Supporting Information

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Safe and Efficient Preparative Approach to Chiral α-Chloroketones Based on In-Flow Generated Diazomethane

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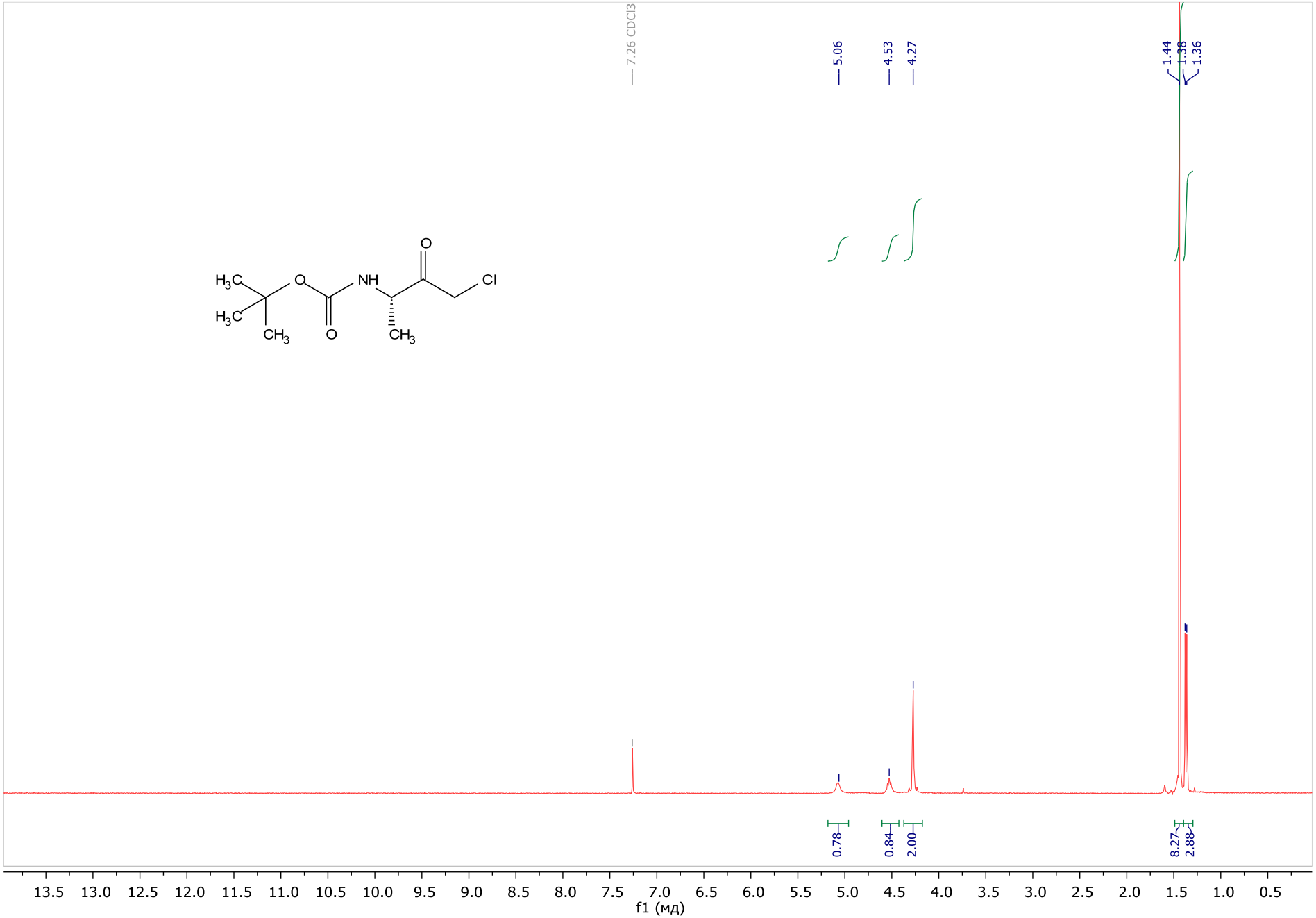

Figure 1. (S)-tert-Butyl (4-Chloro-3-oxobutan-2-yl)carbamate **3a,** ^{1}H NMR (400 MHz, CDCl3).

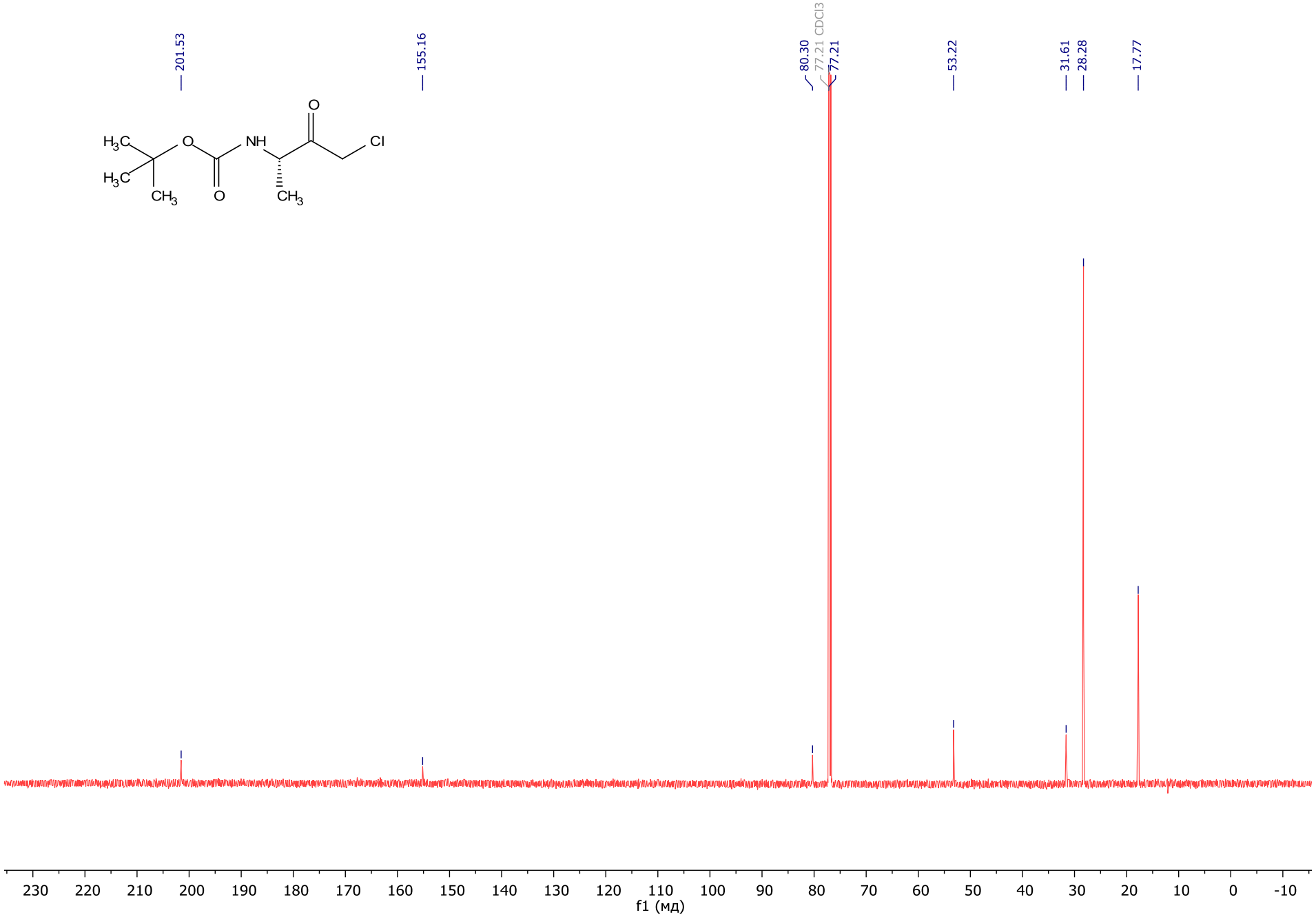

Figure 2. (S)-tert-Butyl (4-Chloro-3-oxobutan-2-yl)carbamate **3a,** ^{13}C NMR(101MHz, CDCl3).

