Electronic Supplementary Material (ESI) for Organic & Biomolecular Chemistry.

Methyl 5-MeO-anthranilate, a minimalist fluorogenic probe for sensing cellular aldehydic load

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CONTENT:

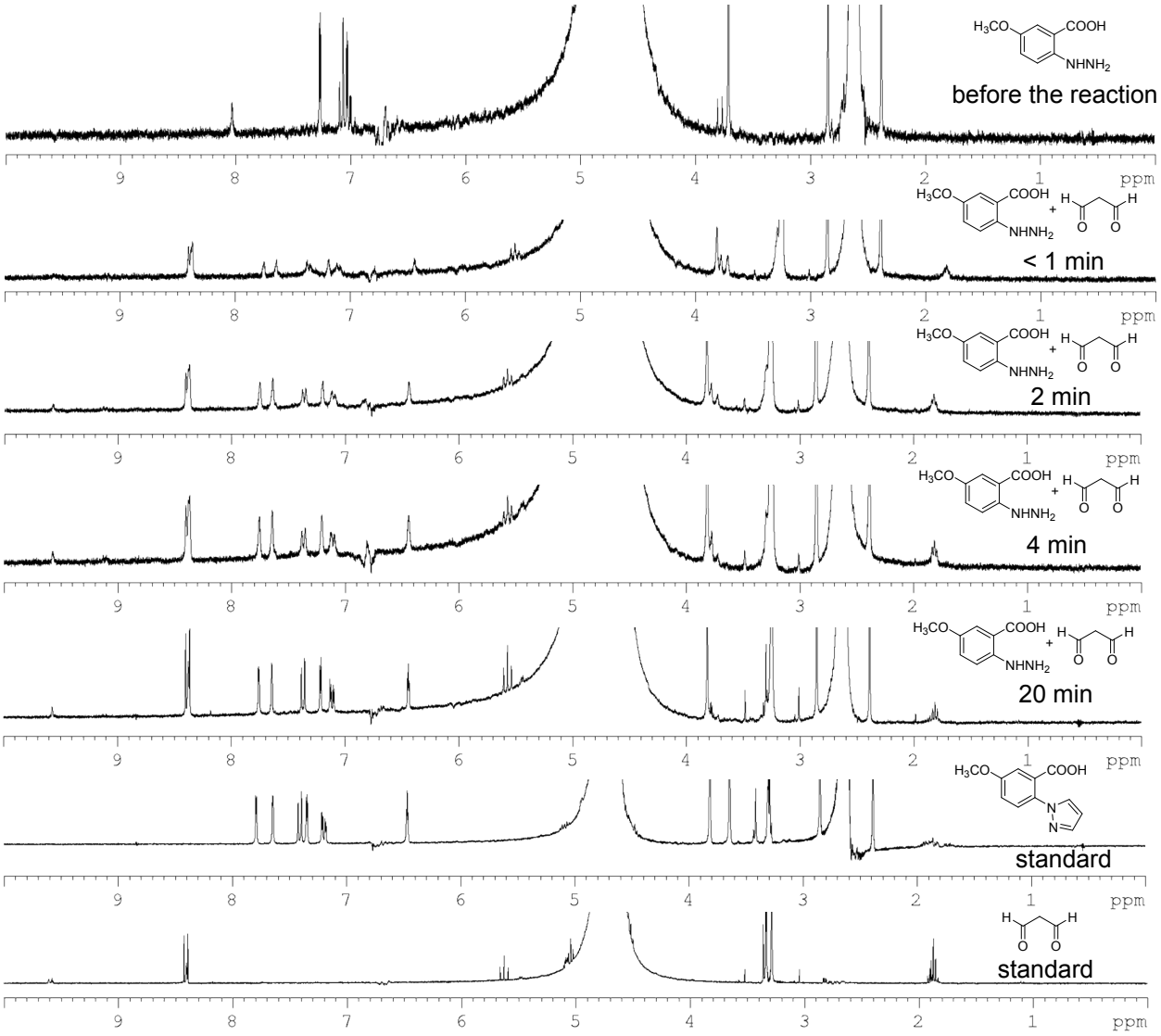

Figure ESI1: Detailed NMR analysis of the reactions between 5-MeO-*N*-aminoanthranilic acid (**2a**) and MDA, full spectral range view

