

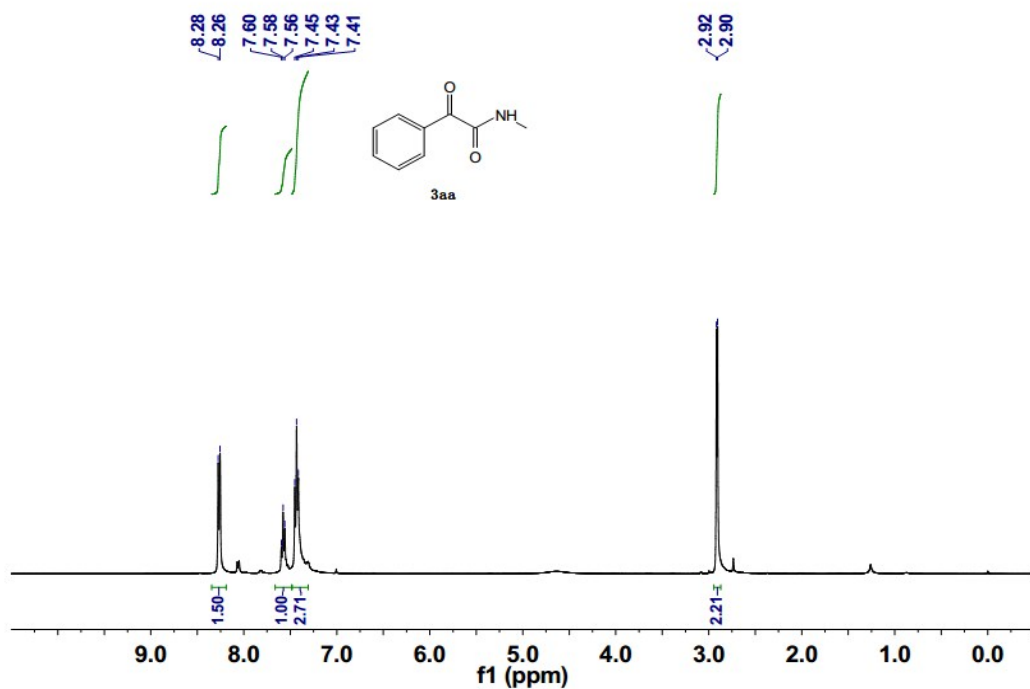
Supplementary Information

***n*Bu₄Ni-mediated oxidation of methyl ketones
to α -ketoamides: using ammonium, primary and
secondary amine -salt as amine moiety**

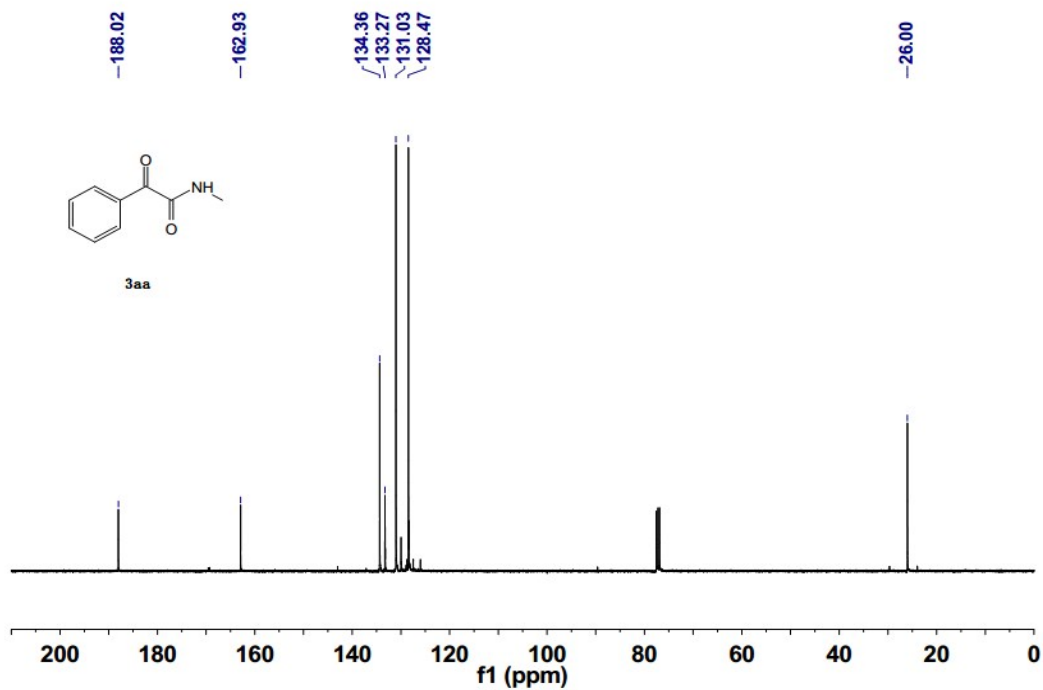
- 1. ¹H NMR and ¹³C NMR spectrum for isolated products ..1-28***
- 2. HRMS spectrum for isolated products29-32***

1. ^1H NMR and ^{13}C NMR spectrum for isolated products

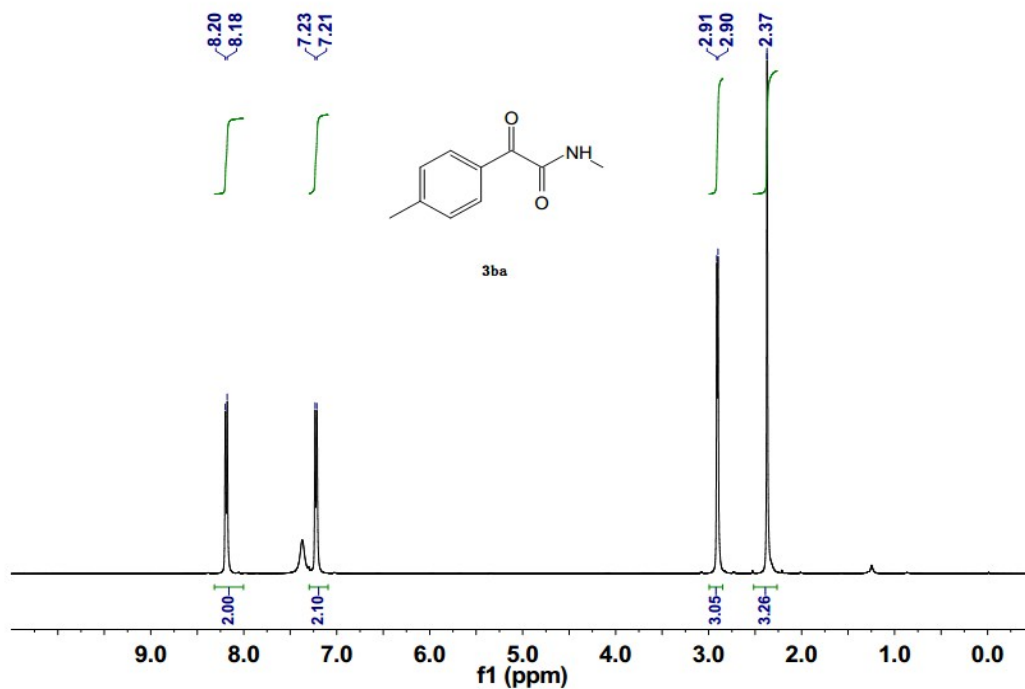
^1H NMR for *N*-methyl-2-oxo-2-phenylacetamide



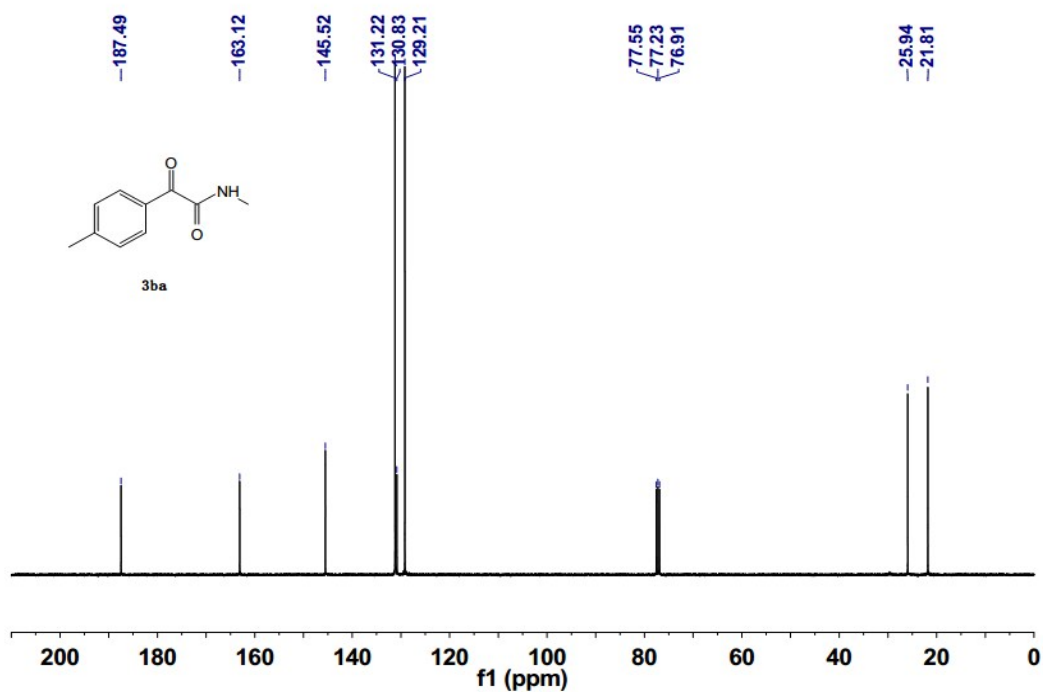
^{13}C NMR for *N*-methyl-2-oxo-2-phenylacetamide



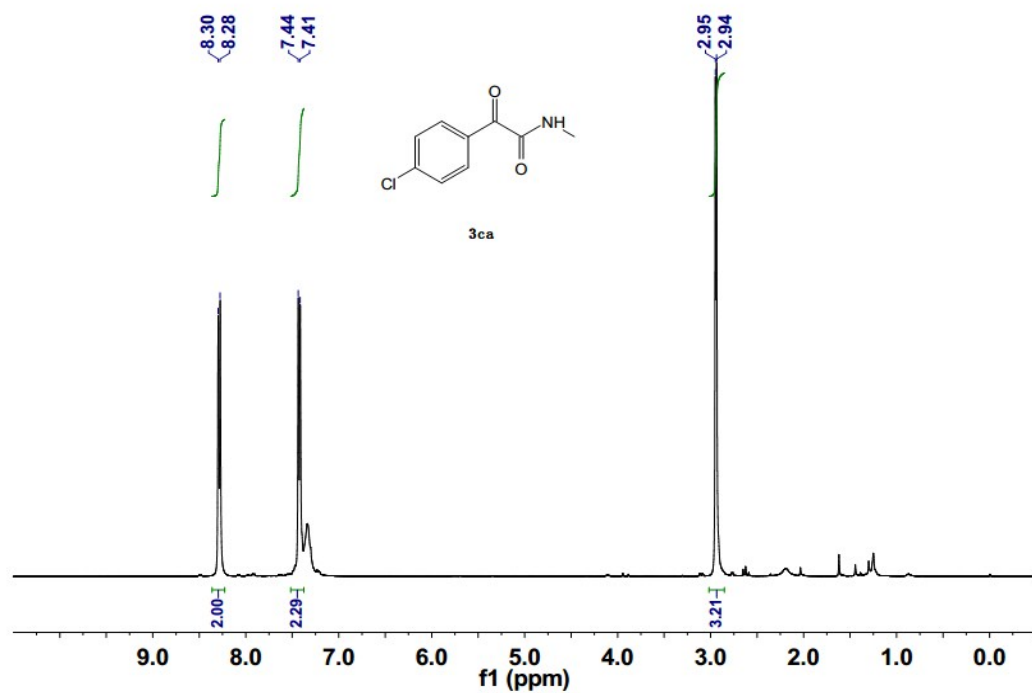
¹H NMR for N-methyl-2-oxo-2-(p-tolyl)acetamide



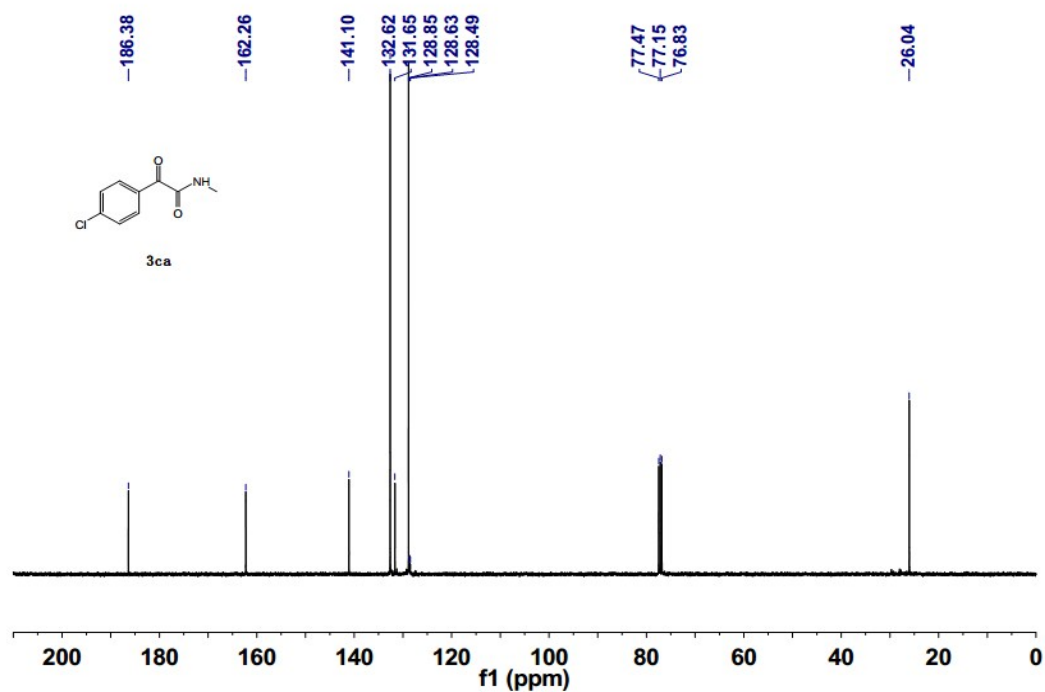
¹³C NMR for N-methyl-2-oxo-2-(p-tolyl)acetamide



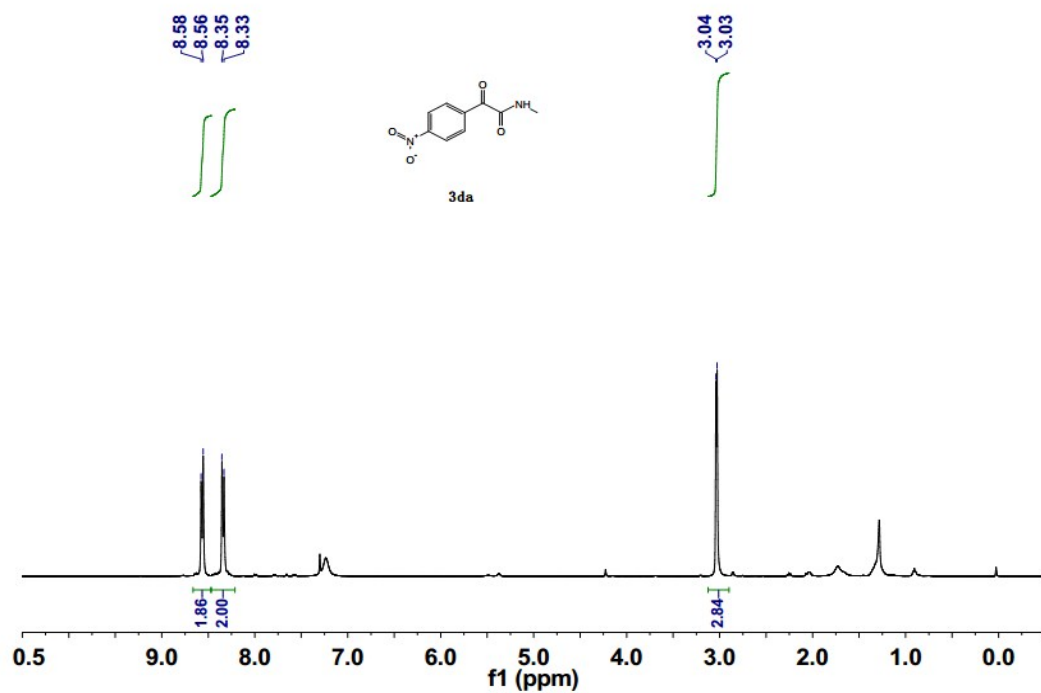
¹H NMR for N-methyl-2-oxo-2-(p-tolyl)acetamide