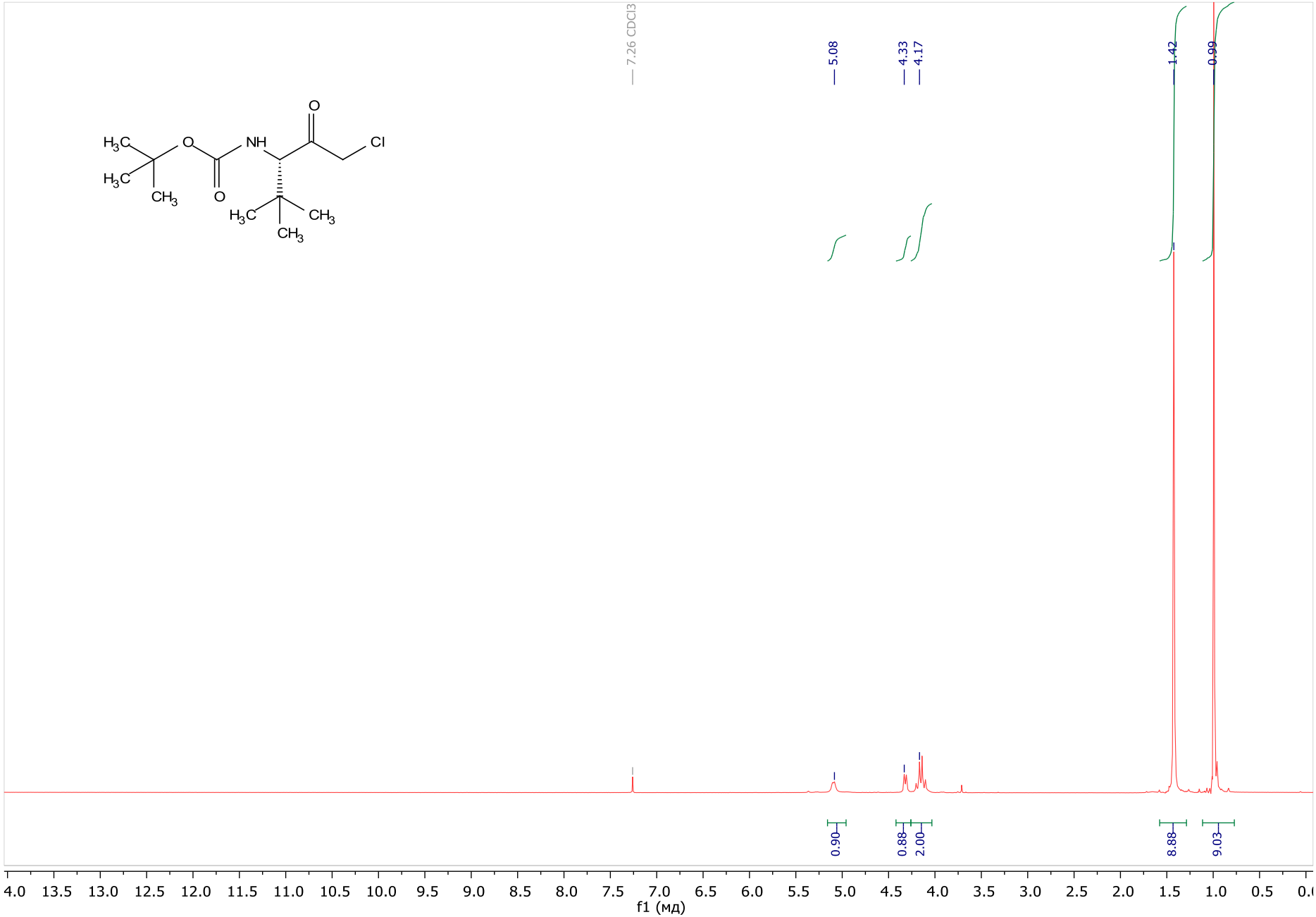

Figure 3. (S)-tert-Butyl (1-Chloro-4,4-dimethyl-2-oxopentan-3-yl)-carbamate **3b**, ^{1}H NMR (400 MHz, CDCl3).

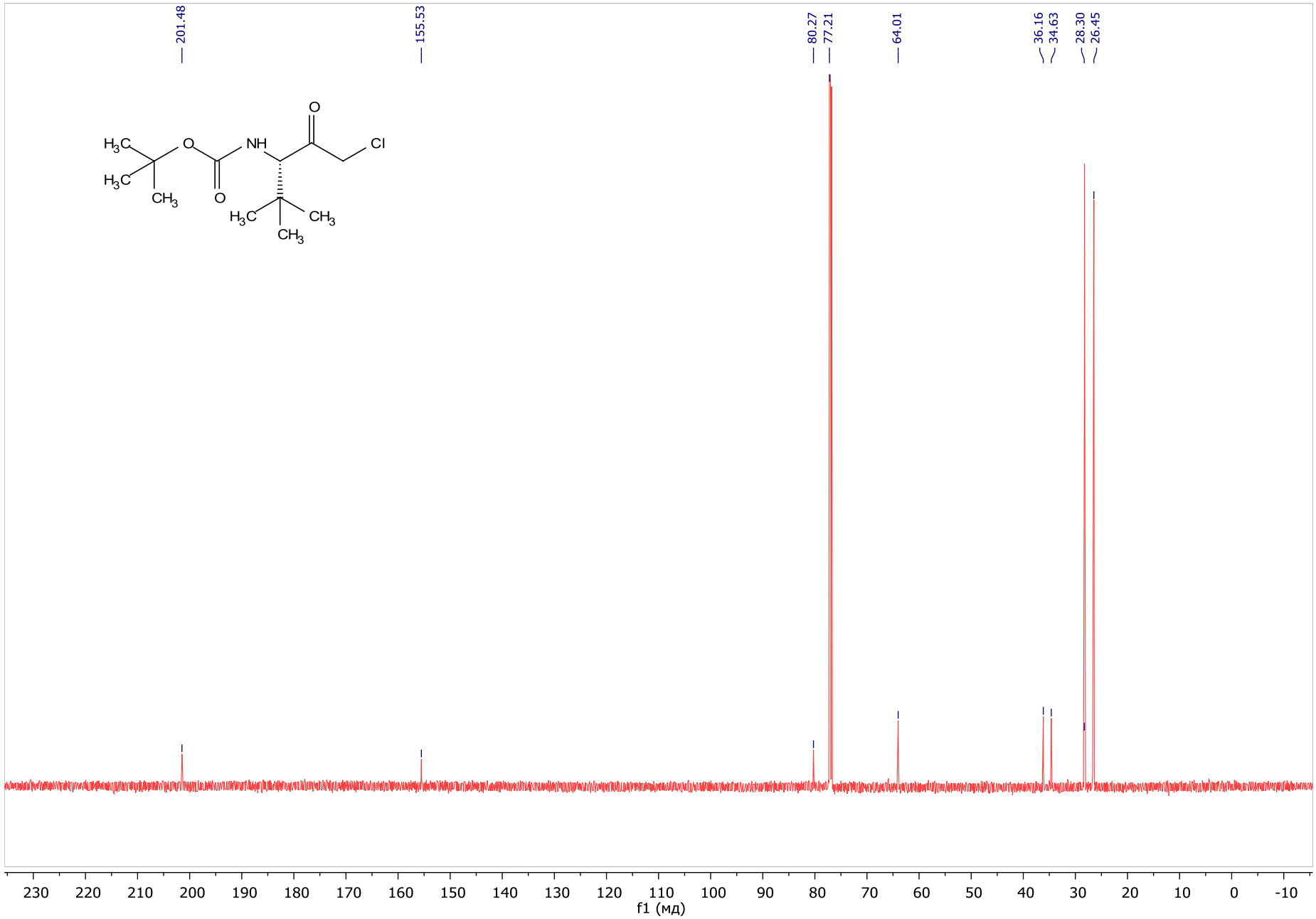

Figure 4. (S)-tert-Butyl (1-Chloro-4,4-dimethyl-2-oxopentan-3-yl)-carbamate **3b,** ^{13}C NMR(101MHz, CDCl3).