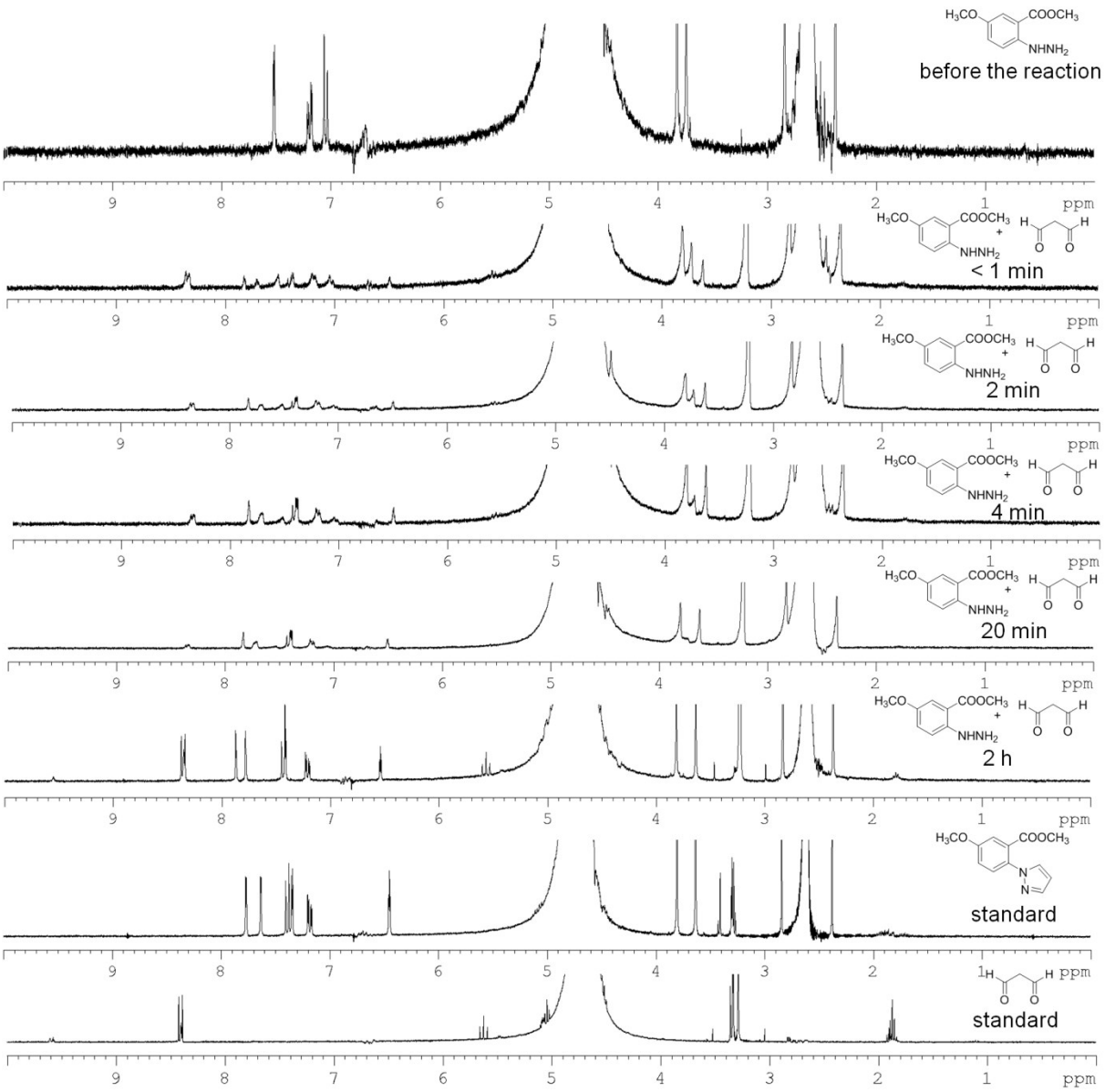

Figure ESI2: Detailed NMR analysis of the reactions between methyl 5-MeO-*N*-aminoanthranilate (**2b**) and MDA, full spectral range view