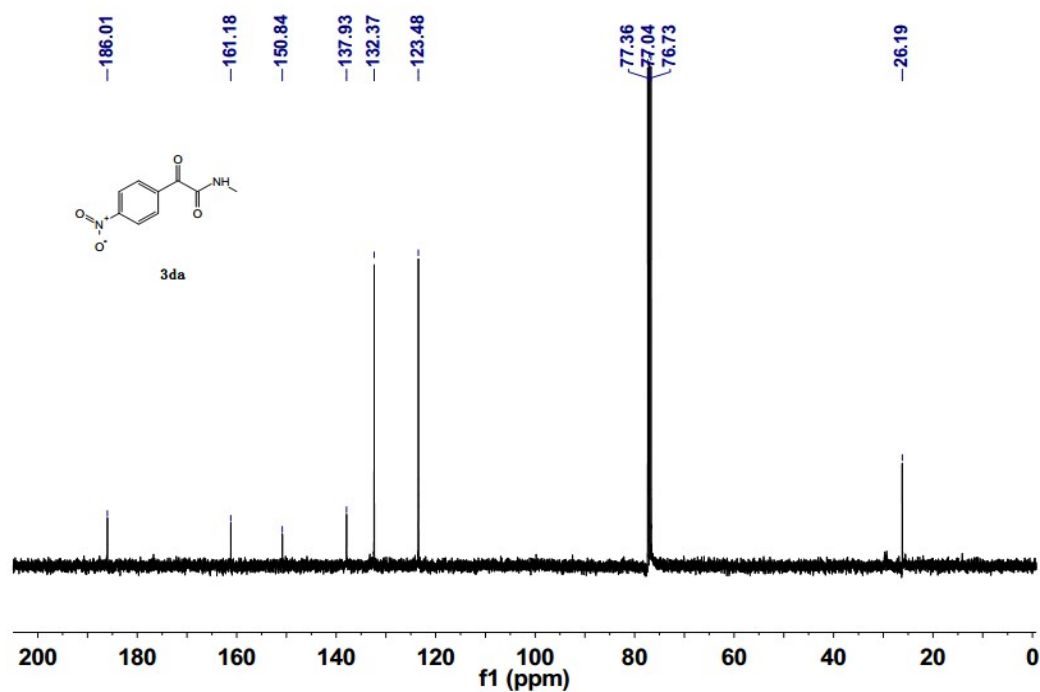
¹³C NMR for N-methyl-2-oxo-2-(p-tolyl)acetamide



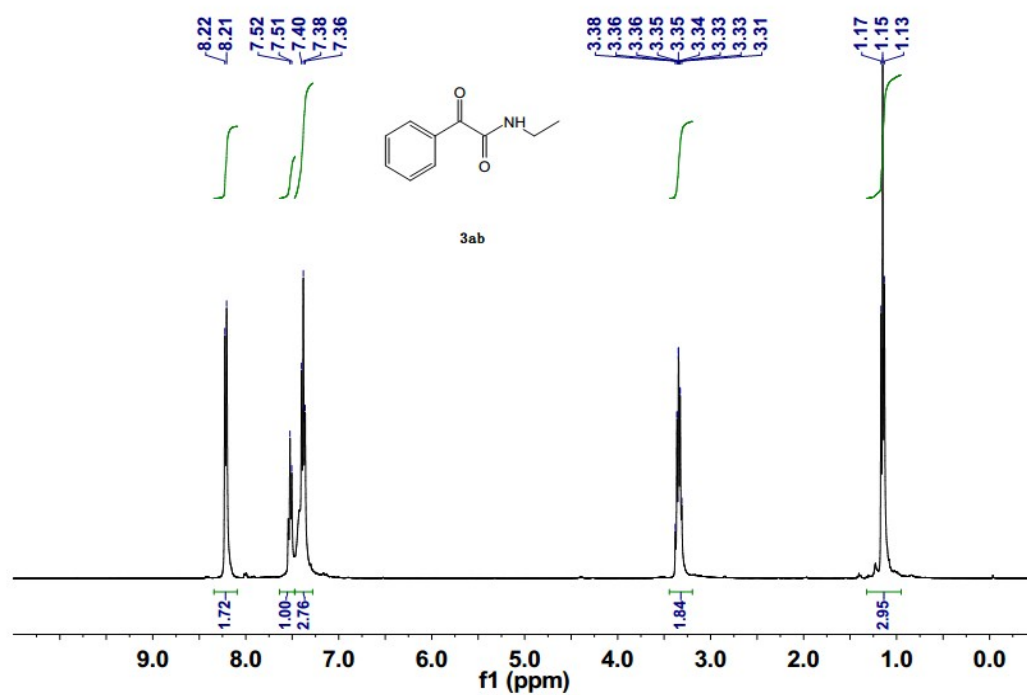
¹H NMR for N-methyl-2-(4-nitrophenyl)-2-oxoacetamide



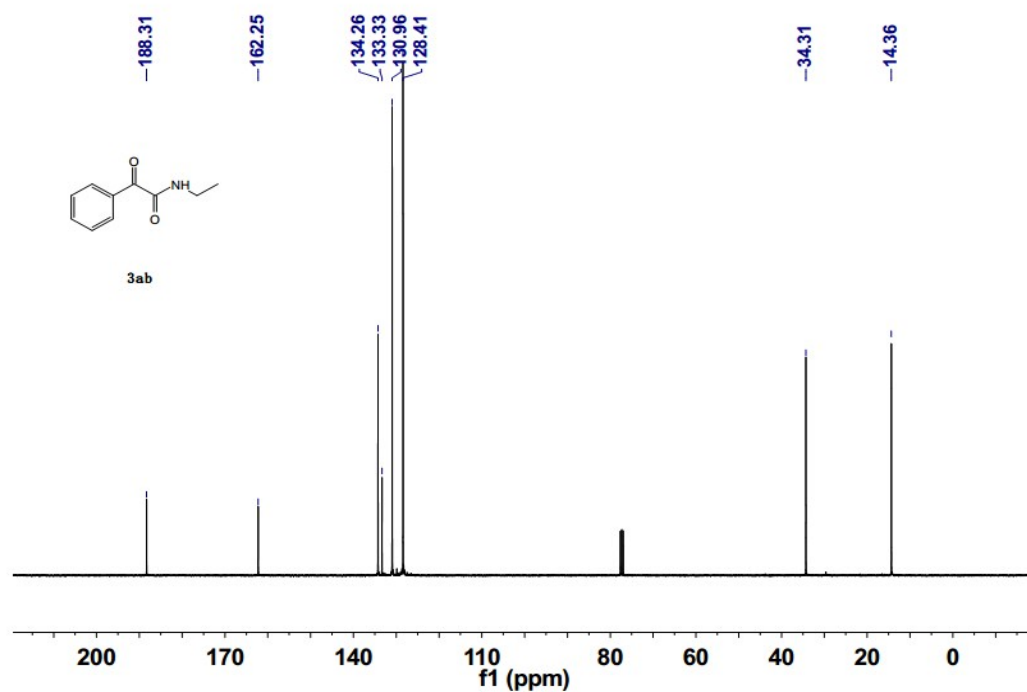
¹³C NMR for N-methyl-2-(4-nitrophenyl)-2-oxoacetamide



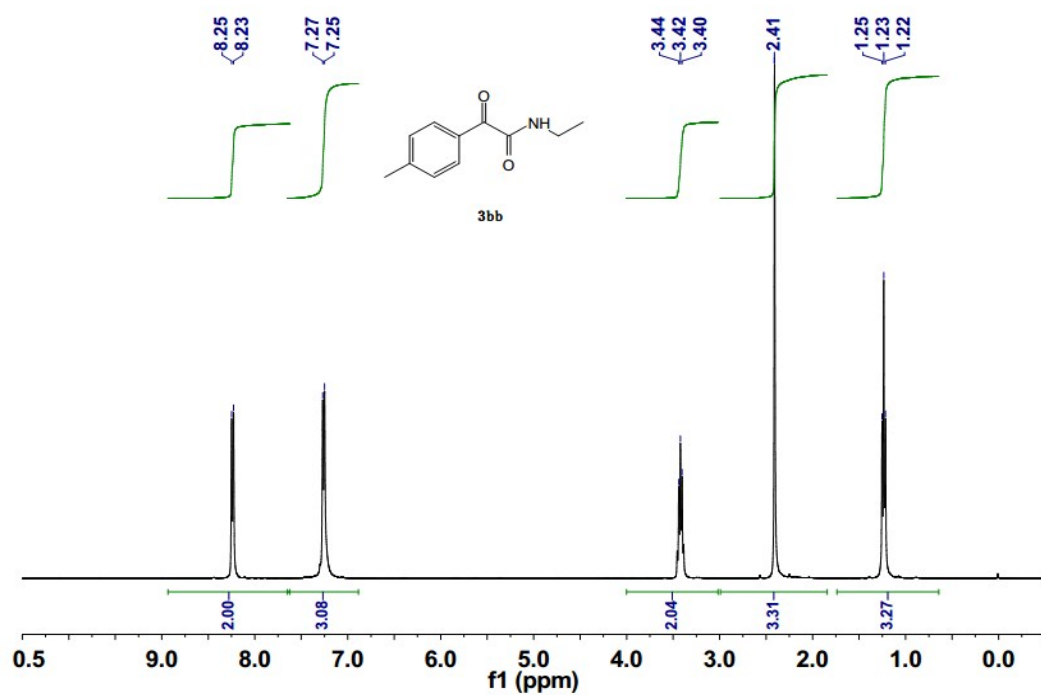
¹H NMR for N-ethyl-2-oxo-2-phenylacetamide



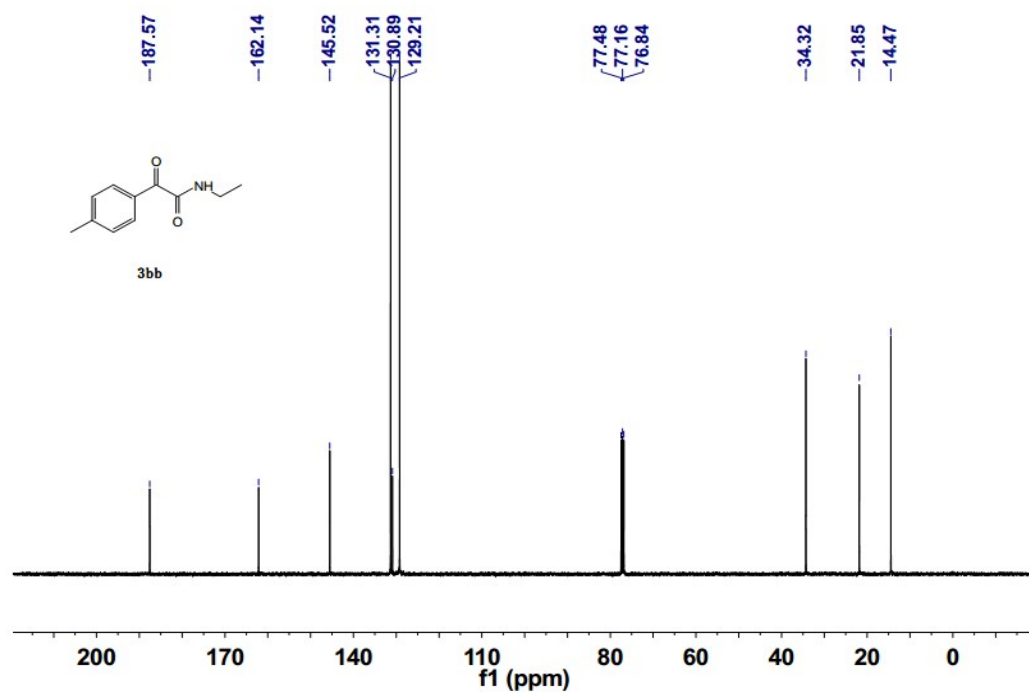
¹³C NMR for N-ethyl-2-oxo-2-phenylacetamide



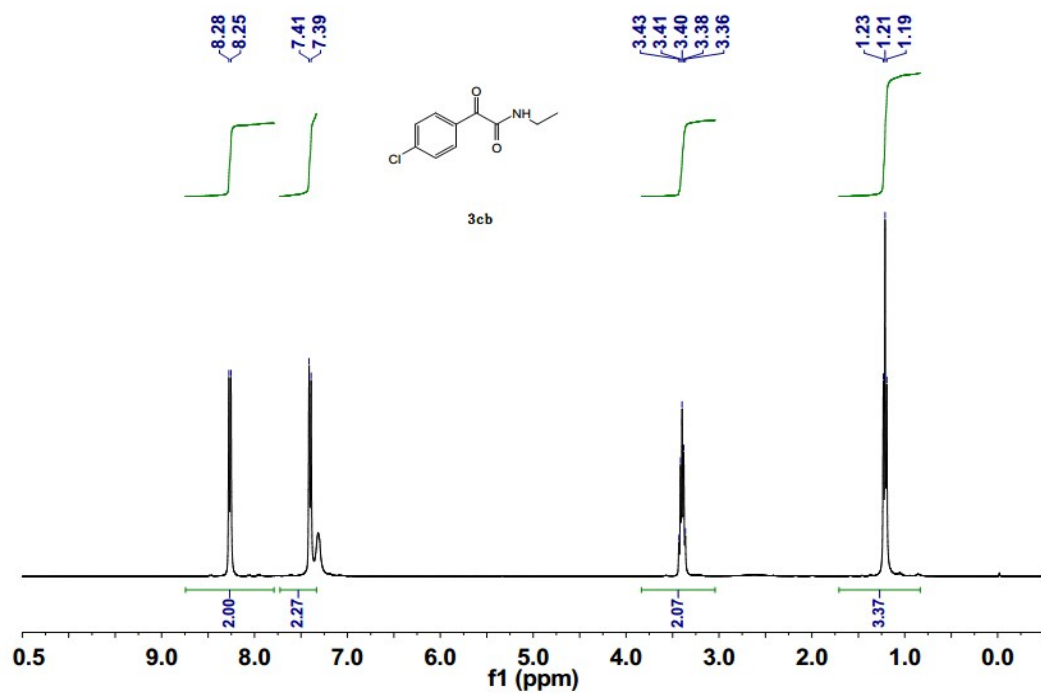
¹H NMR for N-ethyl-2-oxo-2-(p-tolyl)acetamide



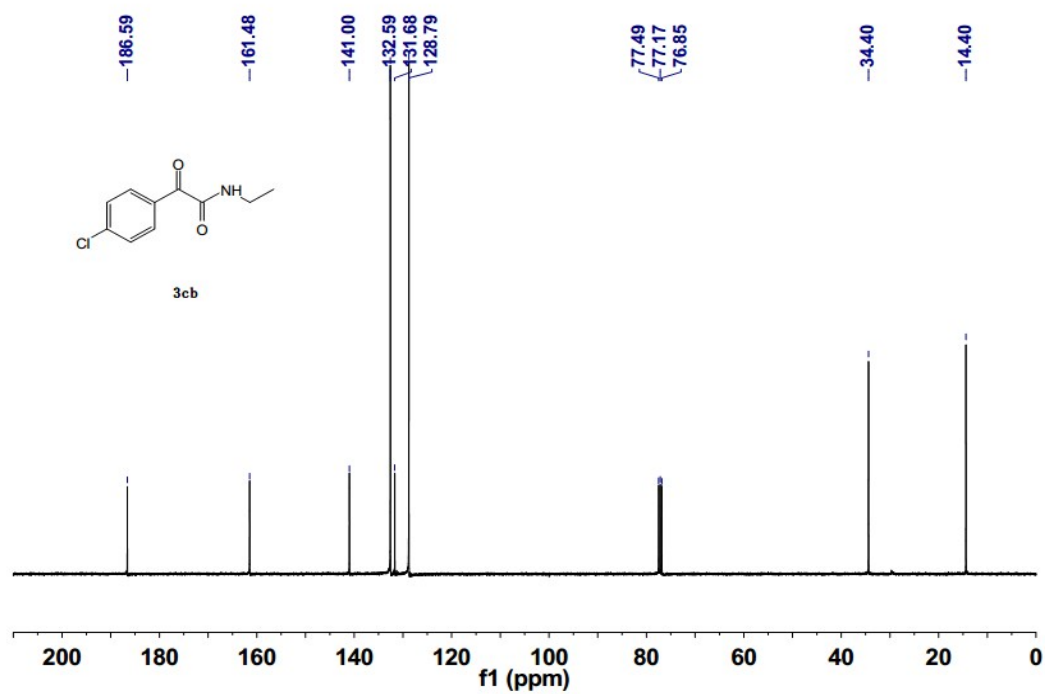
¹³C NMR for N-ethyl-2-oxo-2-(p-tolyl)acetamide



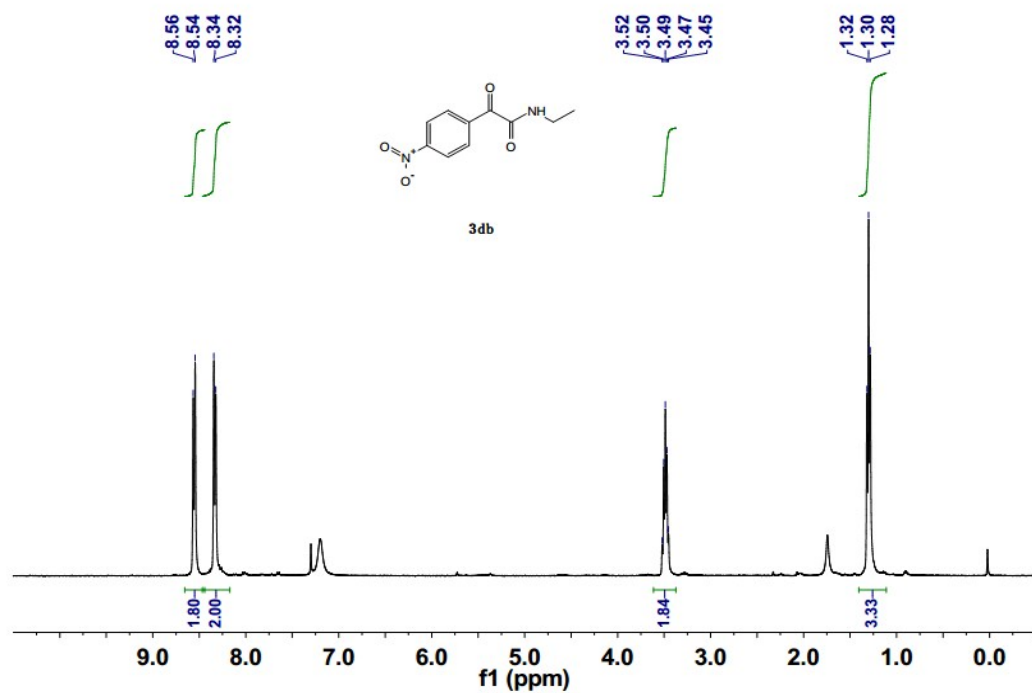
¹H NMR for 2-(4-chlorophenyl)-N-ethyl-2-oxoacetamide