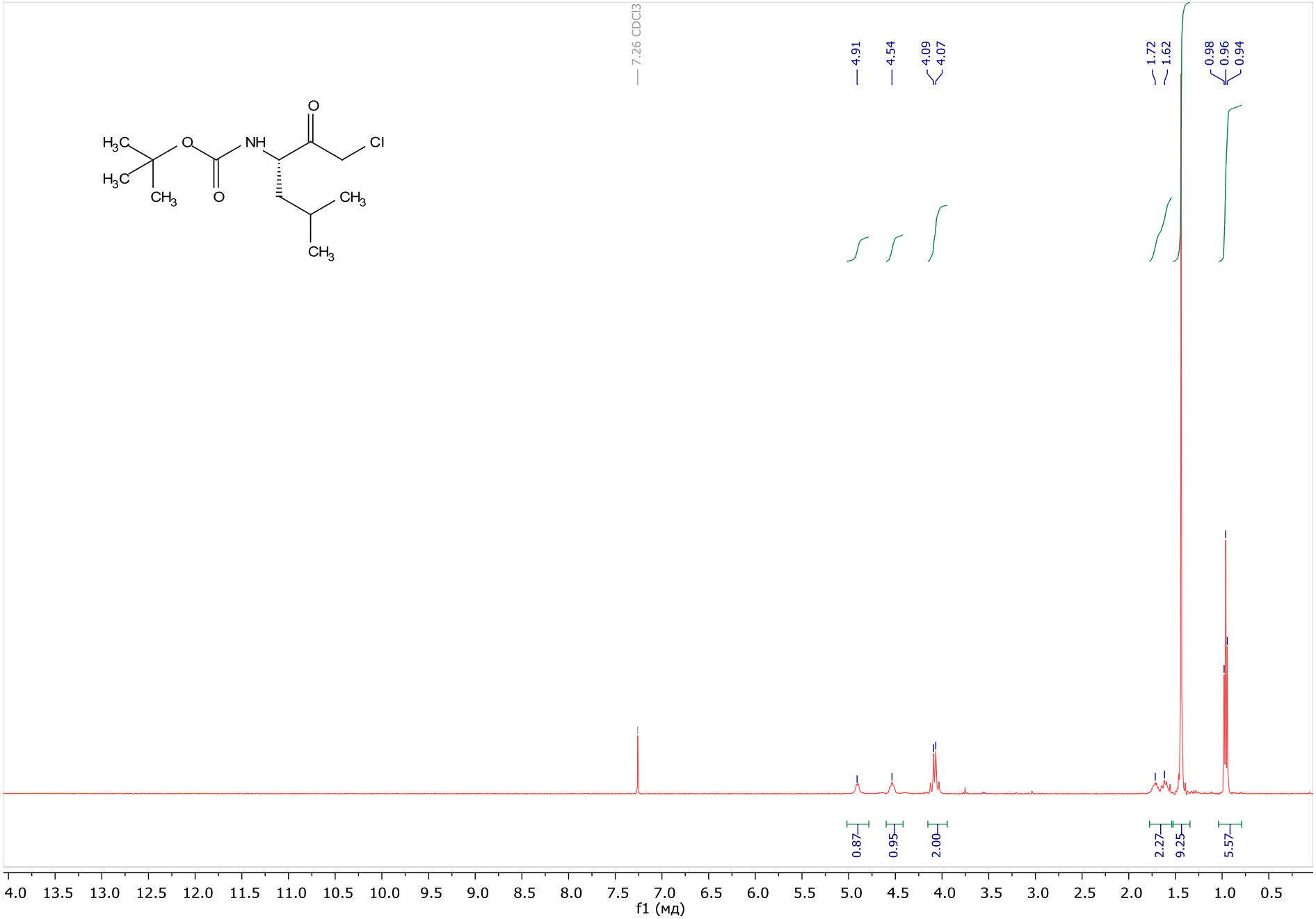

Figure 5. (S)-tert-Butyl (1-Chloro-5-methyl-2-oxohexan-3-yl)-carbamate **3c**, ^{1}H NMR (400 MHz, CDCl3).

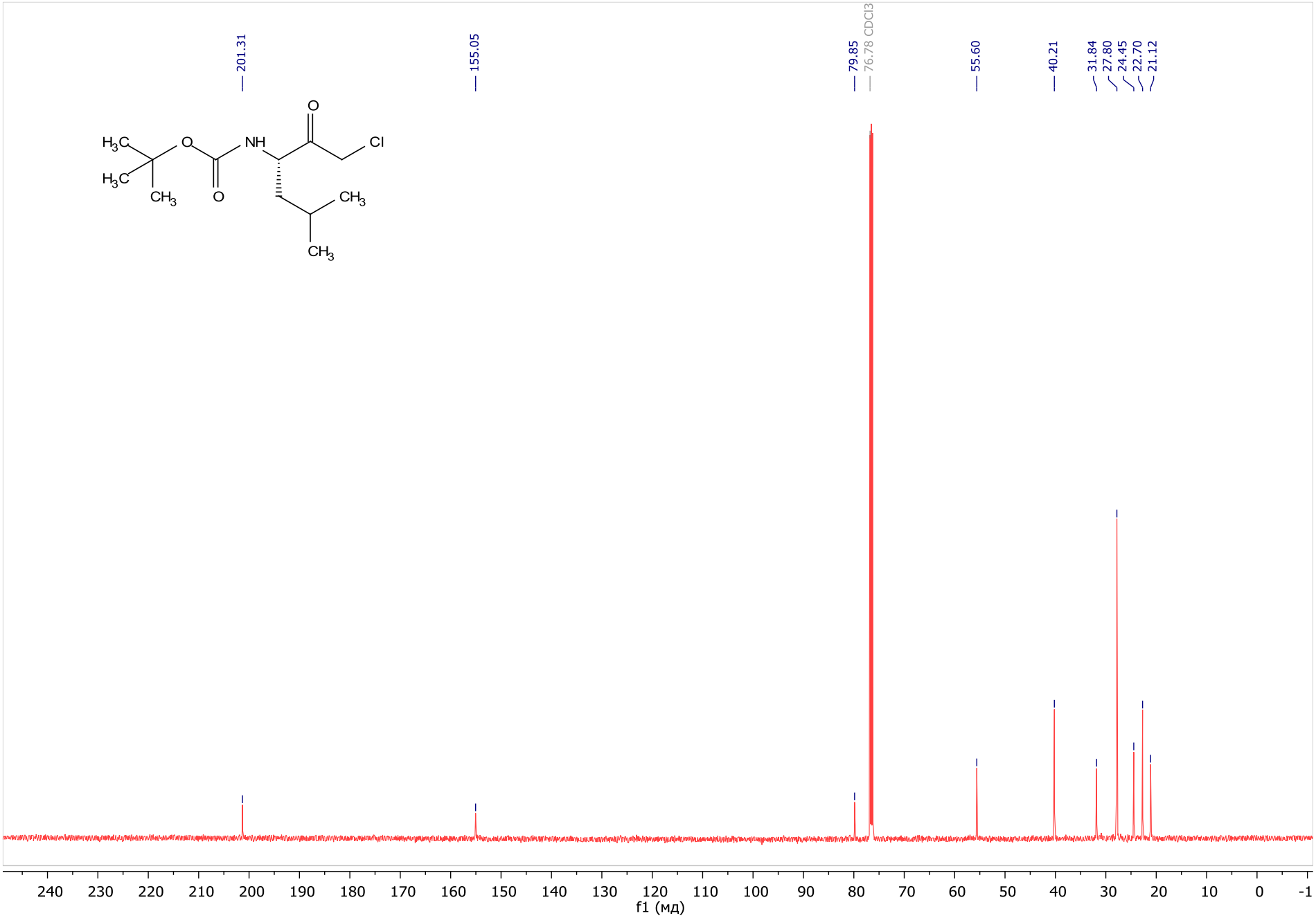

Figure 6. (S)-tert-Butyl (1-Chloro-5-methyl-2-oxohexan-3-yl)-carbamate **3c**, ^{13}C NMR(101MHz, CDCl3).

