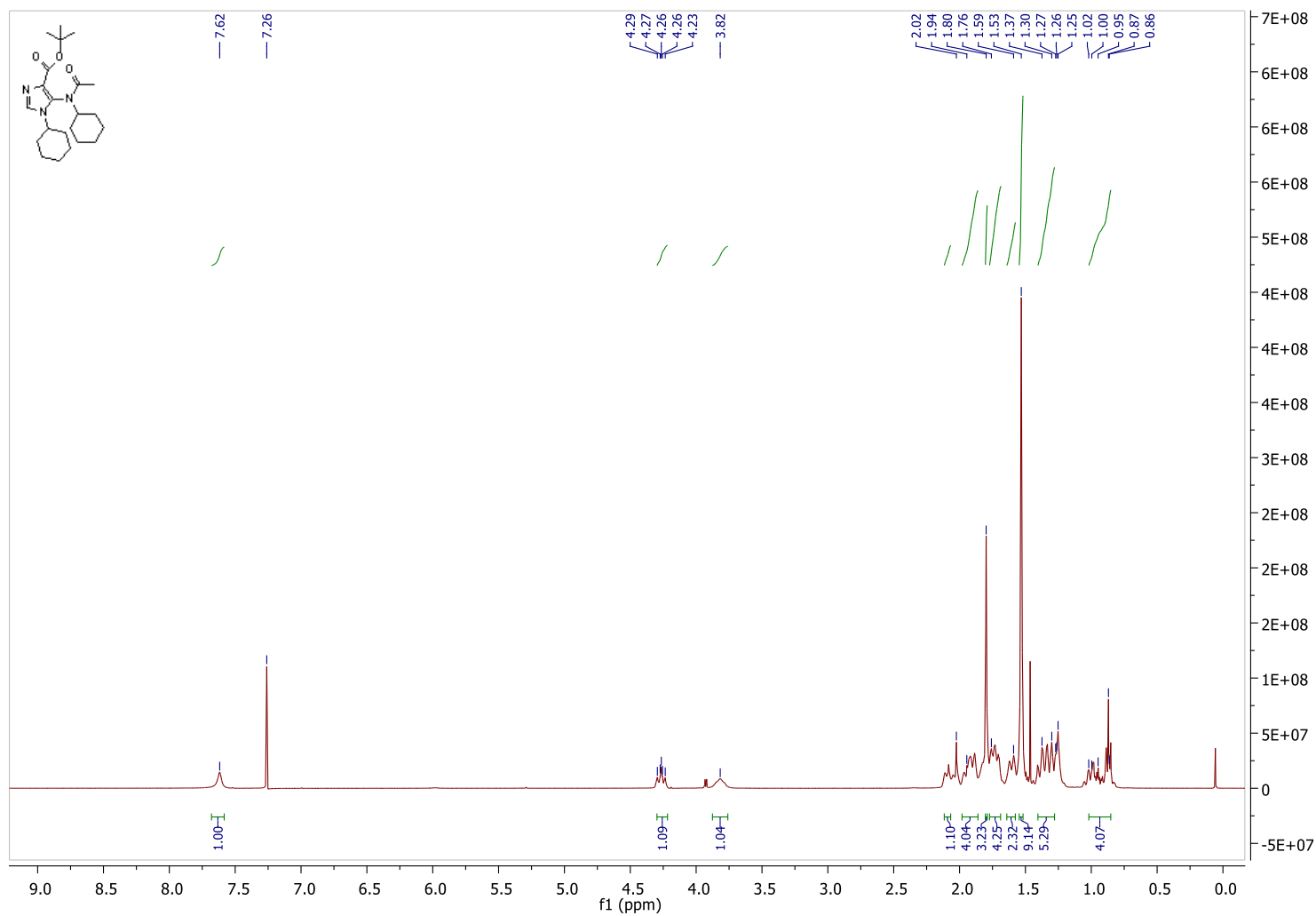
^1H NMR spectra of ethyl 1-isopropyl-5-(*N*-isopropyl-4-methoxy-4-oxobutanamido)-1*H*-imidazole-4-carboxylate (10q)



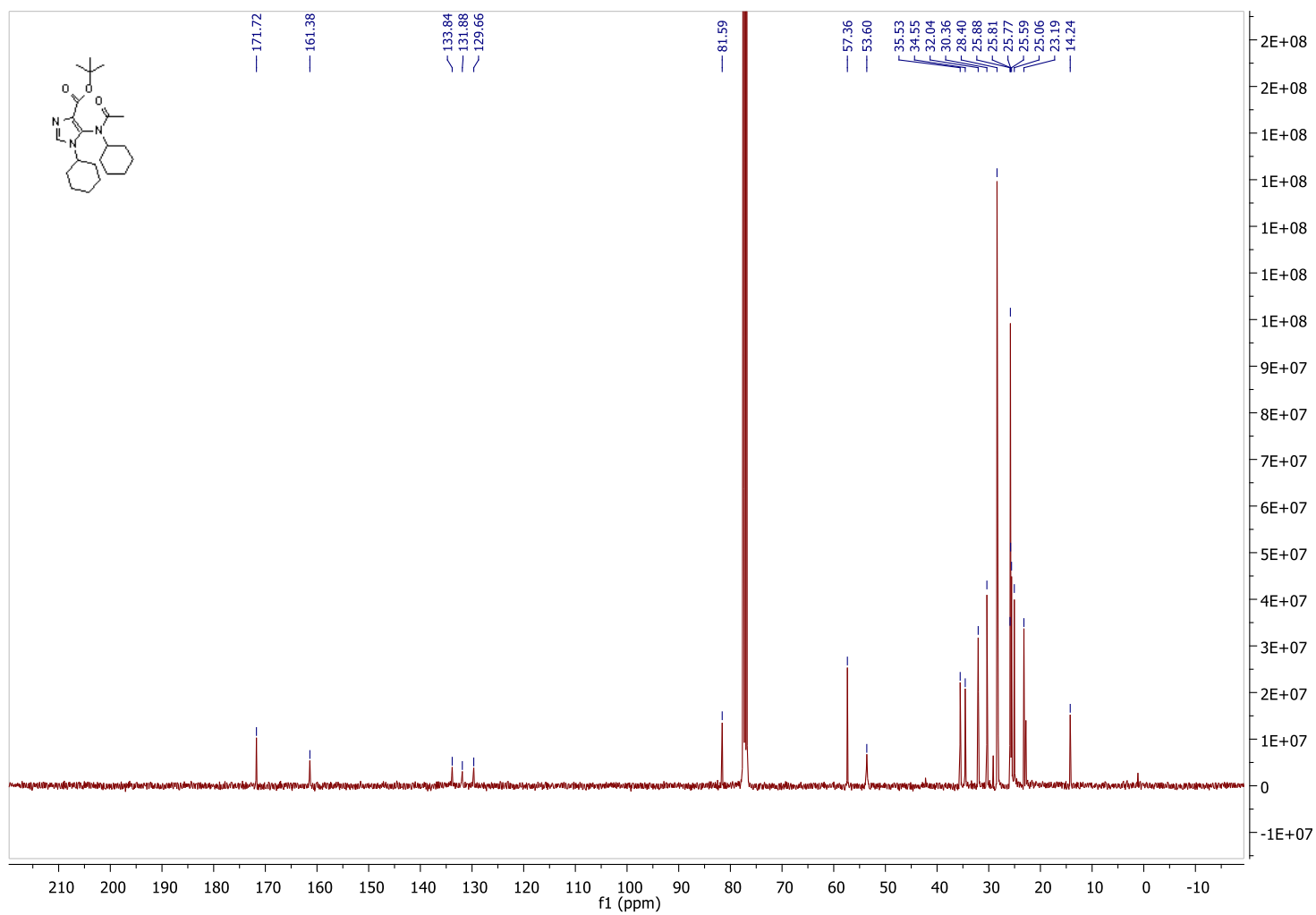