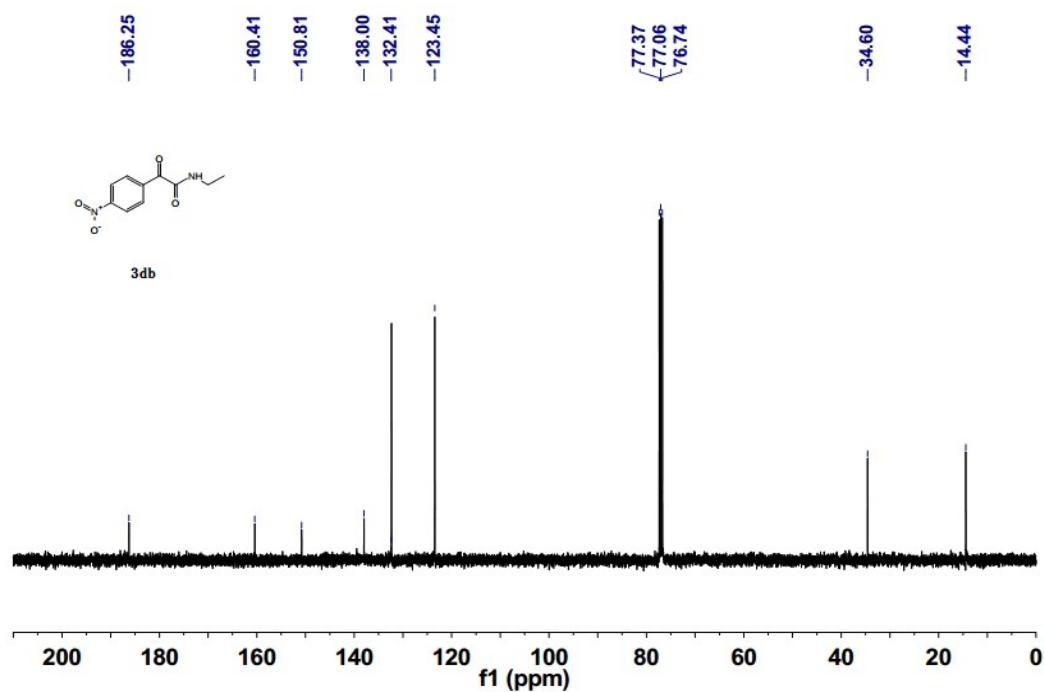
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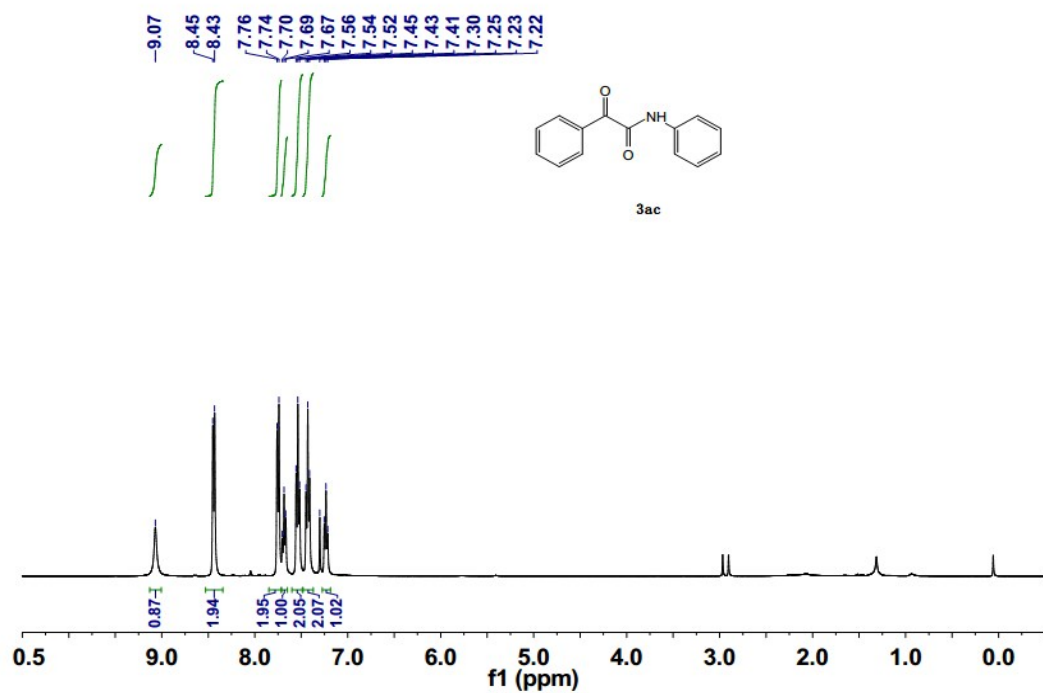
¹H NMR for N-ethyl-2-(4-nitrophenyl)-2-oxoacetamide



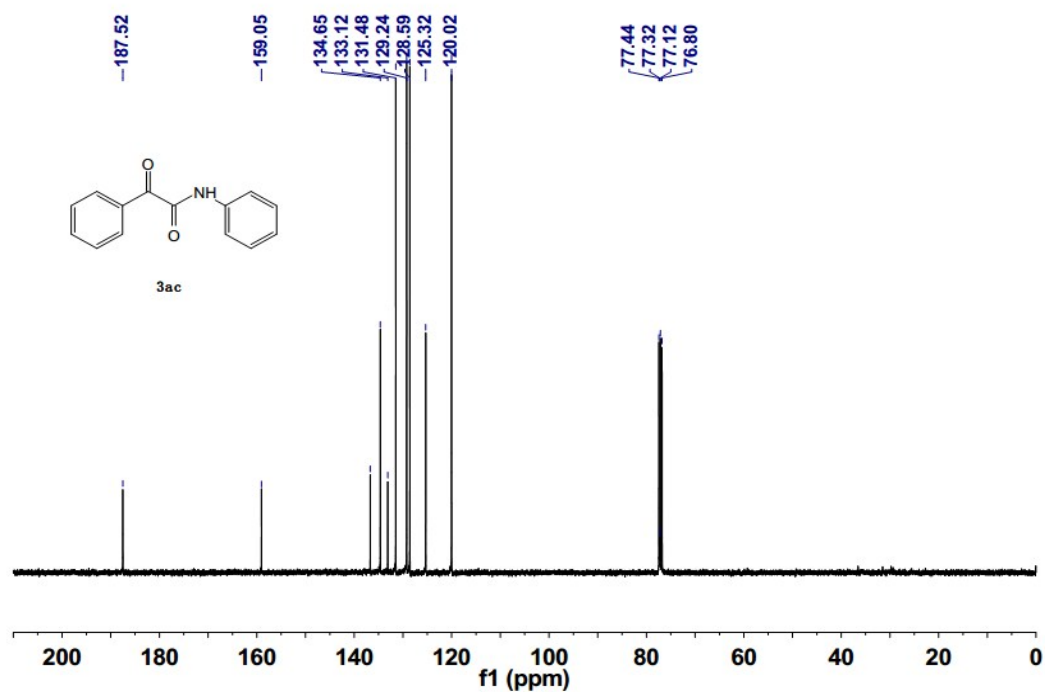
¹³C NMR for N-ethyl-2-(4-nitrophenyl)-2-oxoacetamide



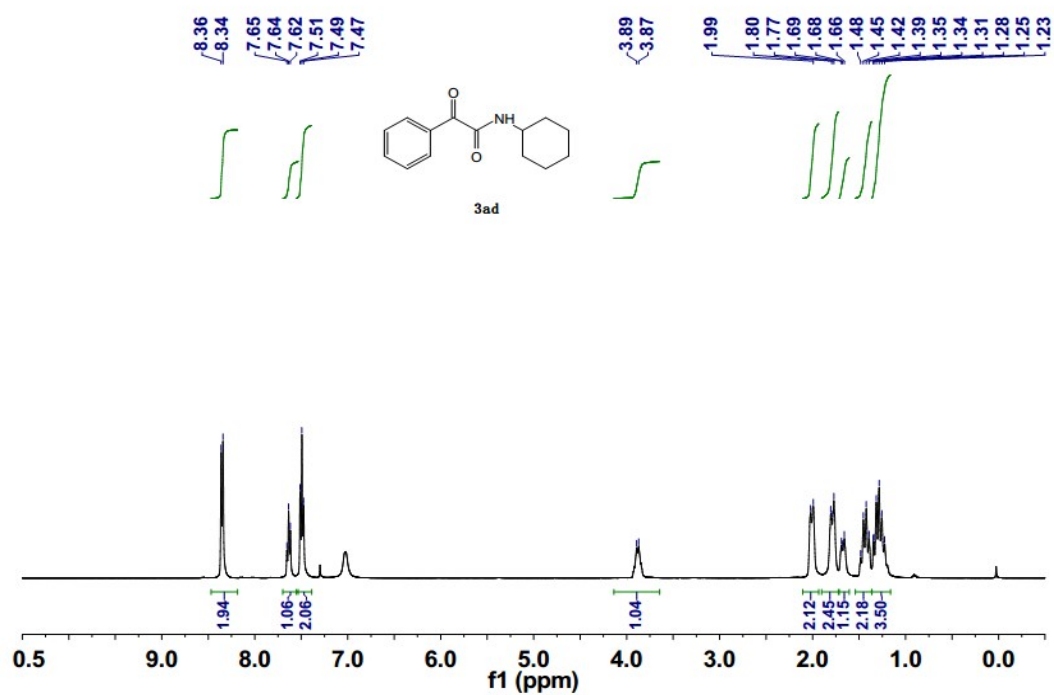
¹H NMR for 2-oxo-N,2-diphenylacetamide



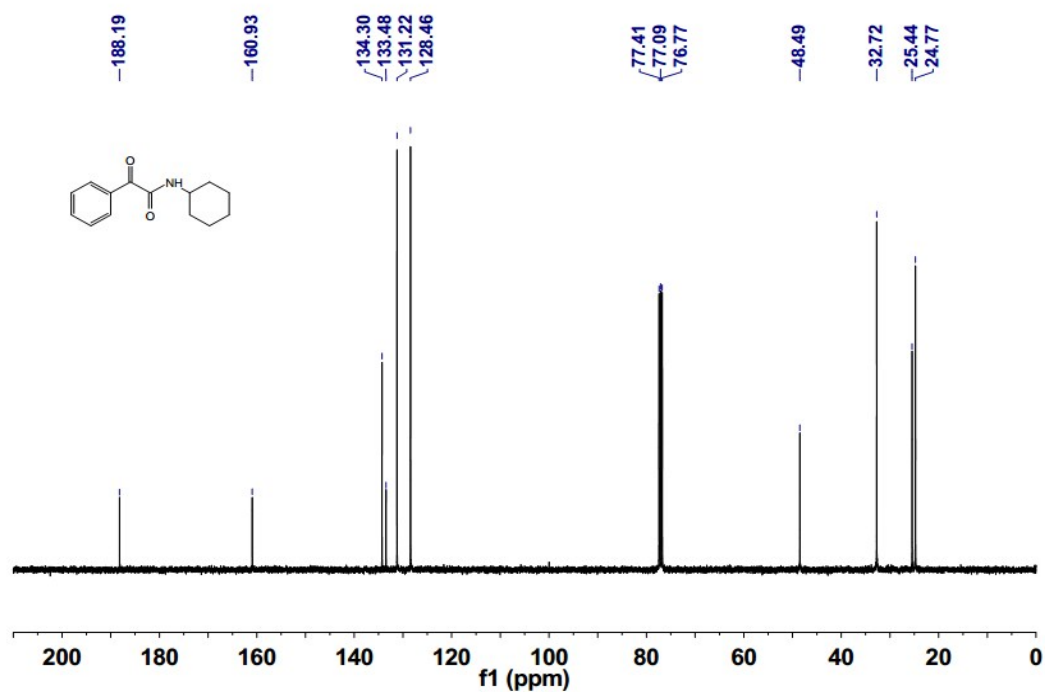
¹³C NMR for 2-oxo-N,2-diphenylacetamide



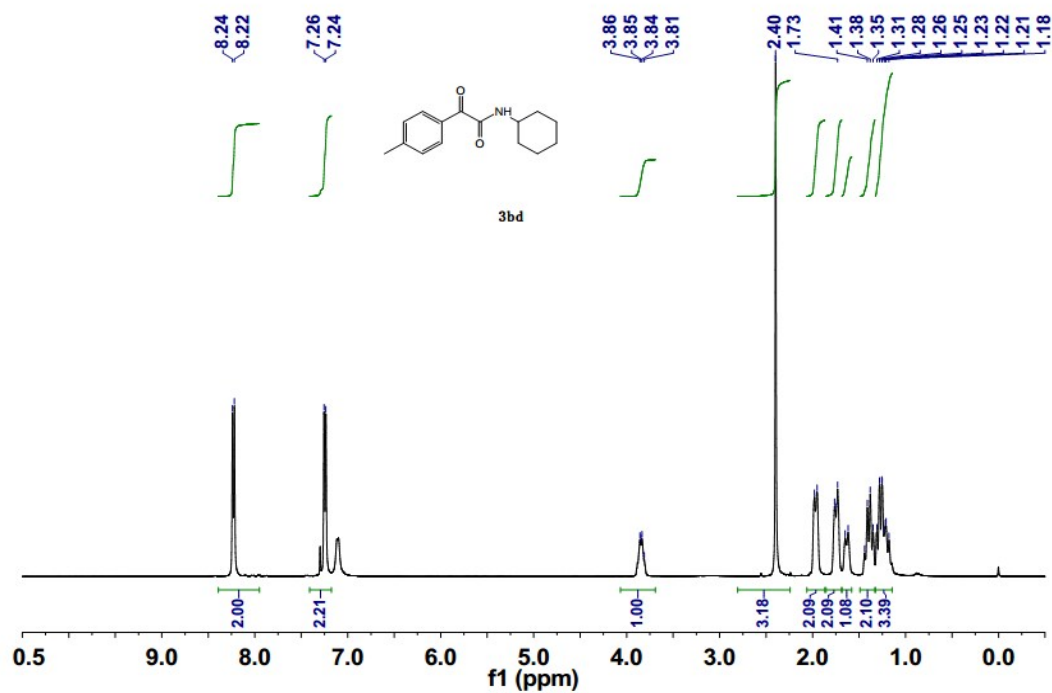
¹H NMR for N-cyclohexyl-2-oxo-2-phenylacetamide



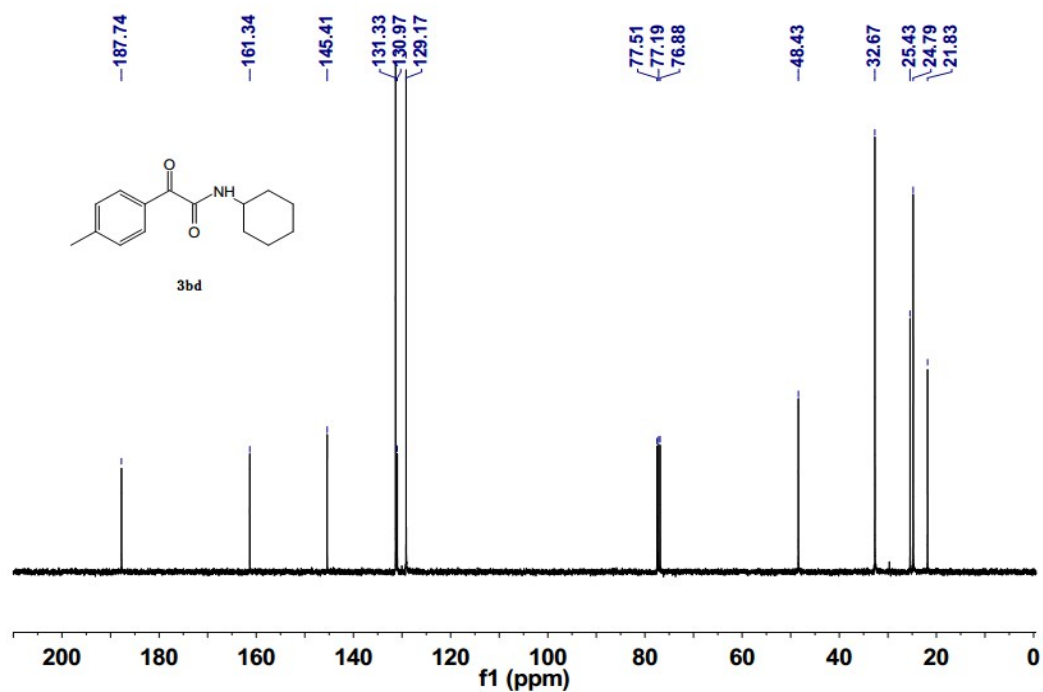
¹³C NMR for N-cyclohexyl-2-oxo-2-phenylacetamide