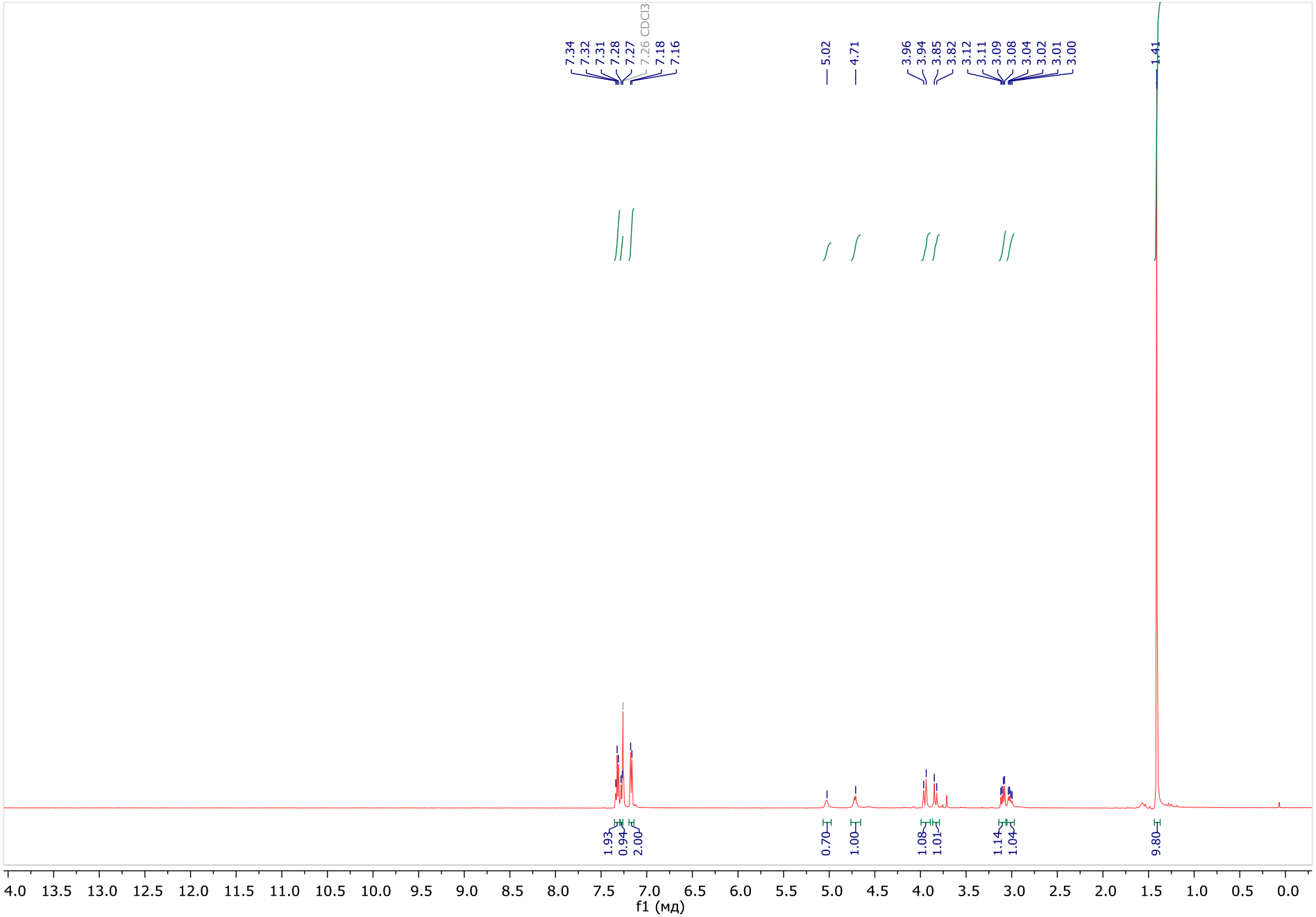

Figure 7. (S)-tert-Butyl (4-Chloro-3-oxo-1-phenylbutan-2-yl)-carbamate **3d**, ^{1}H NMR (400 MHz, CDCl3).

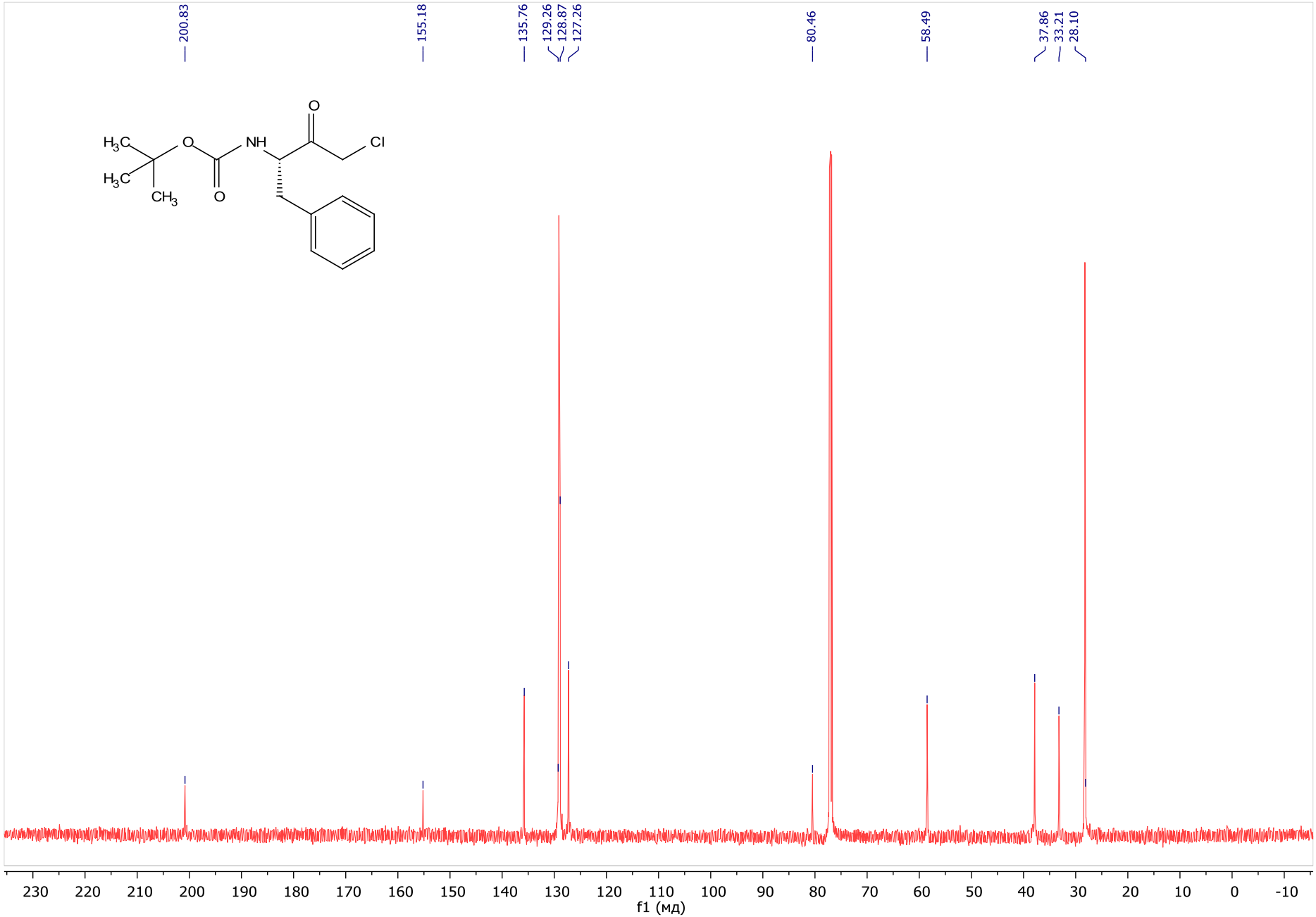

Figure 8. (S)-tert-Butyl (4-Chloro-3-oxo-1-phenylbutan-2-yl)-carbamate **3d,** ^{13}C NMR(101MHz, CDCl3).