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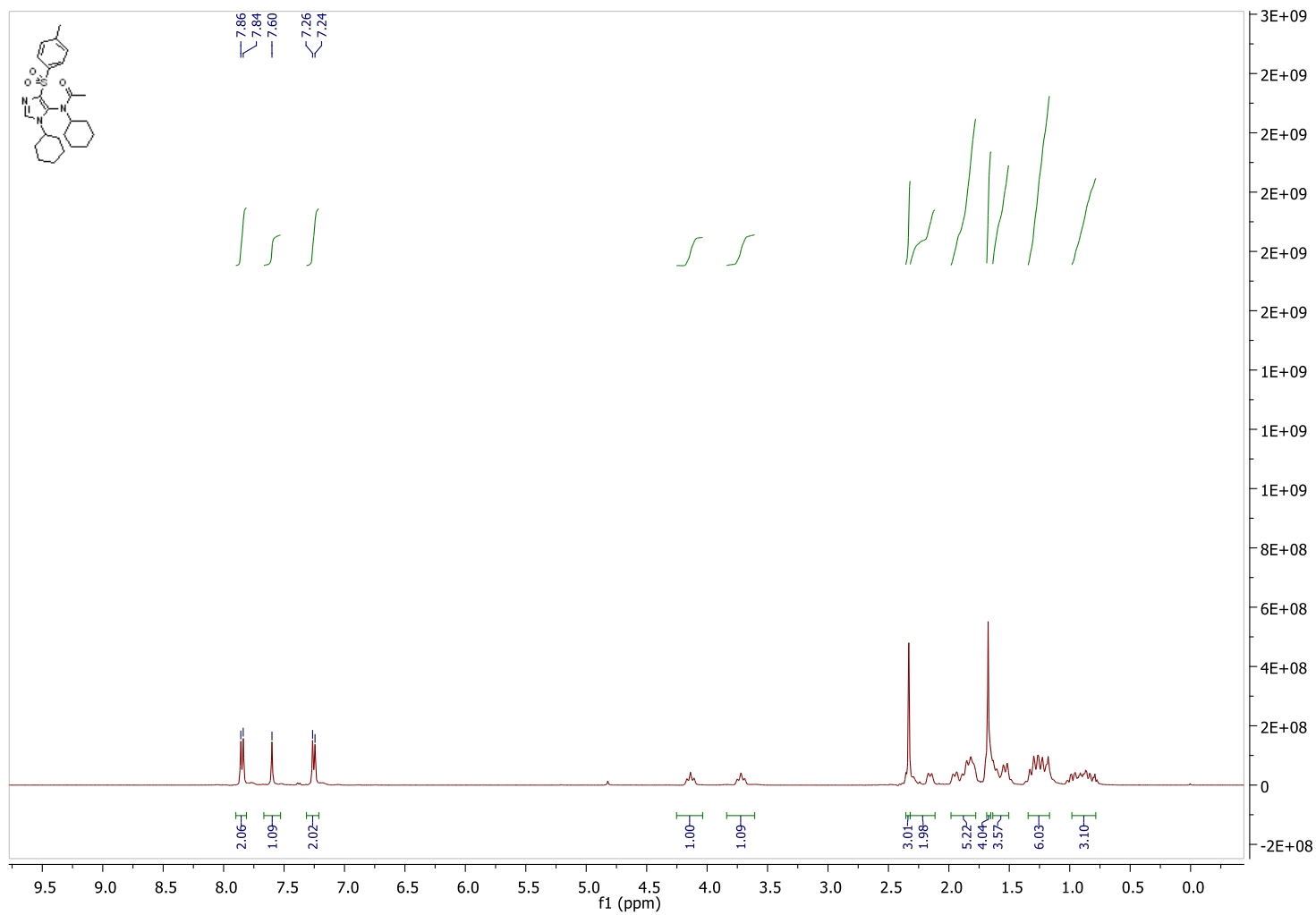
^1H NMR spectra of *tert*-butyl 1-cyclohexyl-5-(*N*-cyclohexylacetamido)-1*H*-imidazole-4-carboxylate (10r)



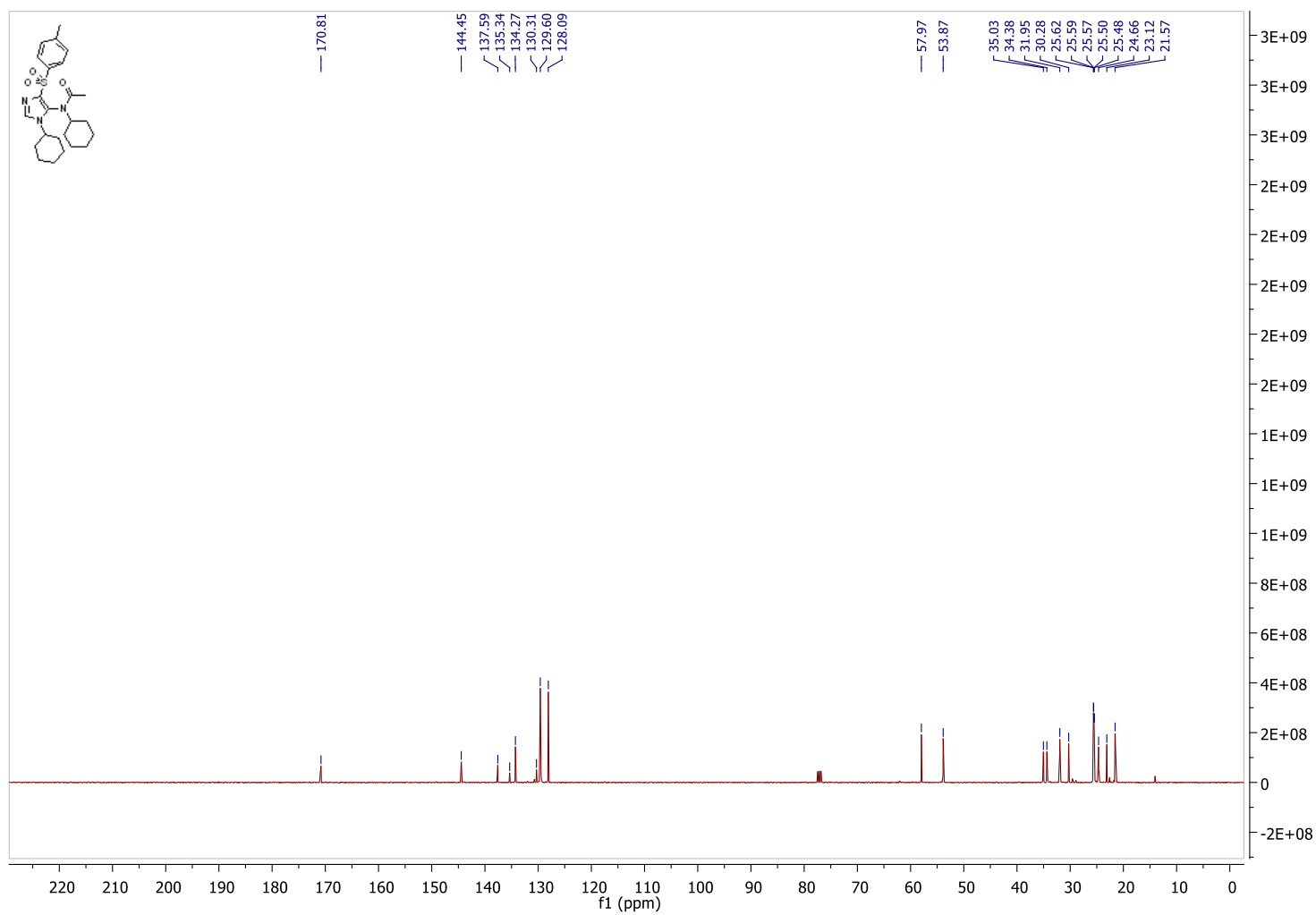
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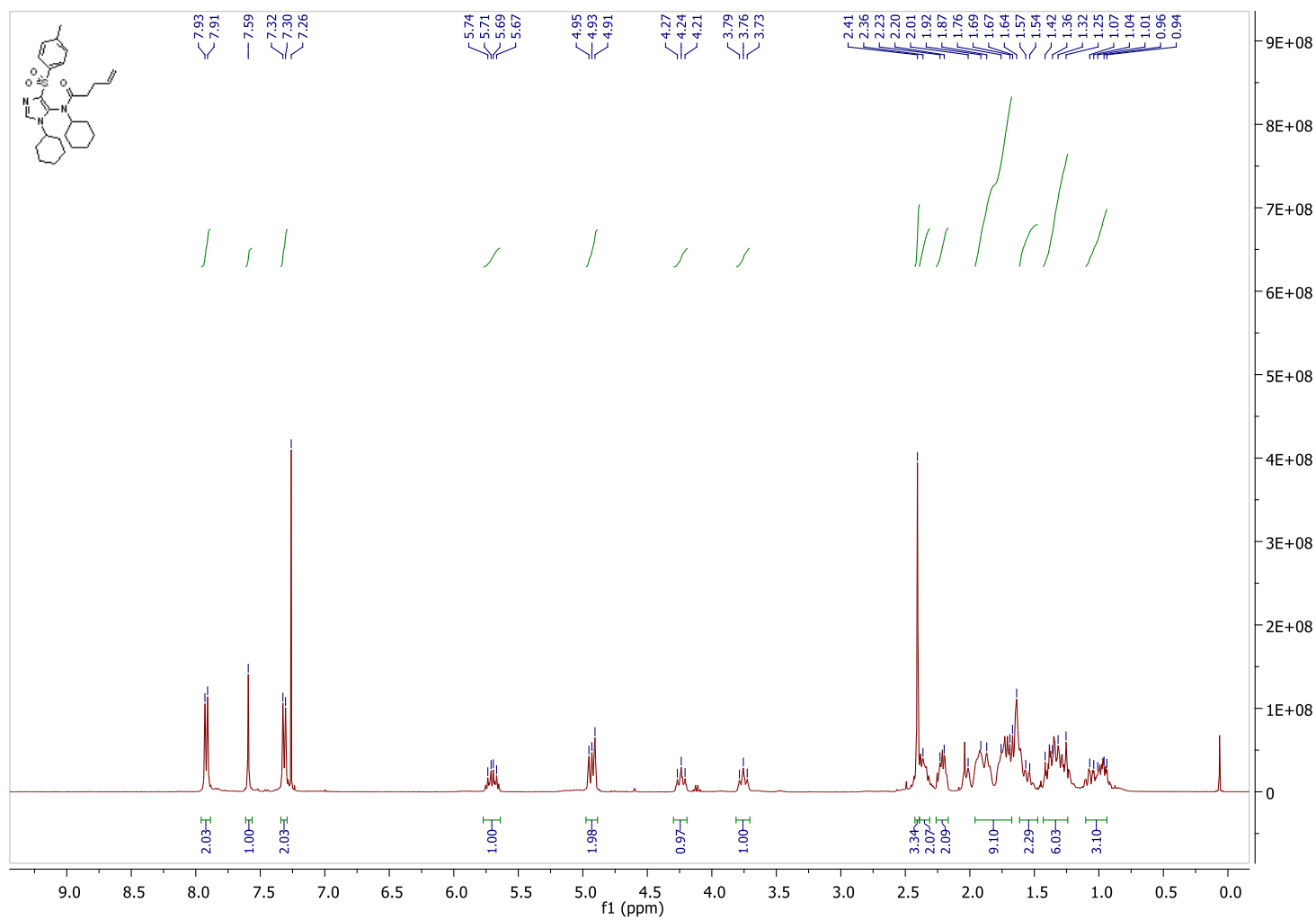
¹H NMR spectra of *N*-cyclohexyl-*N*-(1-cyclohexyl-4-tosyl-1*H*-imidazol-5-yl)acetamide (10s)



^{13}C NMR spectra *N*-cyclohexyl-*N*-(1-cyclohexyl-4-tosyl-1*H*-imidazol-5-yl)acetamide (10s)



¹H NMR spectra of *N*-cyclohexyl-*N*-(1-cyclohexyl-4-tosyl-1*H*-imidazol-5-yl)pent-4-enamide (10t)



¹³C NMR spectra *N*-cyclohexyl-*N*-(1-cyclohexyl-4-tosyl-1*H*-imidazol-5-yl)pent-4-enamide (10t)