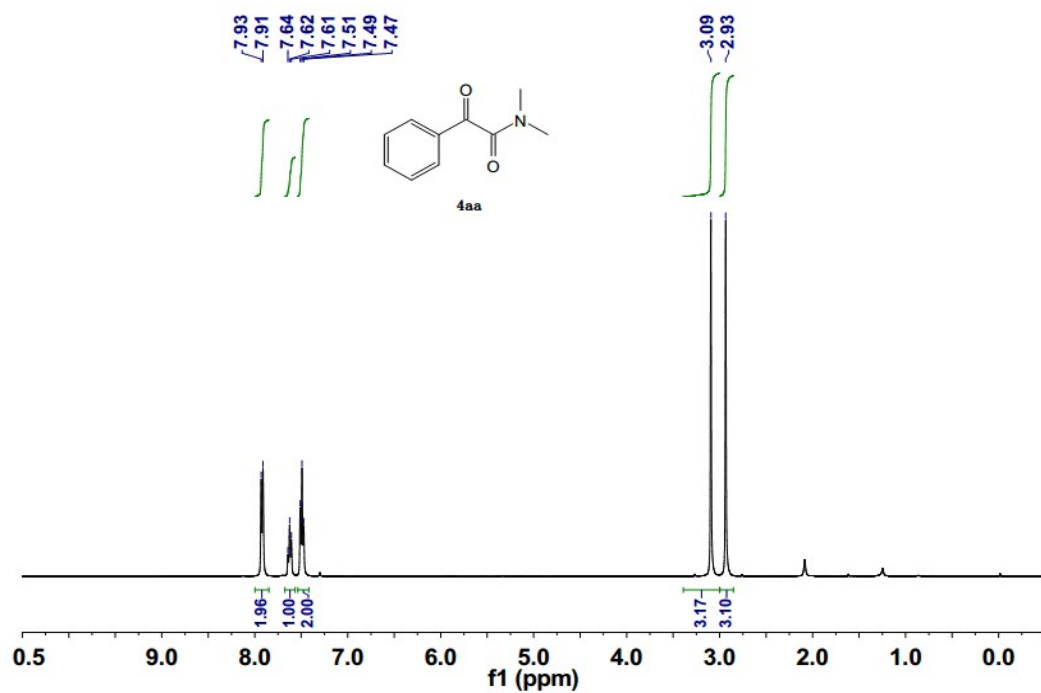
¹H NMR for N-cyclohexyl-2-oxo-2-(p-tolyl)acetamide



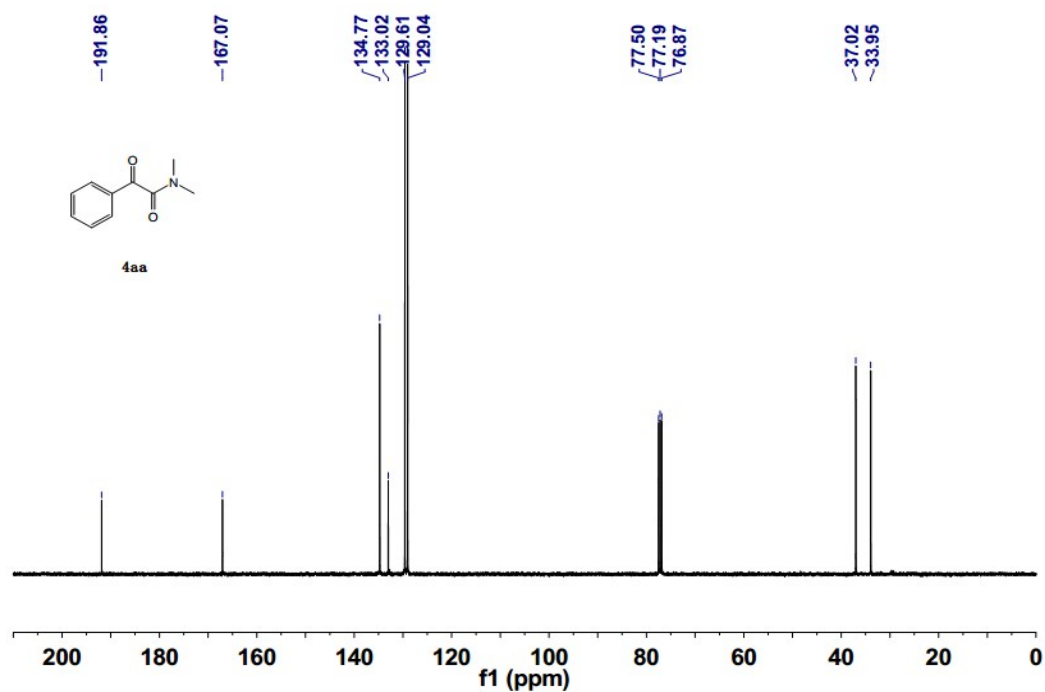
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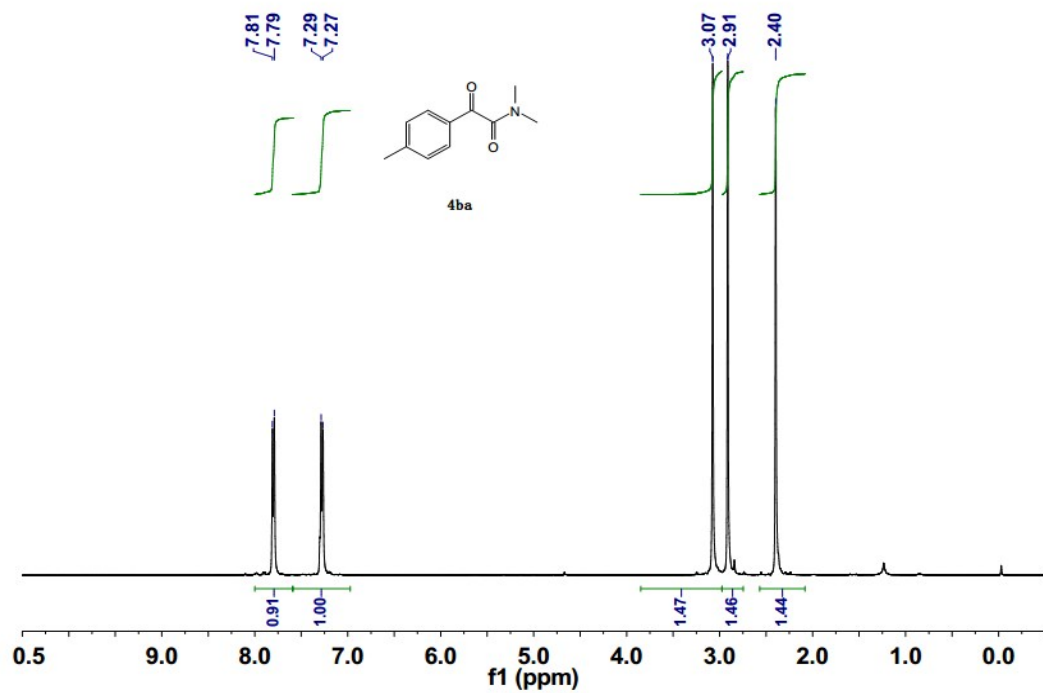
¹H NMR for N,N-dimethyl-2-oxo-2-phenylacetamide



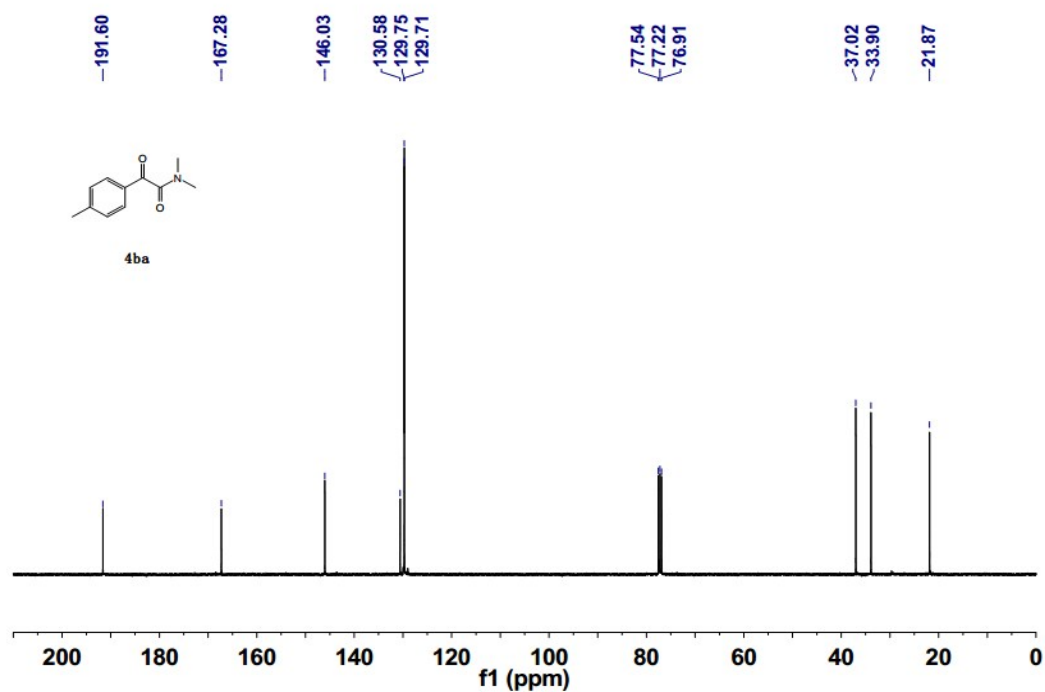
¹³C NMR for N,N-dimethyl-2-oxo-2-phenylacetamide



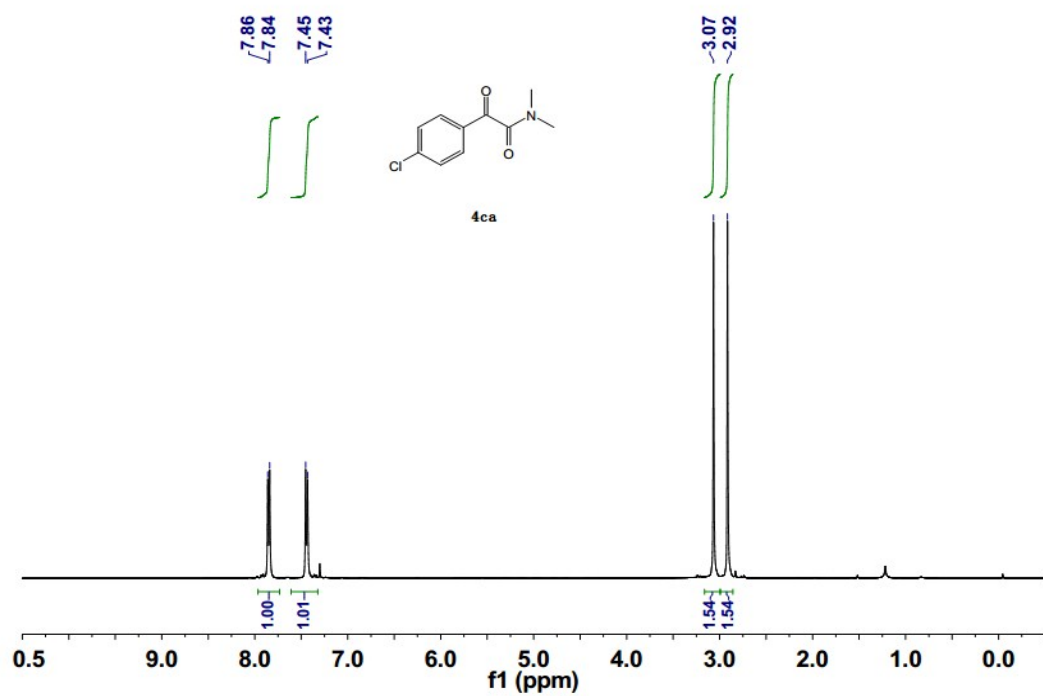
¹H NMR for N,N-dimethyl-2-oxo-2-(p-tolyl)acetamide



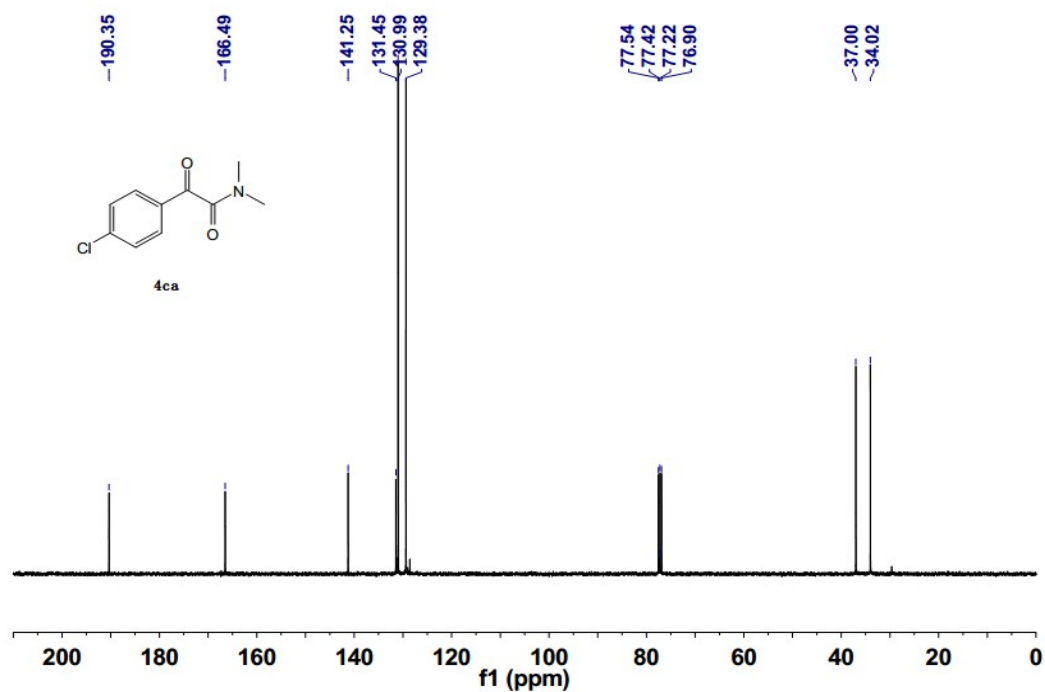
¹³C NMR for N,N-dimethyl-2-oxo-2-(p-tolyl)acetamide



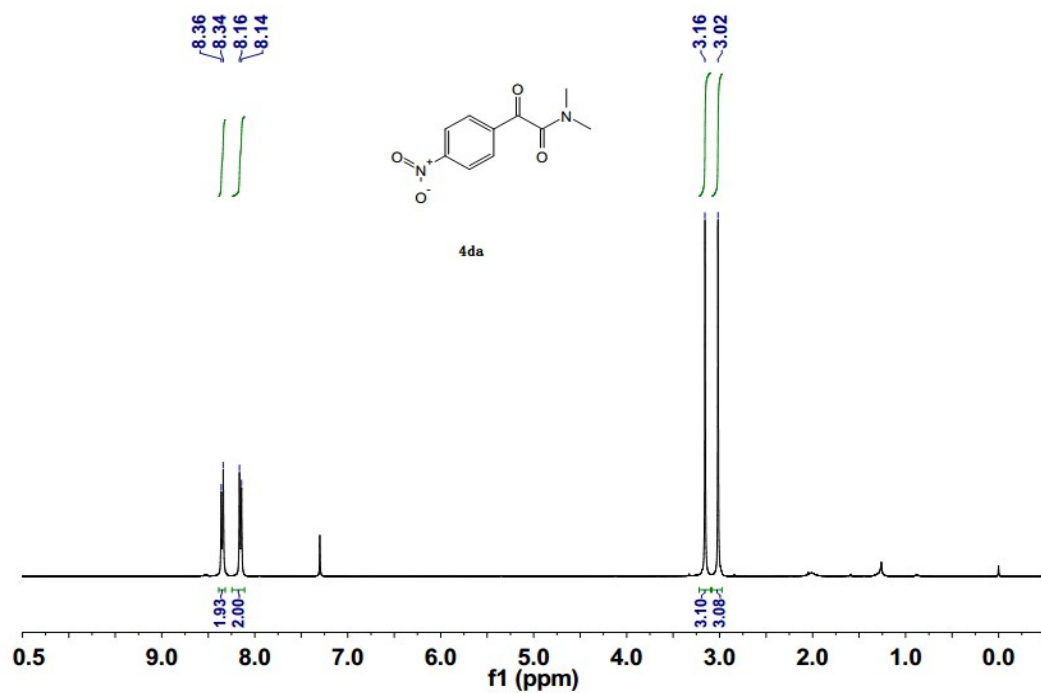
¹H NMR for 2-(4-chlorophenyl)-N,N-dimethyl-2-oxoacetamide