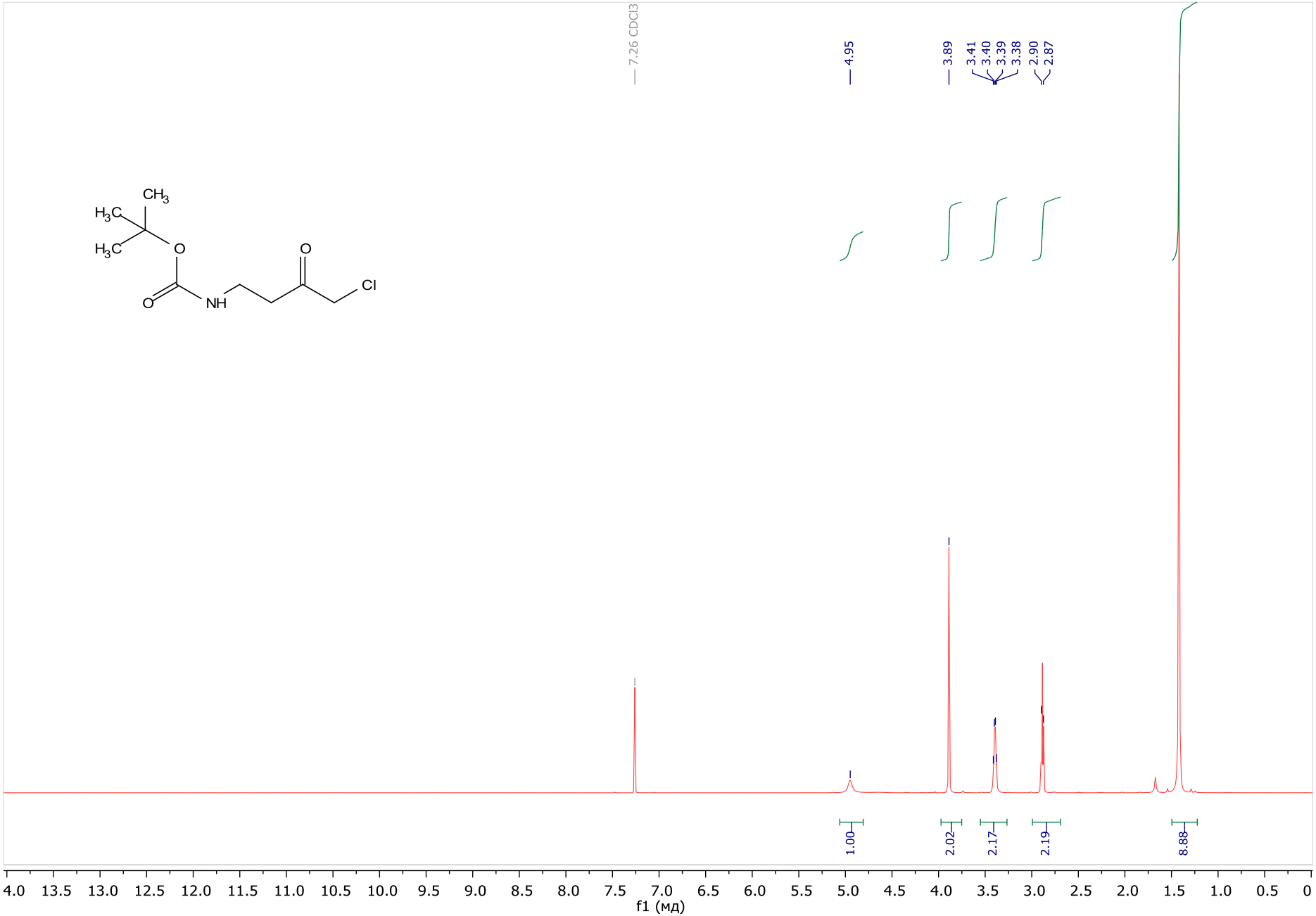

Figure 9. tert-Butyl (4-Chloro-3-oxobutyl)carbamate **3e**, ^{1}H NMR (400 MHz, CDCl3).

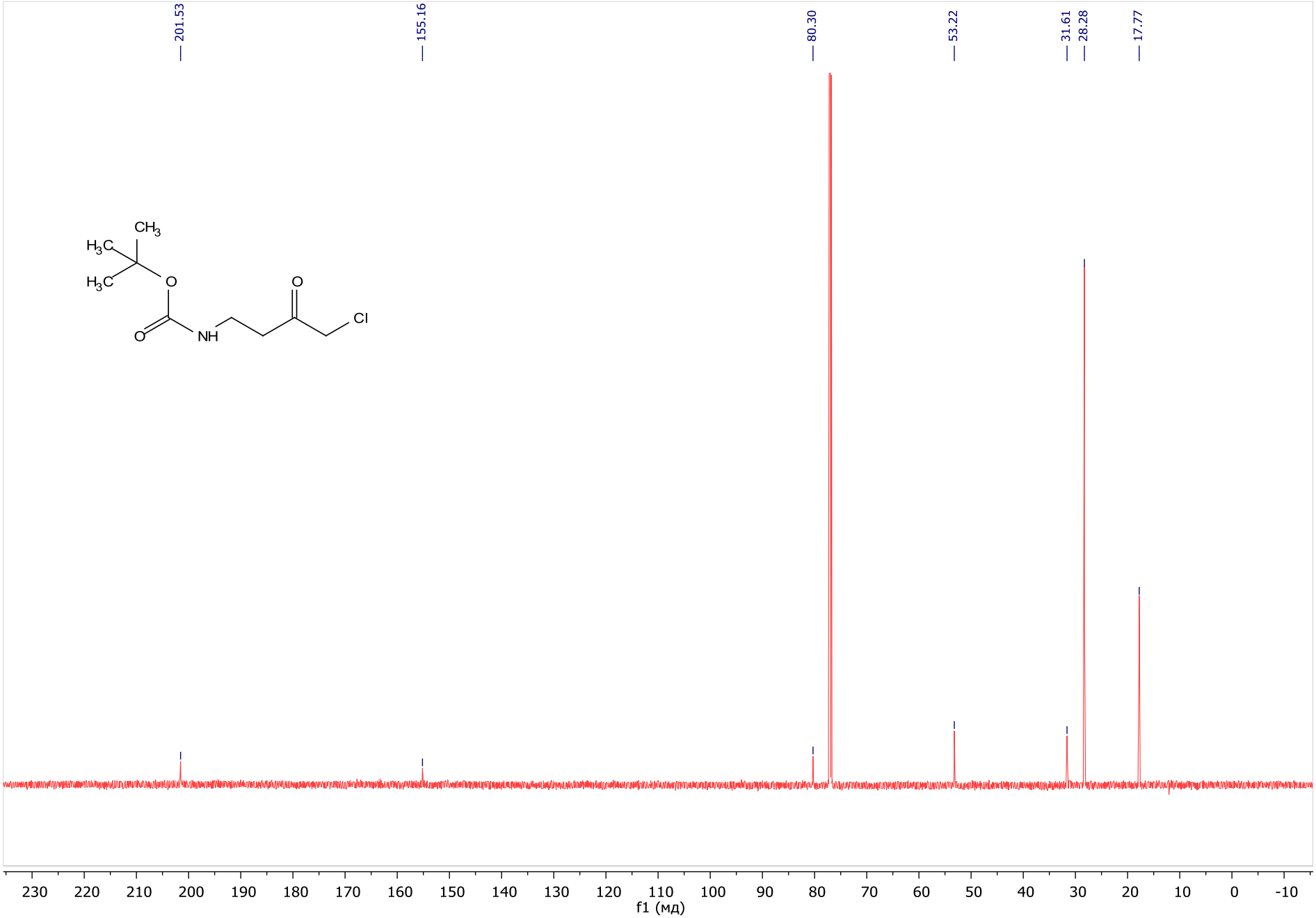

Figure 10. tert-Butyl (4-Chloro-3-oxobutyl)carbamate **3e,** ^{13}C NMR(101MHz, CDCl3).