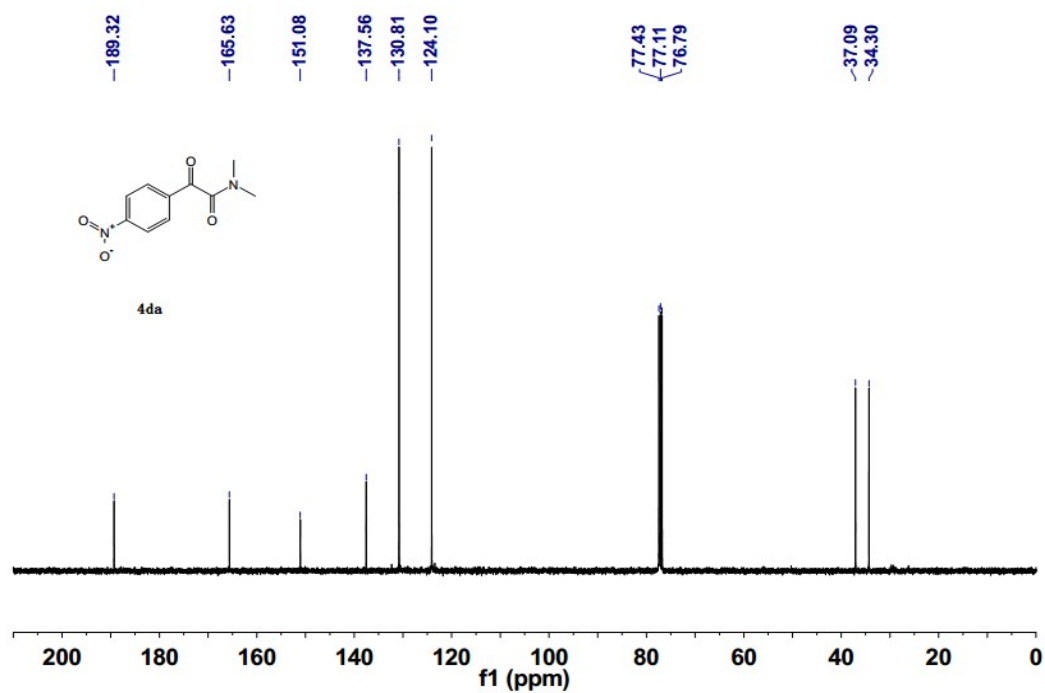
¹³C NMR for 2-(4-chlorophenyl)-N,N-dimethyl-2-oxoacetamide



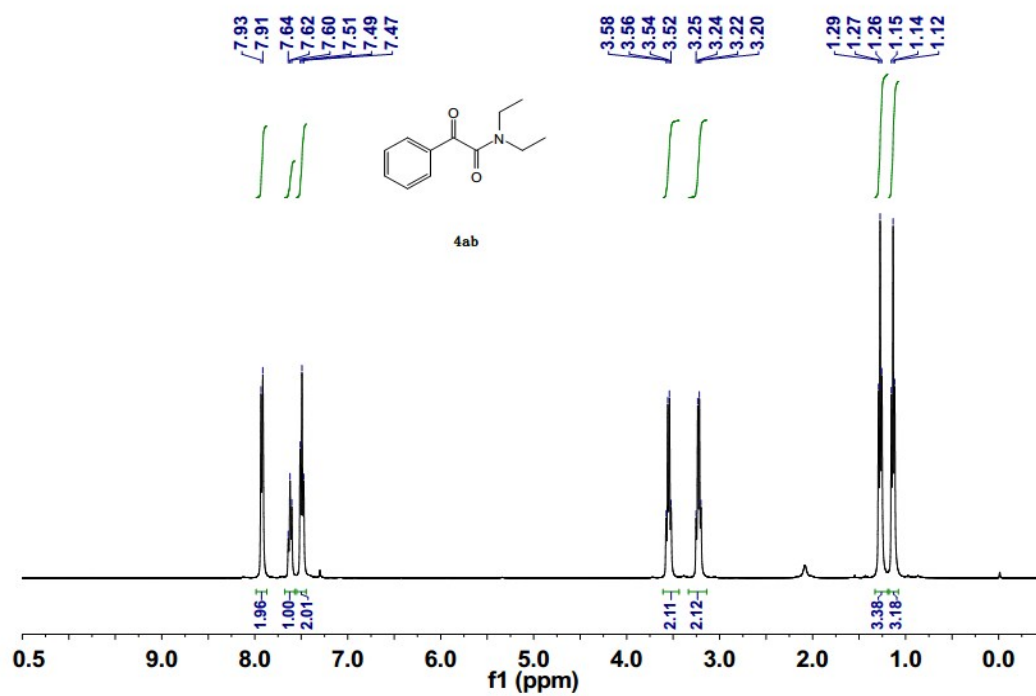
¹H NMR for N,N-dimethyl-2-(4-nitrophenyl)-2-oxoacetamide



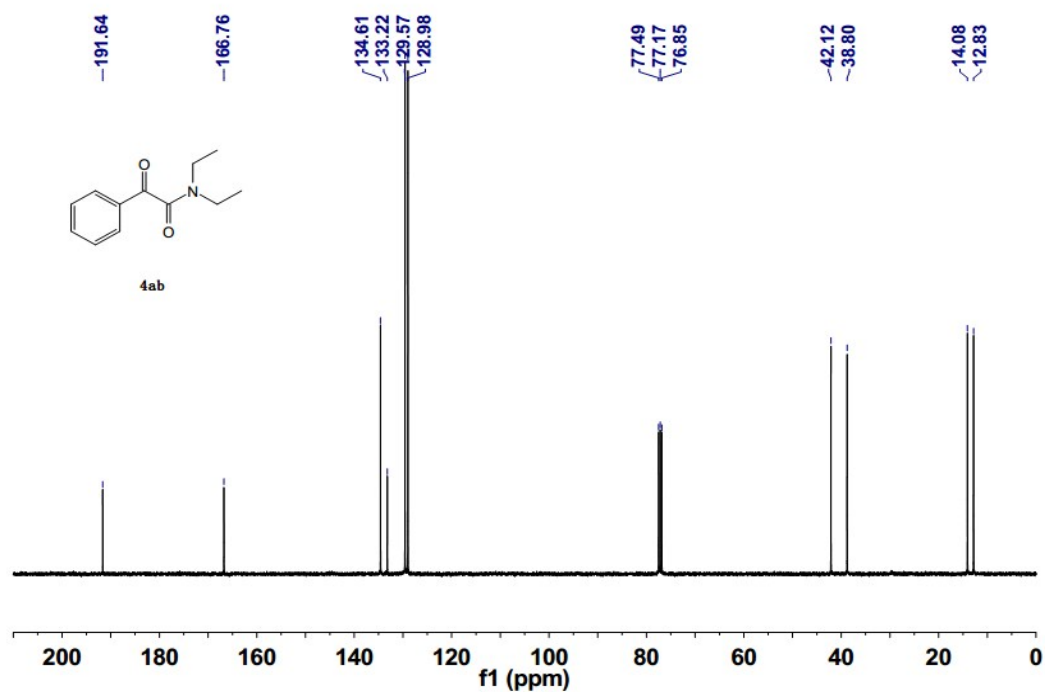
¹³C NMR for N,N-dimethyl-2-(4-nitrophenyl)-2-oxoacetamide



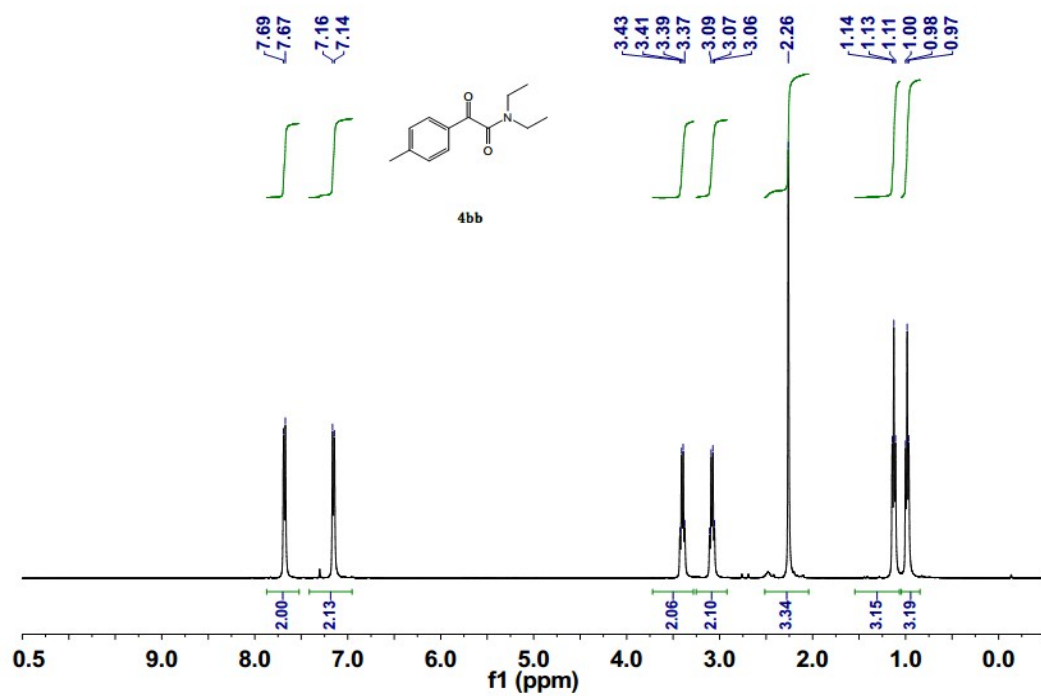
¹H NMR for N,N-diethyl-2-oxo-2-phenylacetamide



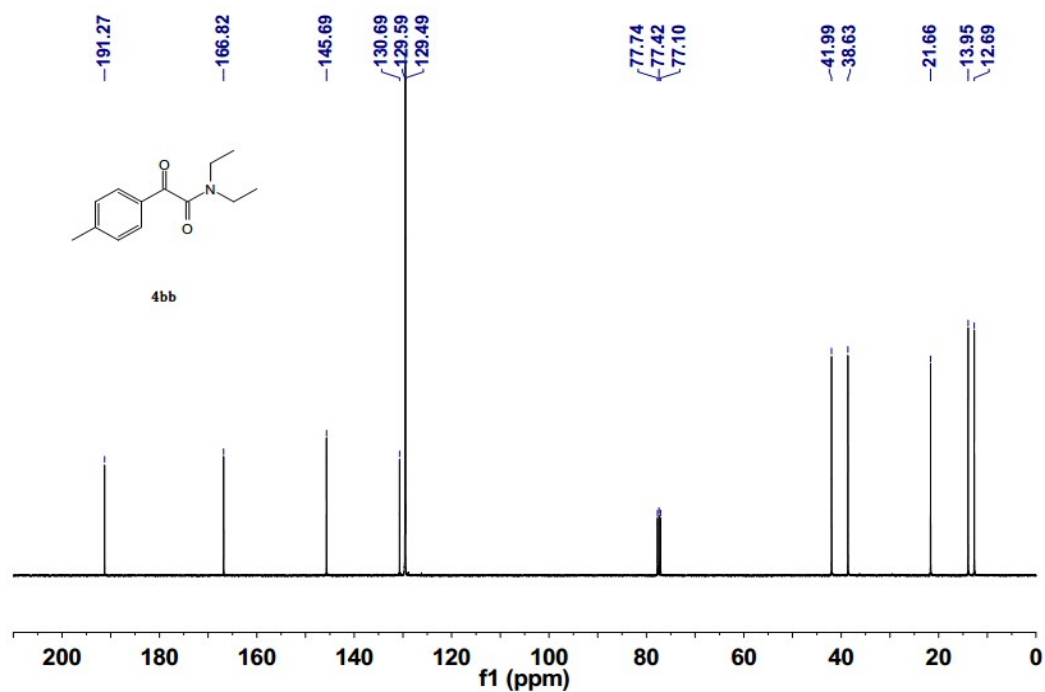
¹³C NMR for N,N-diethyl-2-oxo-2-phenylacetamide



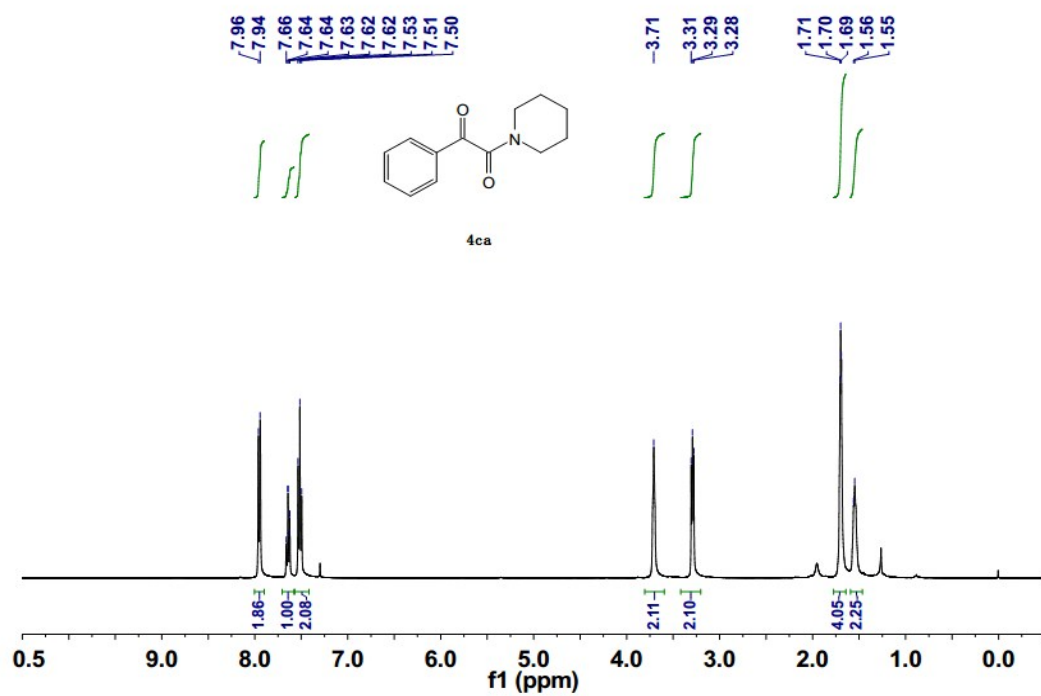
¹H NMR for N,N-diethyl-2-oxo-2-(p-tolyl)acetamide



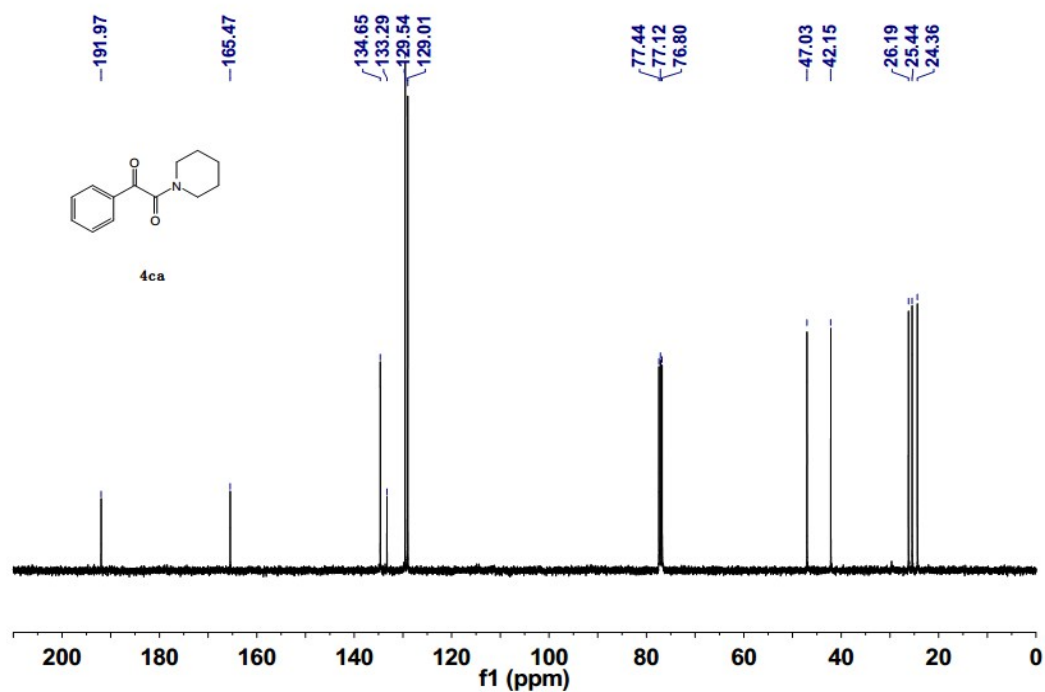
¹³C NMR for N,N-diethyl-2-oxo-2-(p-tolyl)acetamide



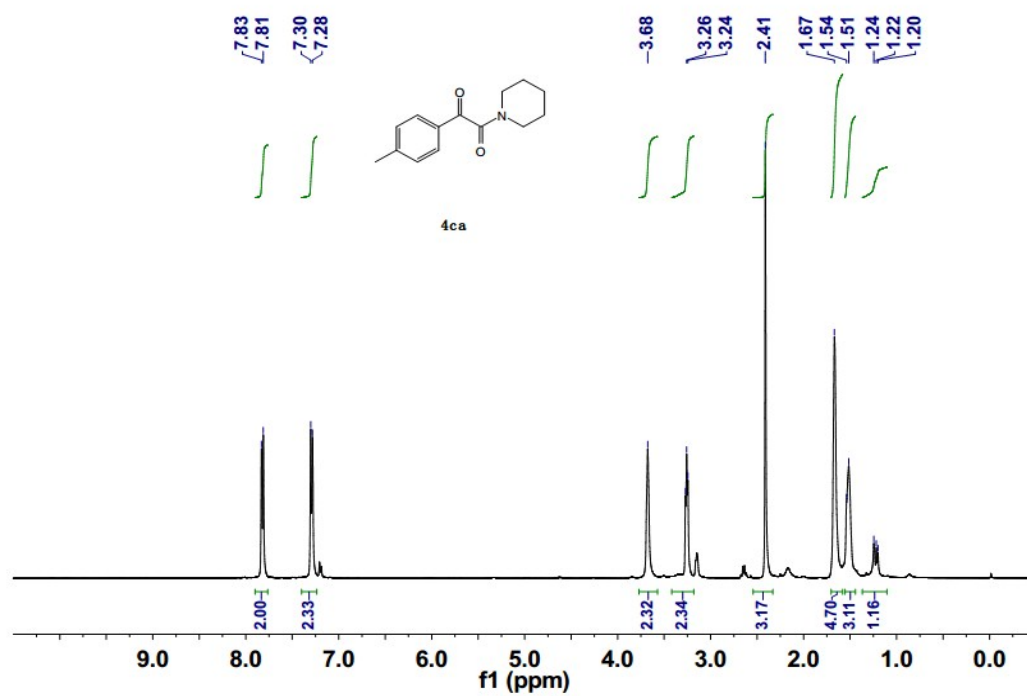
¹H NMR for 1-phenyl-2-(piperidin-1-yl)ethane-1,2-dione



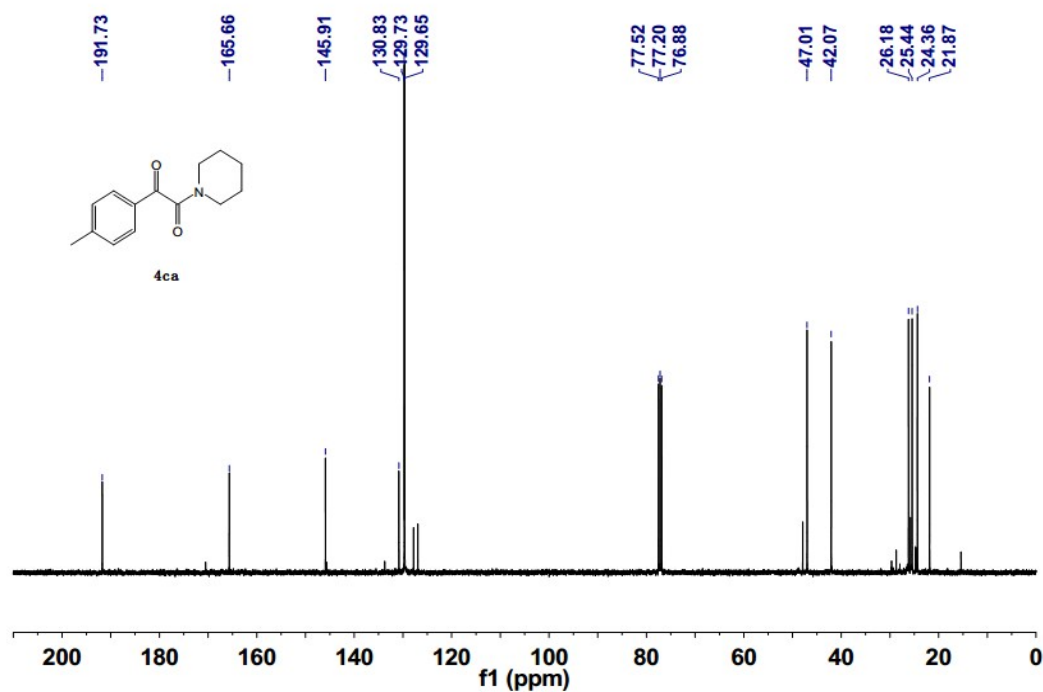
¹³C NMR for 1-phenyl-2-(piperidin-1-yl)ethane-1,2-dione



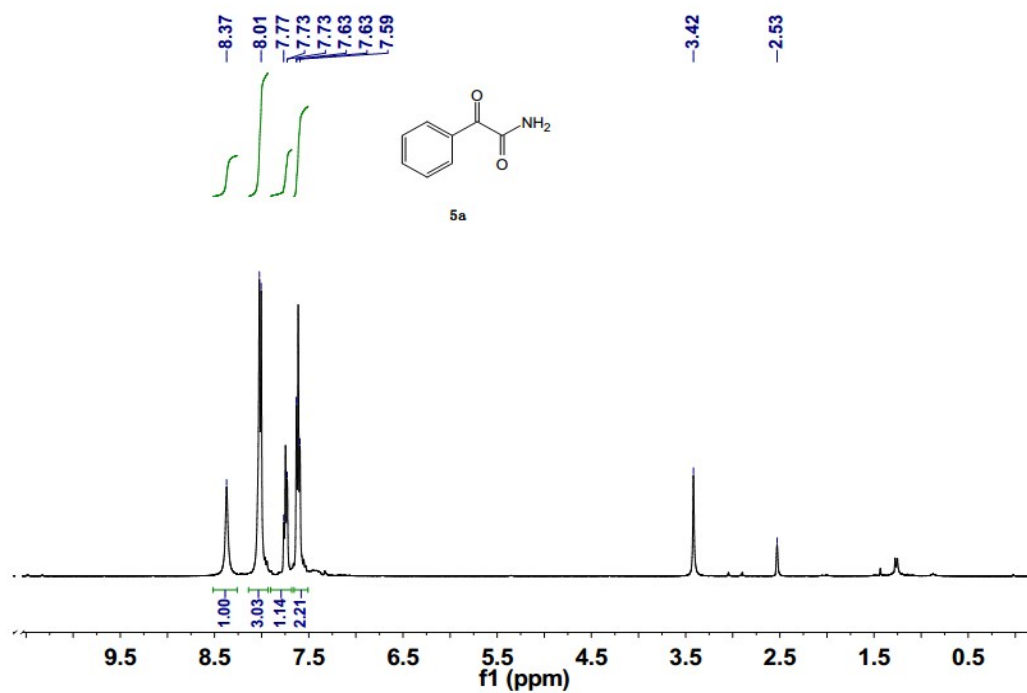
¹H NMR for 1-(piperidin-1-yl)-2-(p-tolyl)ethane-1,2-dione



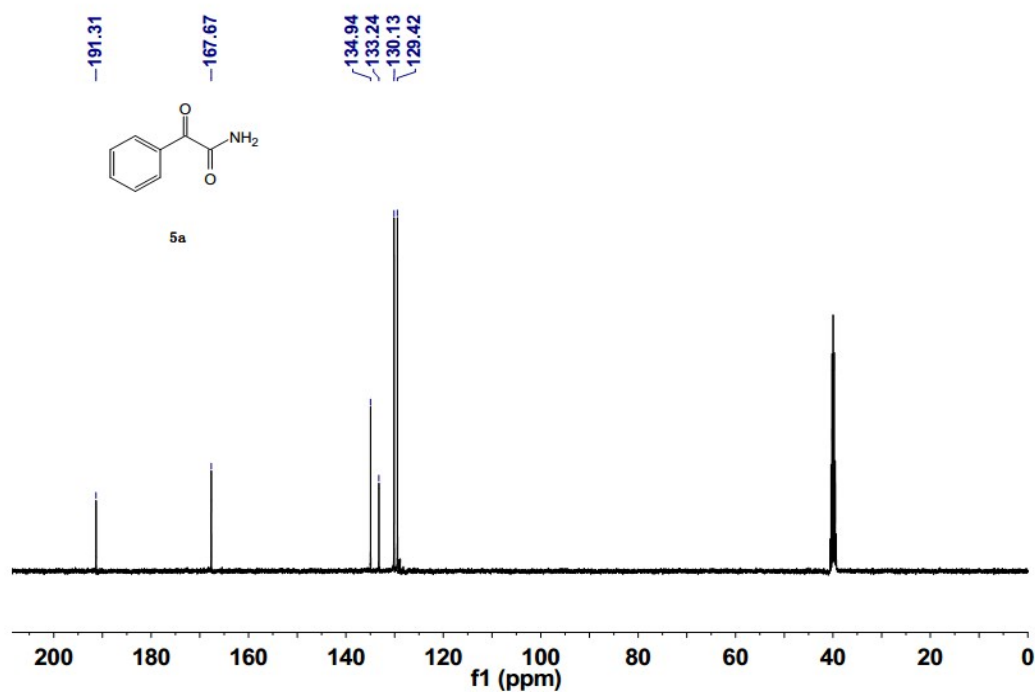
¹³C NMR for 1-(piperidin-1-yl)-2-(p-tolyl)ethane-1,2-dione