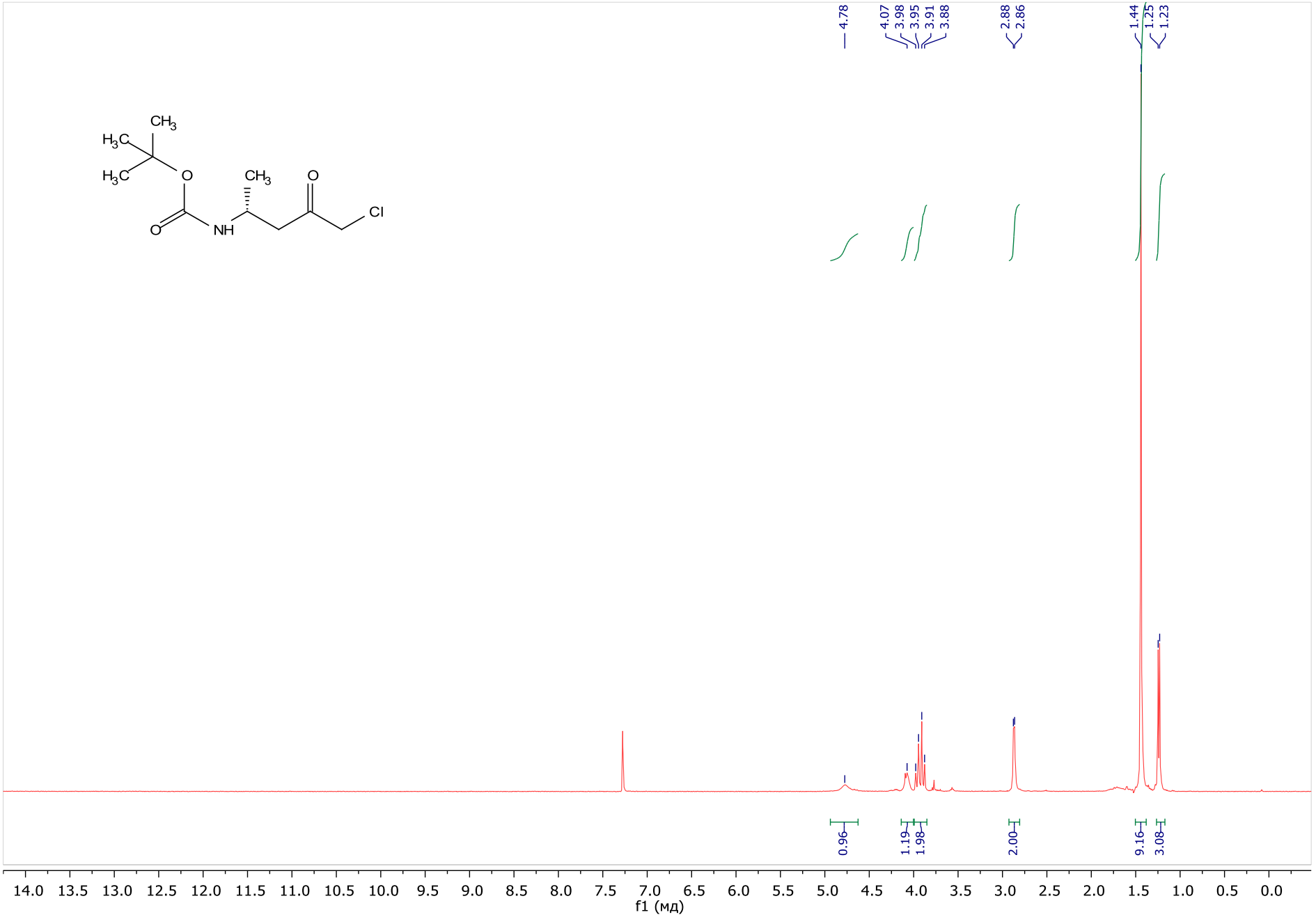

Figure 11. (S)-tert-Butyl (5-Chloro-4-oxopentan-2-yl)carbamate **3f**, ^{1}H NMR (400 MHz, CDCl3).

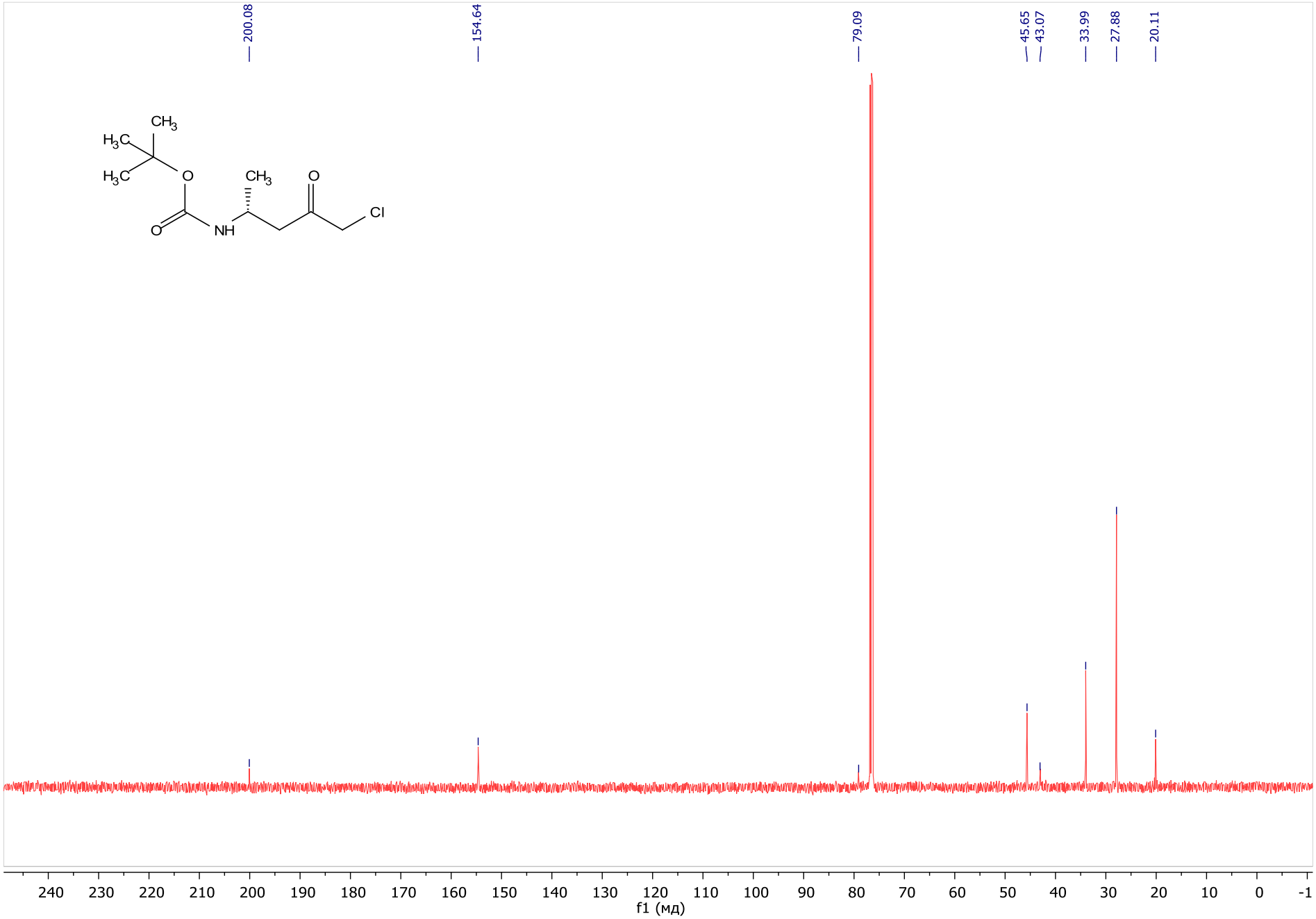

Figure 12. (S)-tert-Butyl (5-Chloro-4-oxopentan-2-yl)carbamate **3f,** ^{13}C NMR(101MHz, CDCl3).