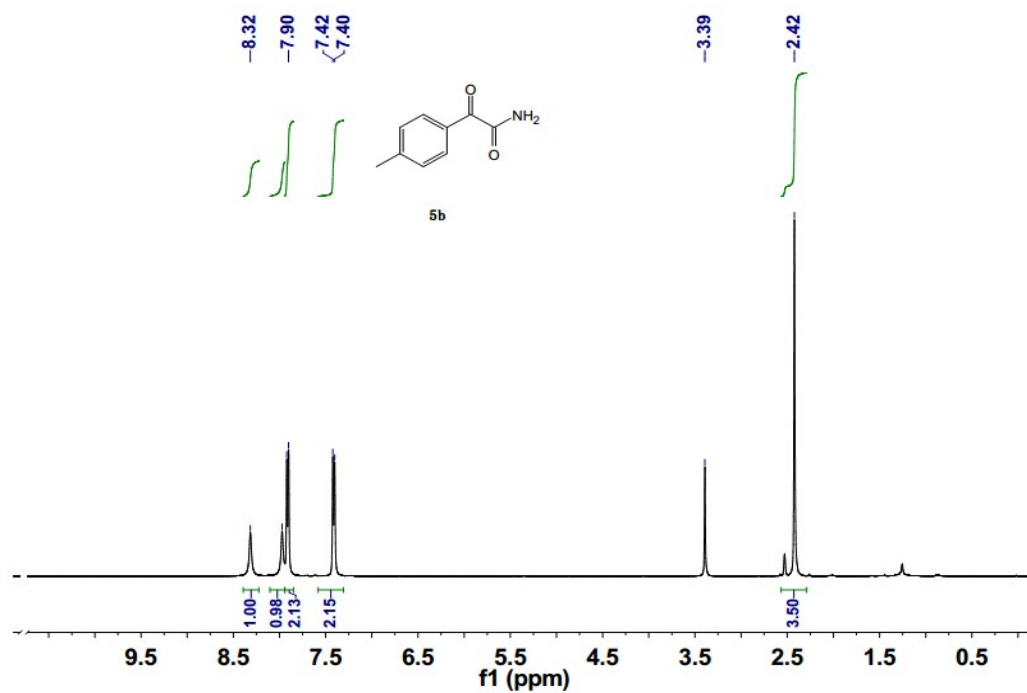
¹H NMR for 2-oxo-2-phenylacetamide



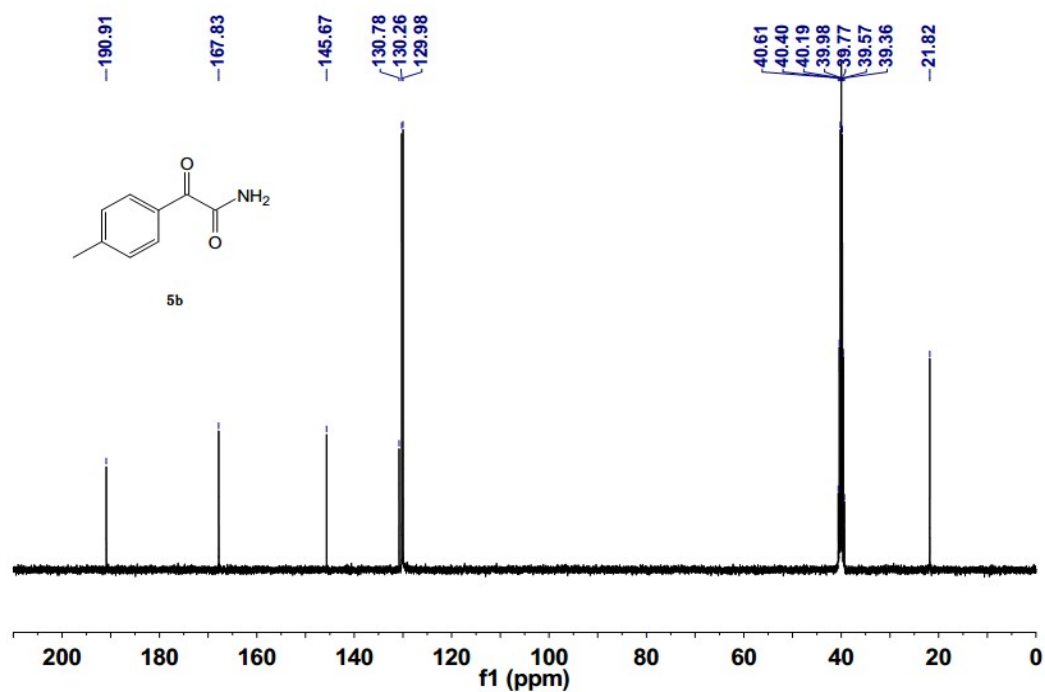
¹³C NMR for 2-oxo-2-phenylacetamide



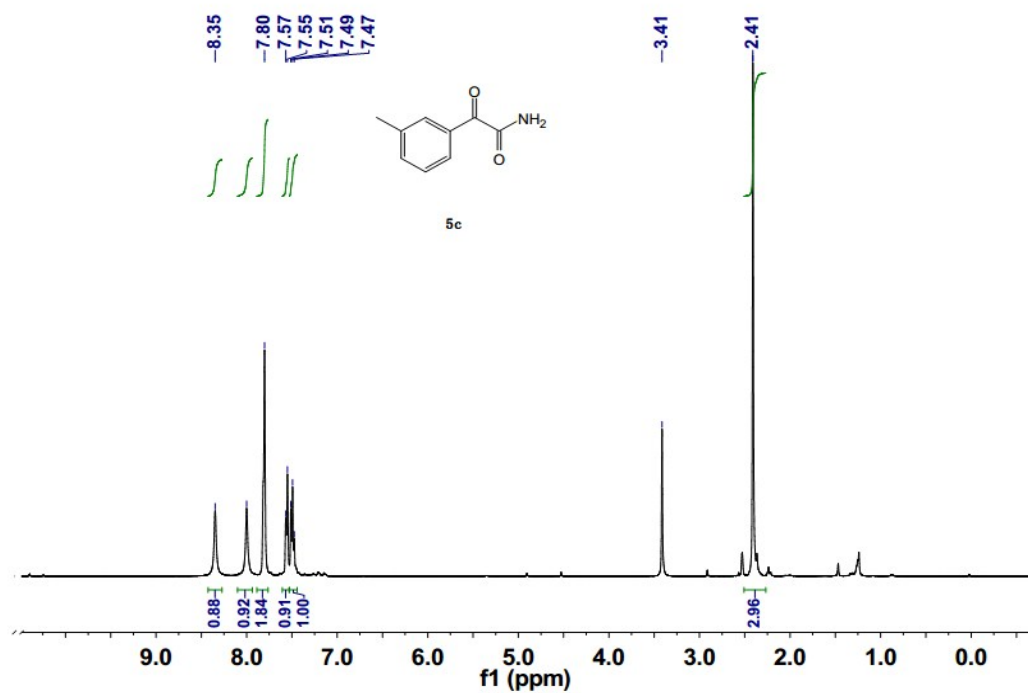
¹H NMR for 2-oxo-2-(p-tolyl)acetamide



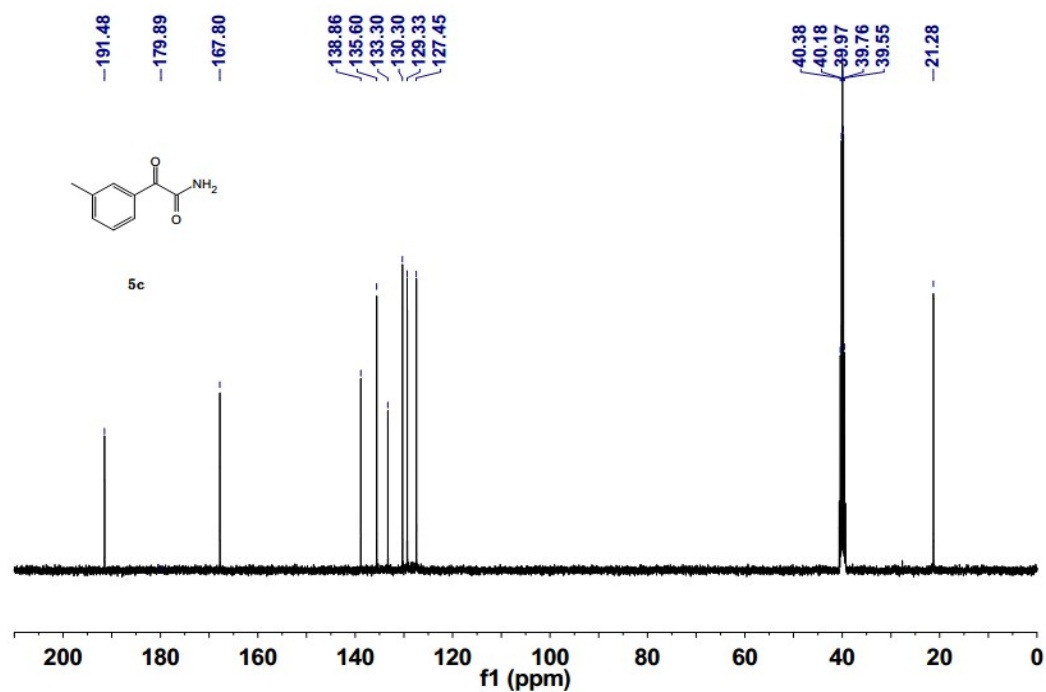
¹³C NMR for 2-oxo-2-(p-tolyl)acetamide



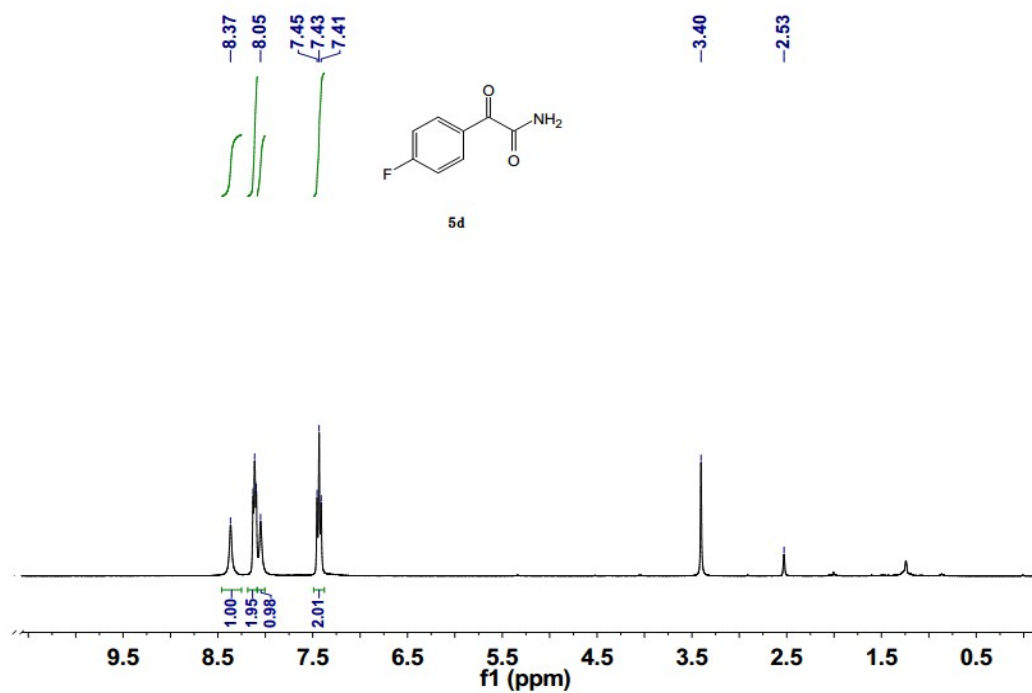
¹H NMR for 2-oxo-2-(m-tolyl)acetamide



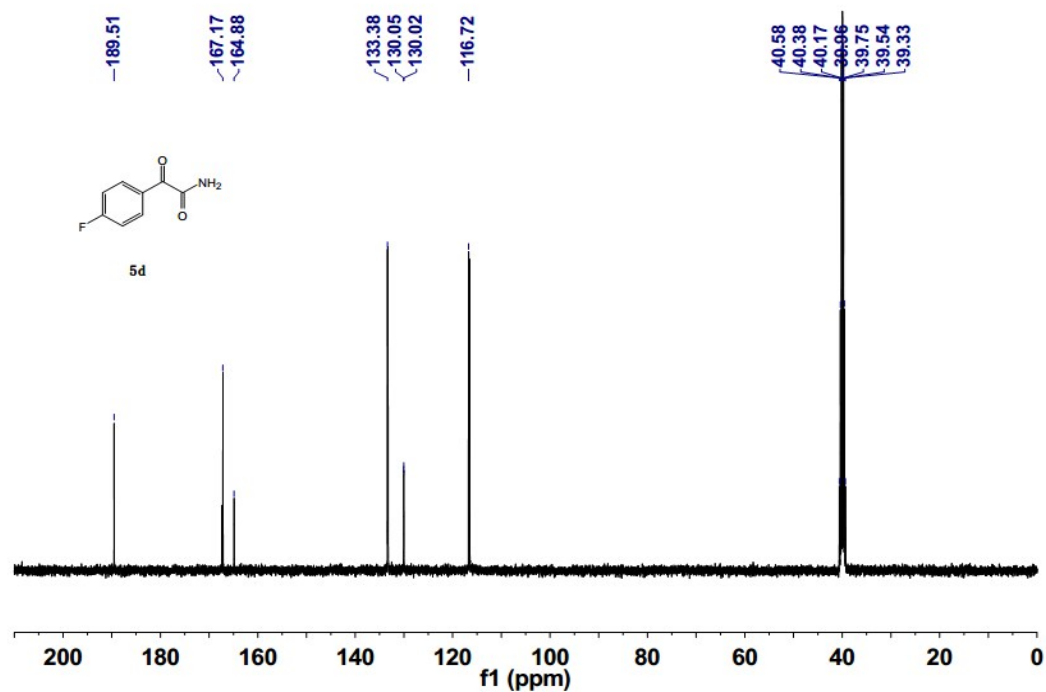
¹³C NMR for 2-oxo-2-(m-tolyl)acetamide



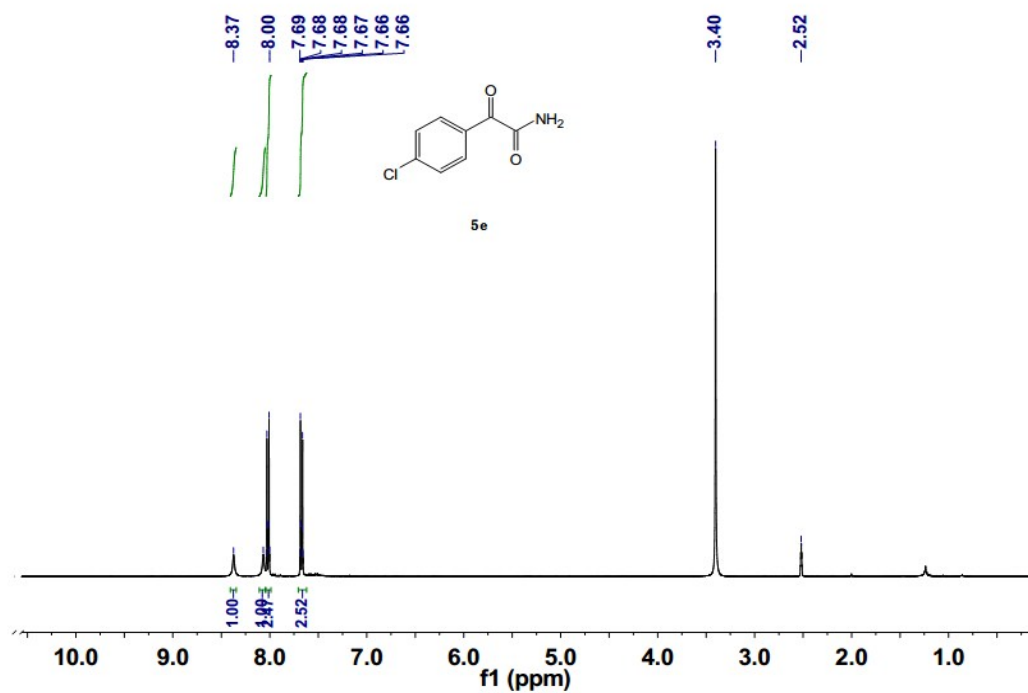
¹H NMR for 2-(4-fluorophenyl)-2-oxoacetamide



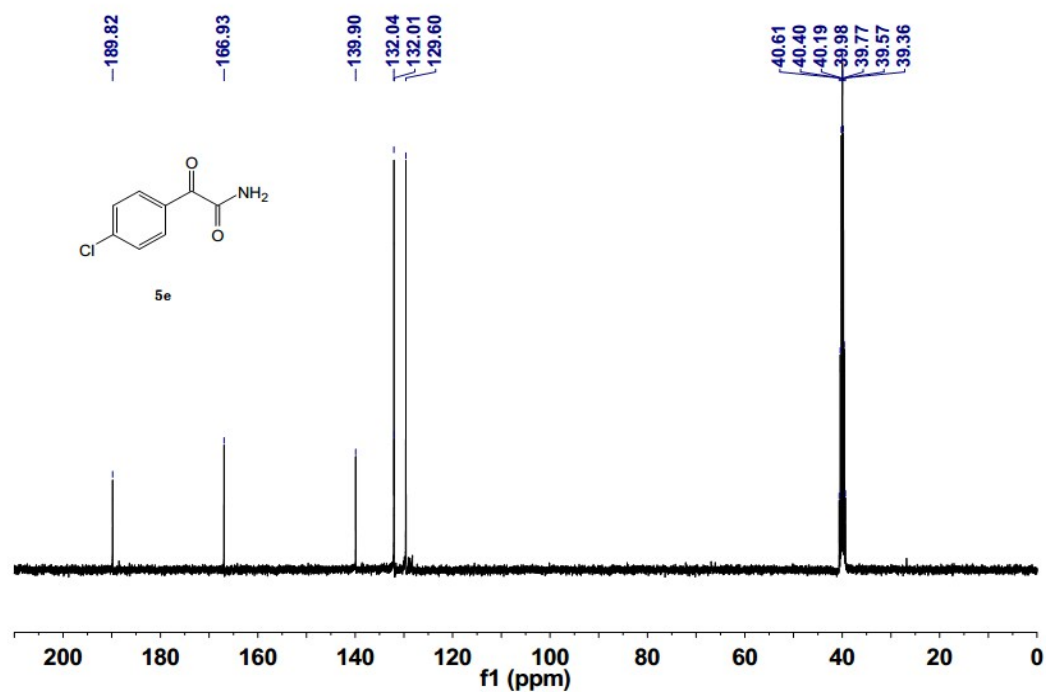
¹³C NMR for 2-(4-fluorophenyl)-2-oxoacetamide



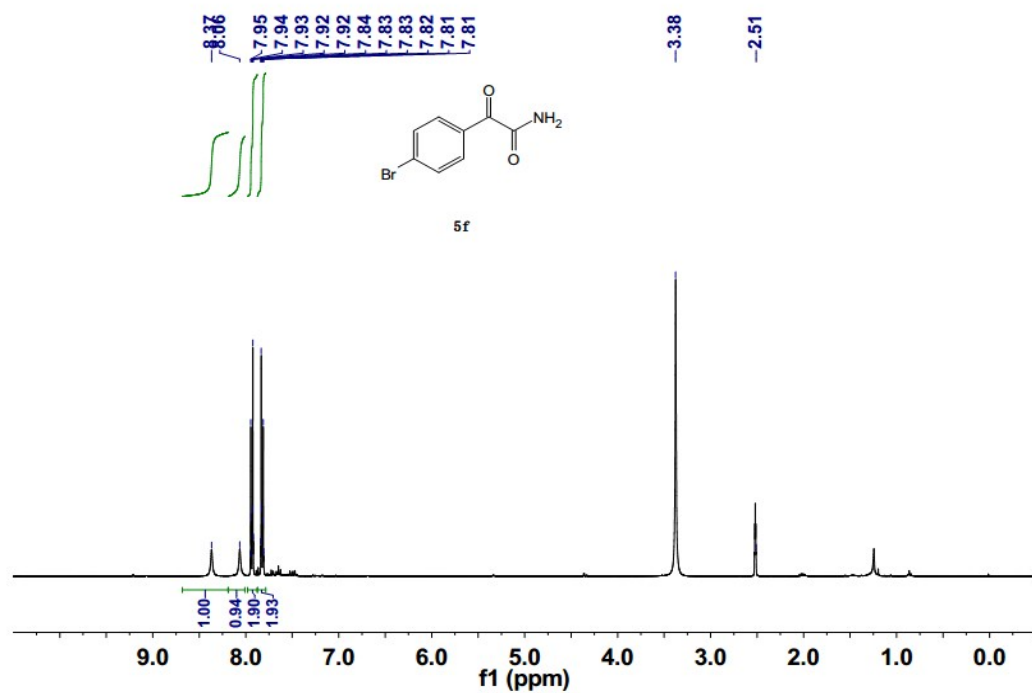
¹H NMR for 2-(4-chlorophenyl)-2-oxoacetamide



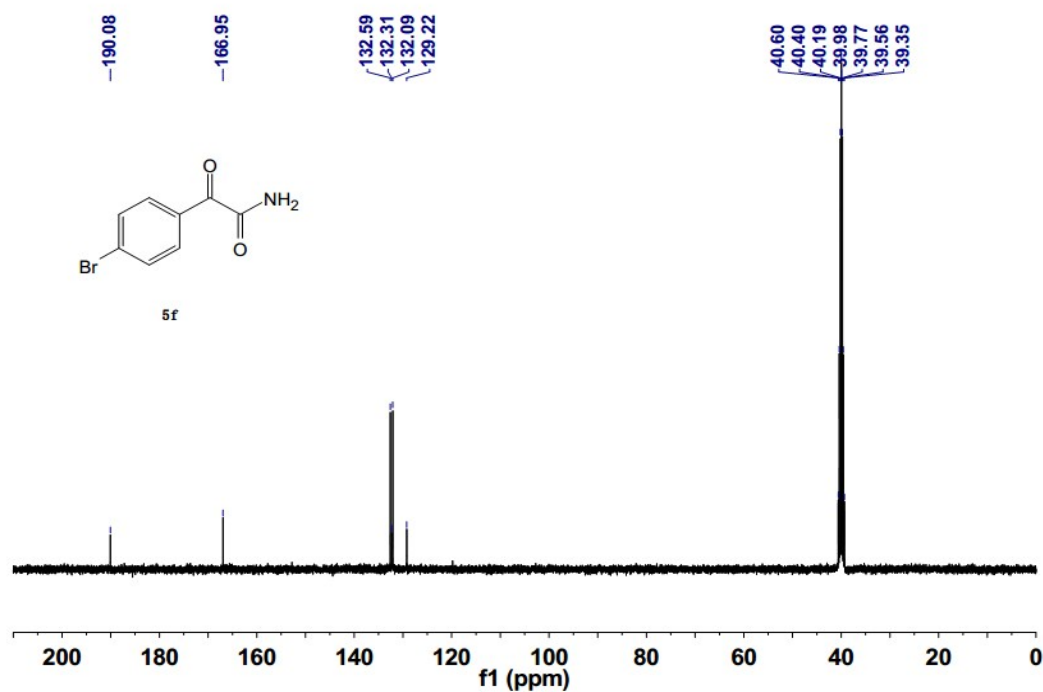
¹³C NMR for 2-(4-chlorophenyl)-2-oxoacetamide



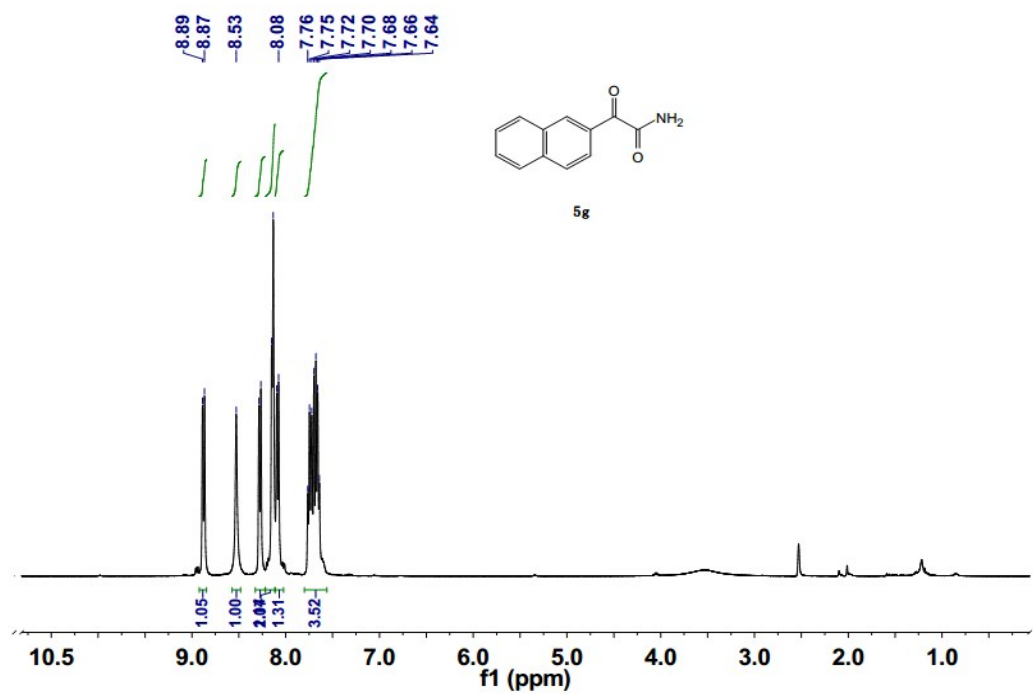
¹H NMR for 2-(4-bromophenyl)-2-oxoacetamide



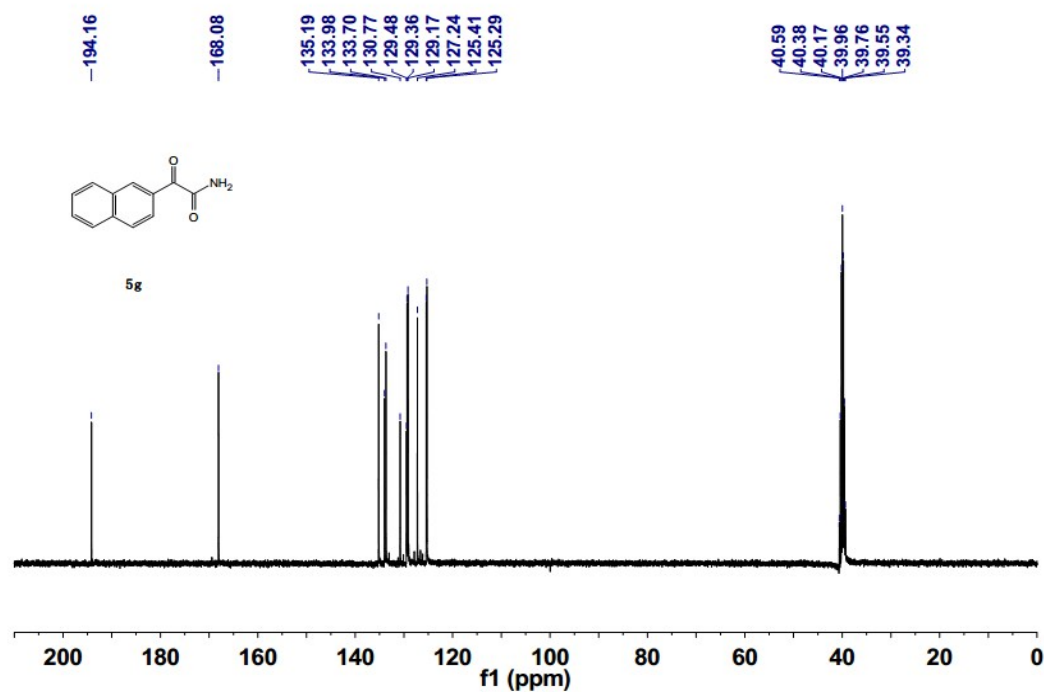
¹³C NMR for 2-(4-bromophenyl)-2-oxoacetamide



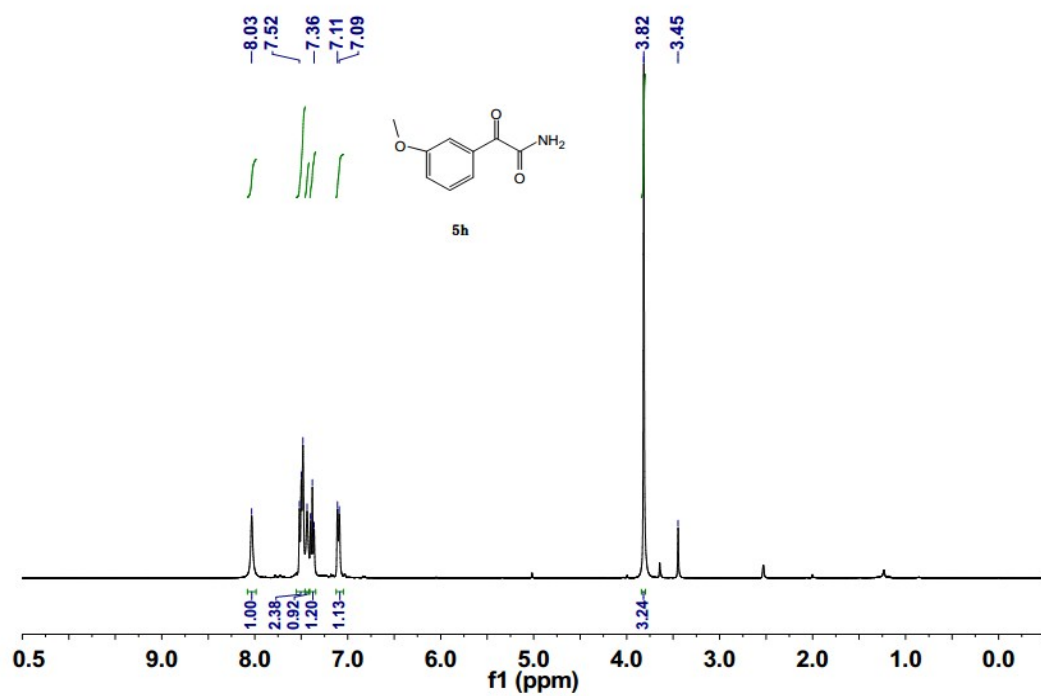
¹H NMR for 2-(naphthalen-2-yl)-2-oxoacetamide



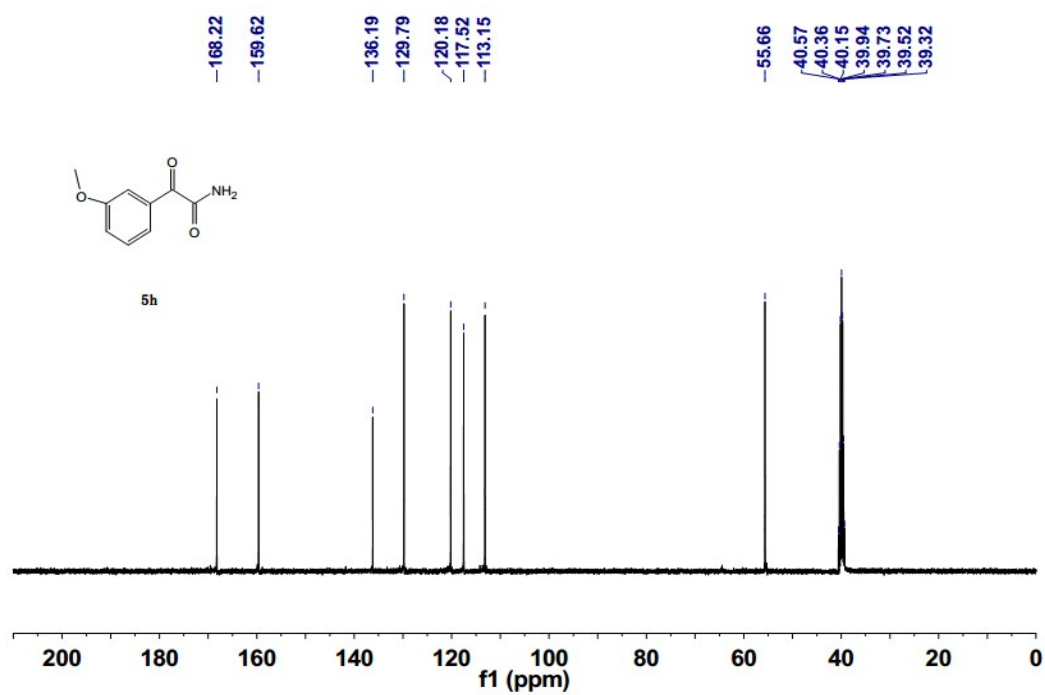
¹³C NMR for 2-(naphthalen-2-yl)-2-oxoacetamide



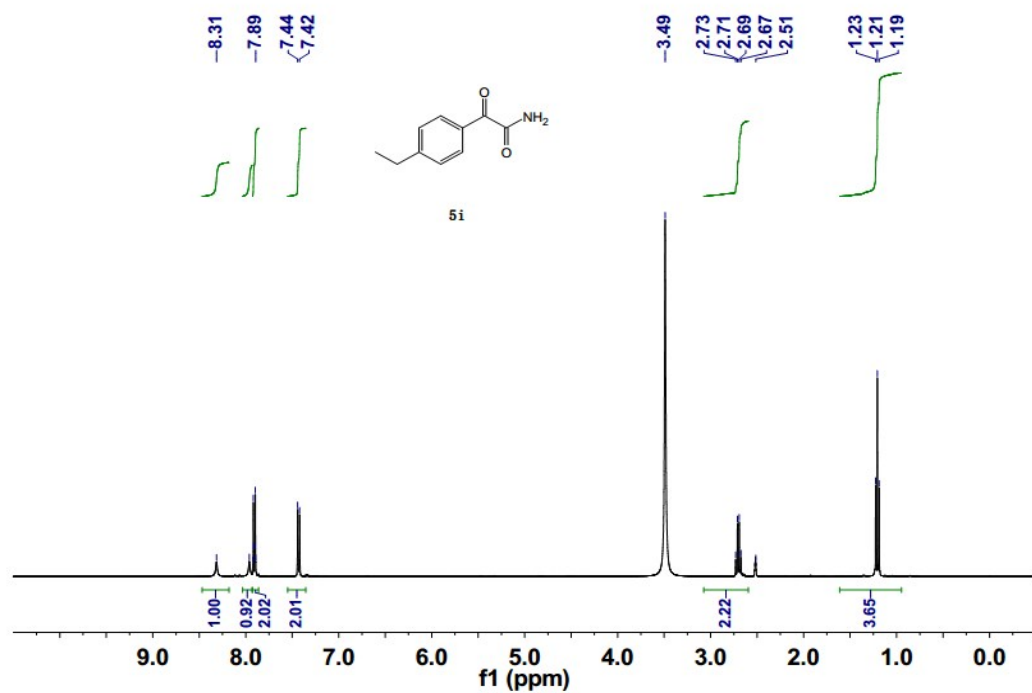
¹H NMR for 2-(3-methoxyphenyl)-2-oxoacetamide



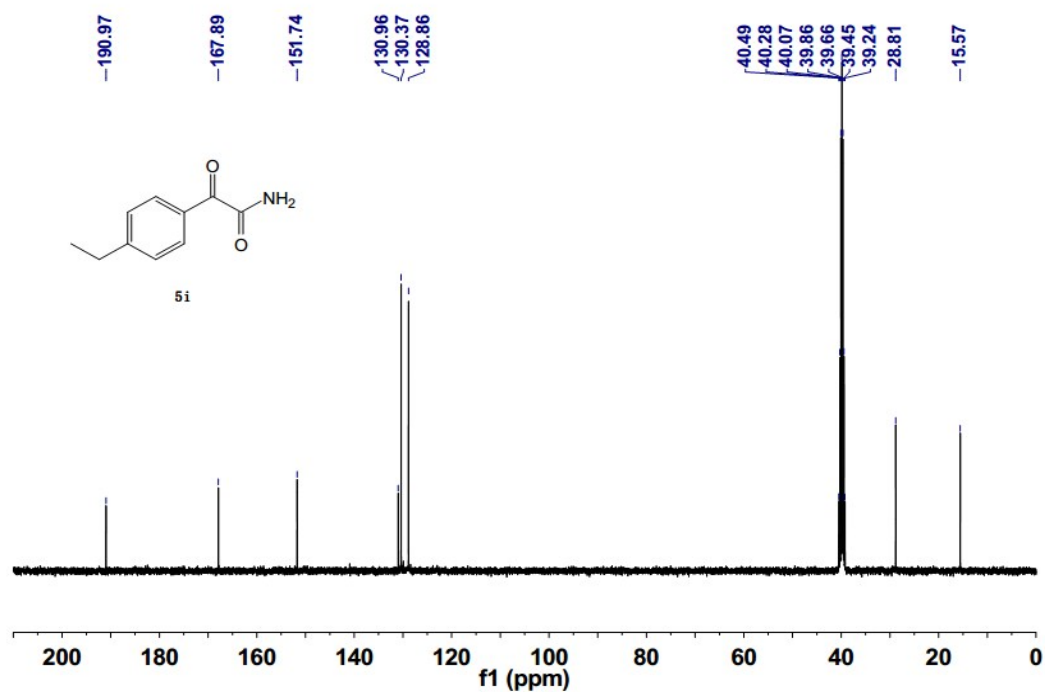
¹³C NMR for 2-(3-methoxyphenyl)-2-oxoacetamide



¹H NMR for 2-(4-ethylphenyl)-2-oxoacetamide

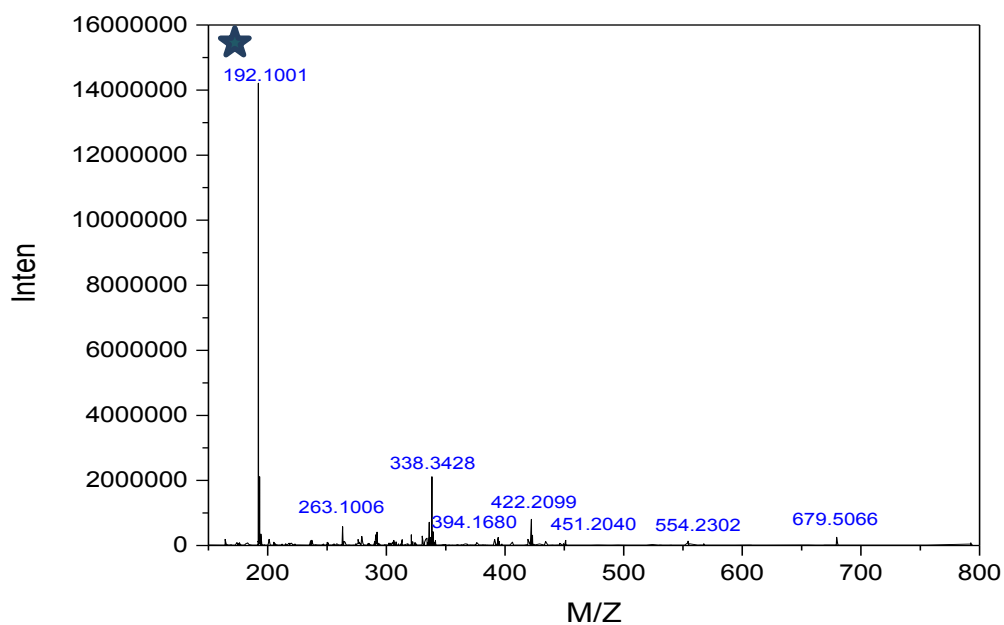


¹³C NMR for 2-(4-ethylphenyl)-2-oxoacetamide

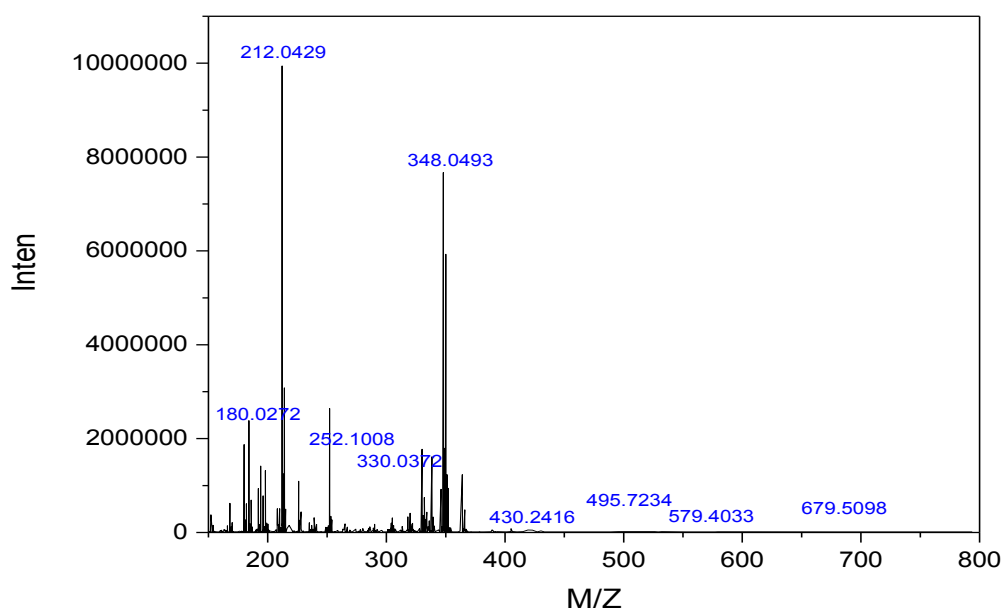


2. HRMS spectrum for isolated products

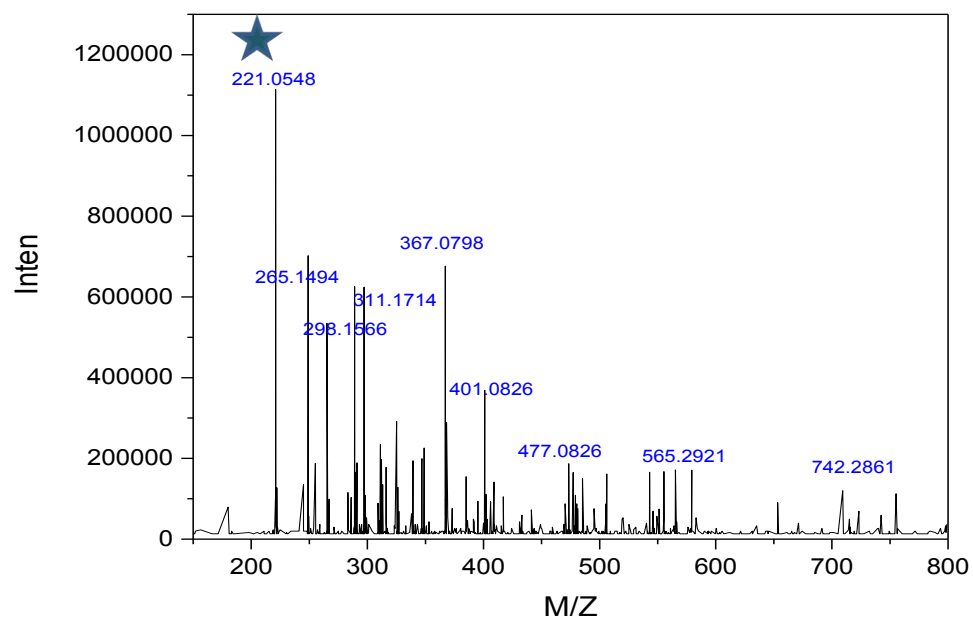
N-ethyl-2-oxo-2-(*p*-tolyl)acetamide (3bb)



2-(4-chlorophenyl)-*N*-ethyl-2-oxoacetamide



***N*-ethyl-2-(4-nitrophenyl)-2-oxoacetamide**



***2*-(4-ethylphenyl)-2-oxoacetamide**