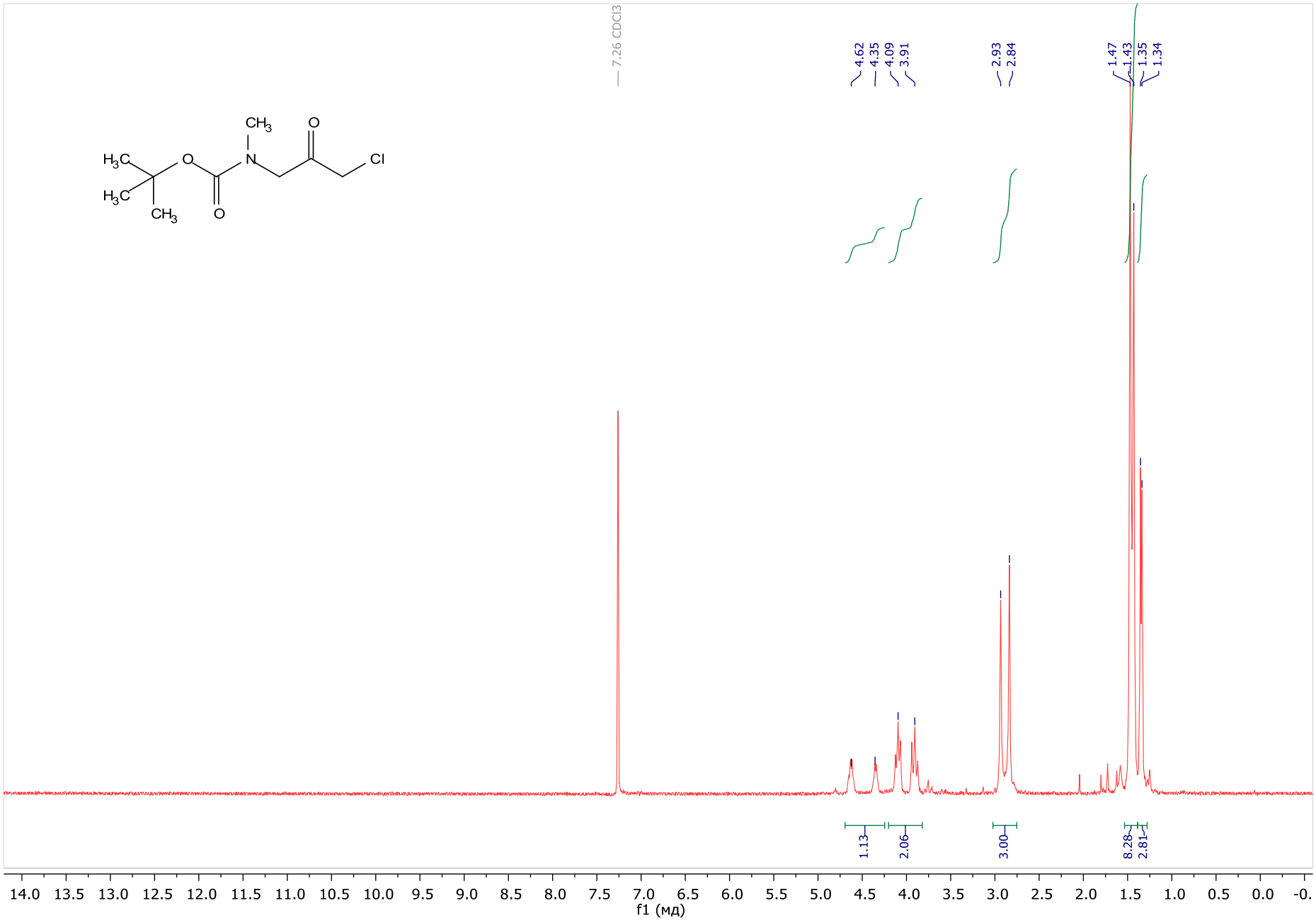

Figure 13. tert-Butyl (3-Chloro-2-oxopropyl)(methyl)carbamate **3g**, ^{1}H NMR (400 MHz, CDCl3).

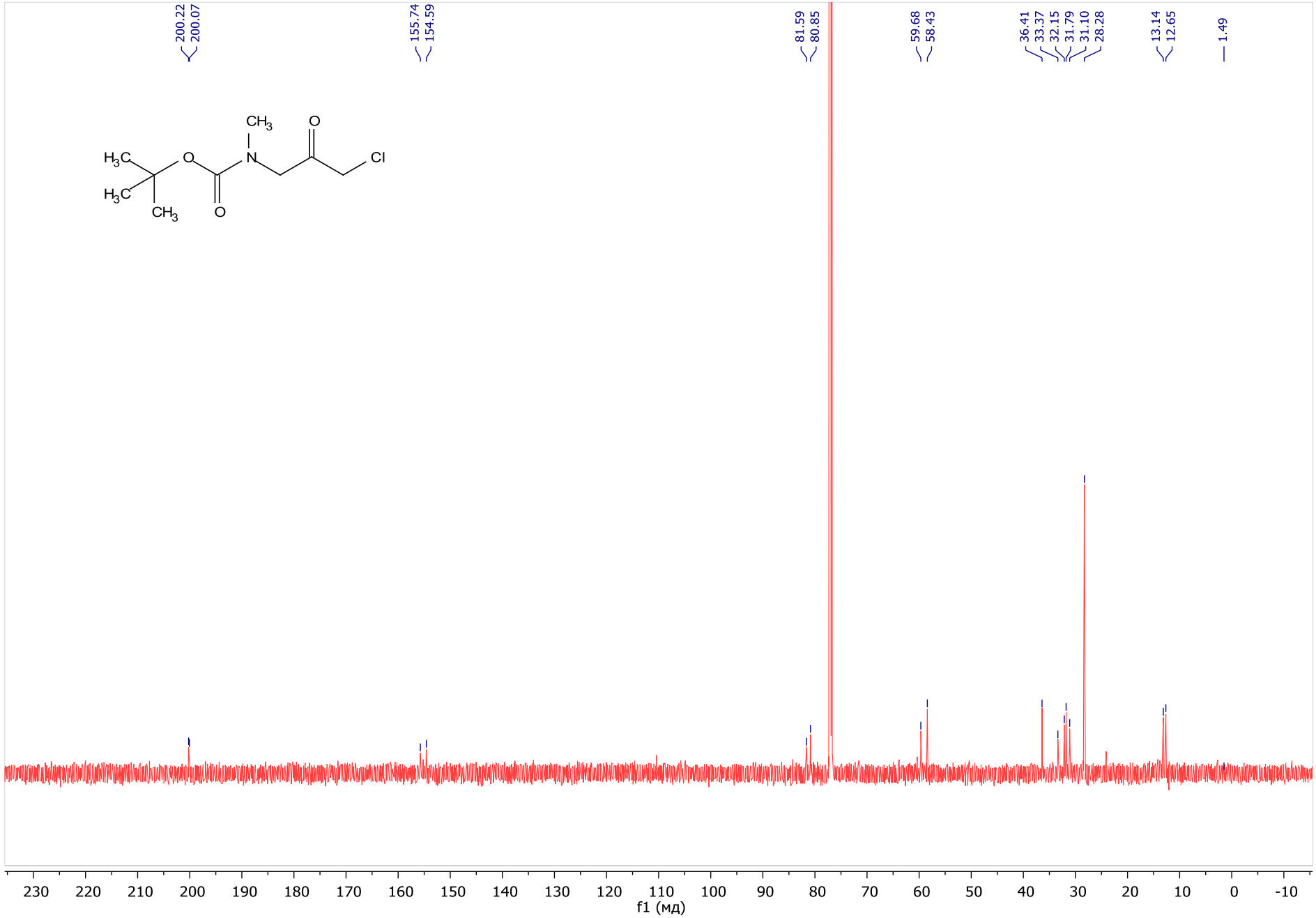

Figure 14. tert-Butyl (3-Chloro-2-oxopropyl)(methyl)carbamate **3g**, ^{13}C NMR(101MHz, CDCl3).

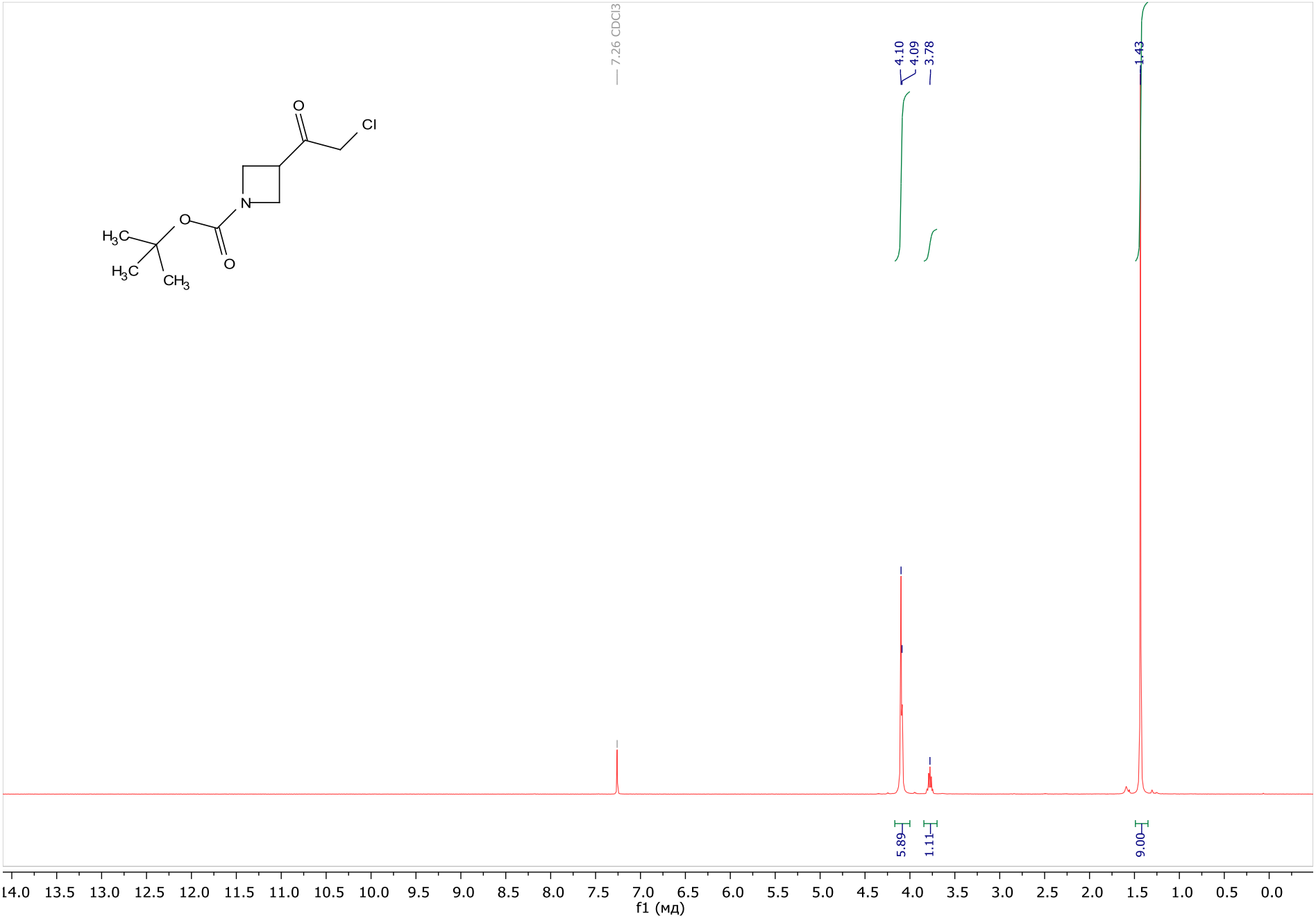

Figure 15. tert-Butyl 3-(2-Chloroacetyl)azetidine-1-carboxylate **3h,** ^{1}H NMR (400 MHz, CDCl3).

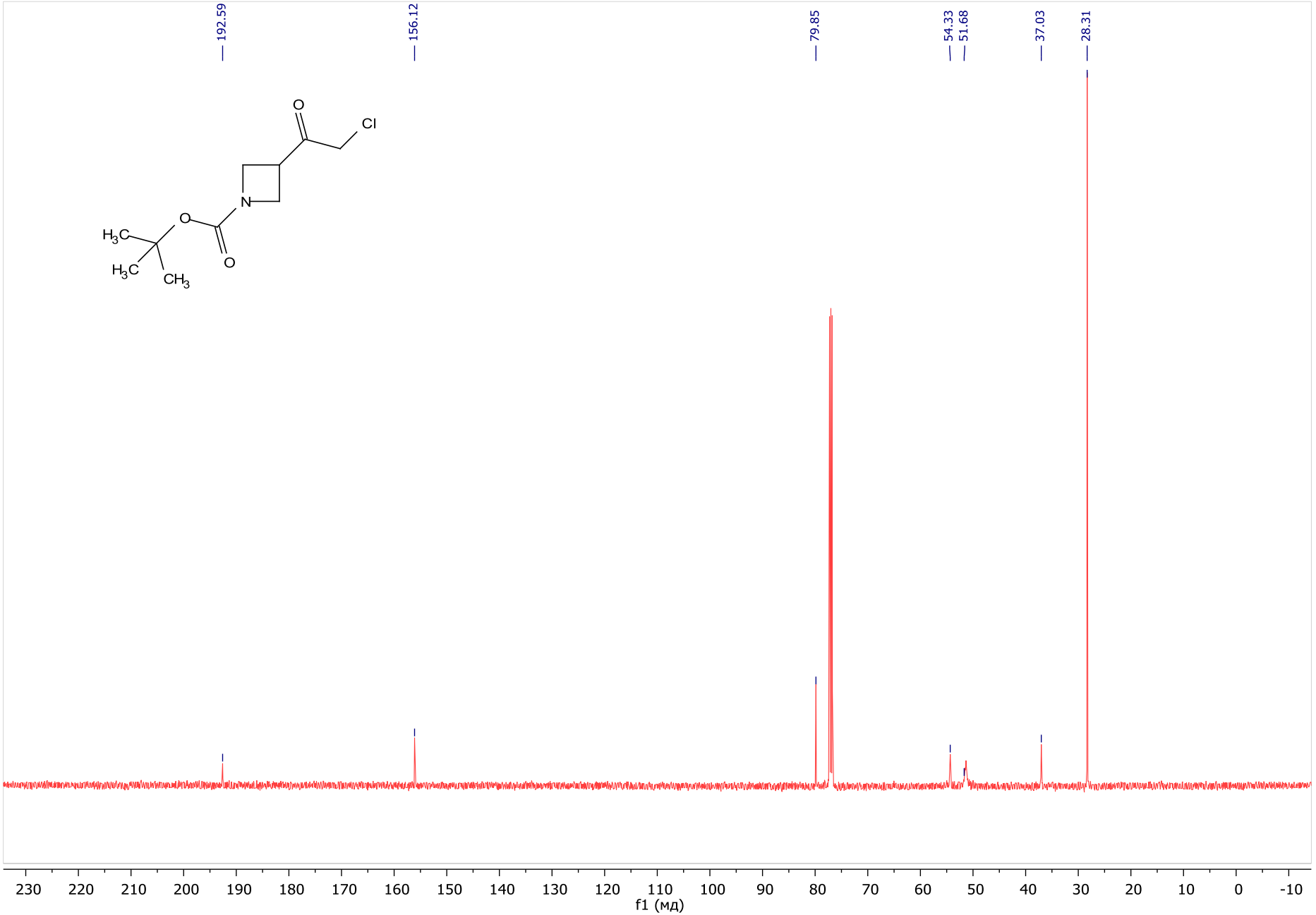

Figure 16. tert-Butyl 3-(2-Chloroacetyl)azetidine-1-carboxylate **3h,** ^{13}C NMR(101MHz, CDCl3).