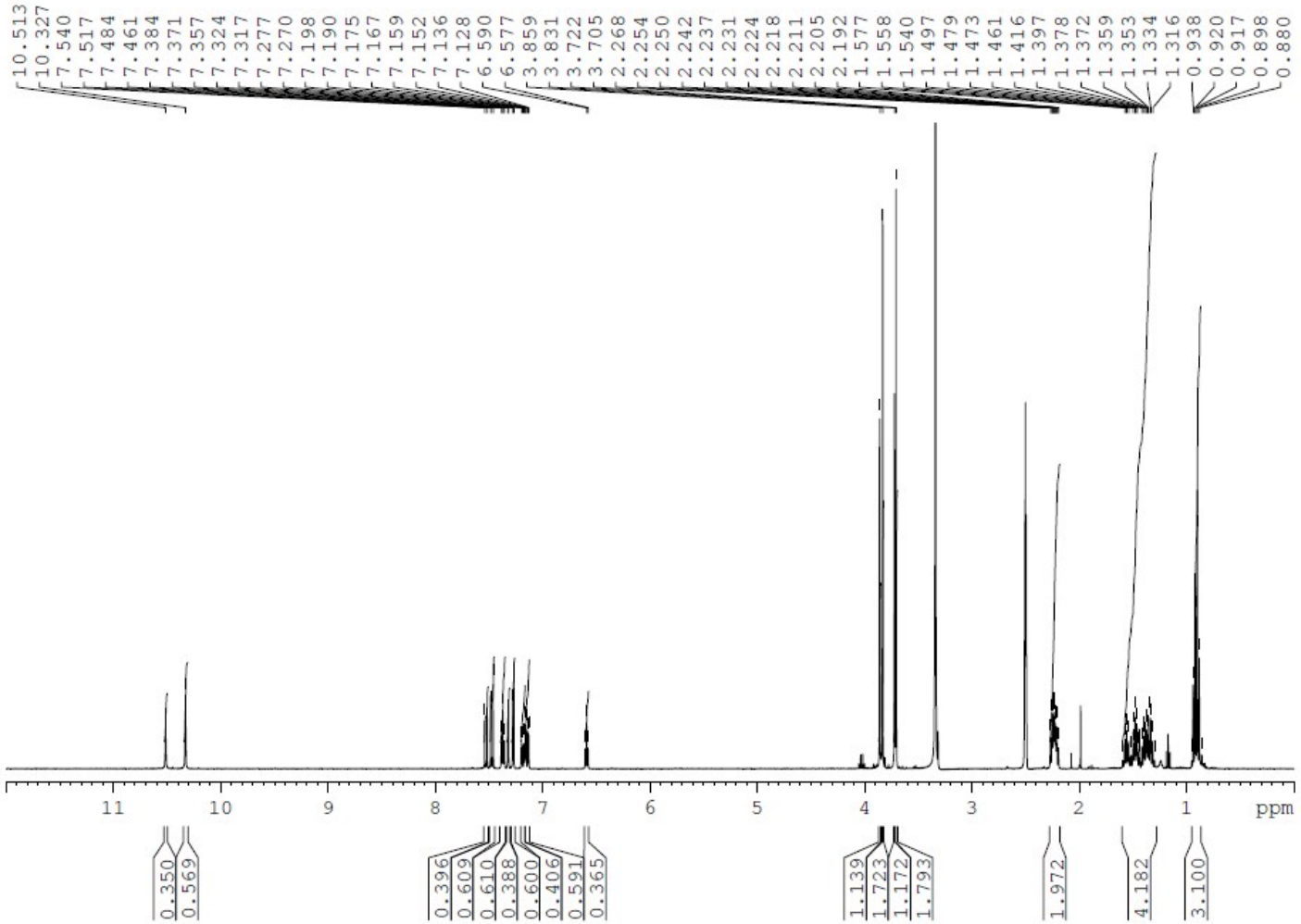

Figure ESI3: ^{1}H NMR spectrum of hydrazone **3f** derived from pentanal, full view

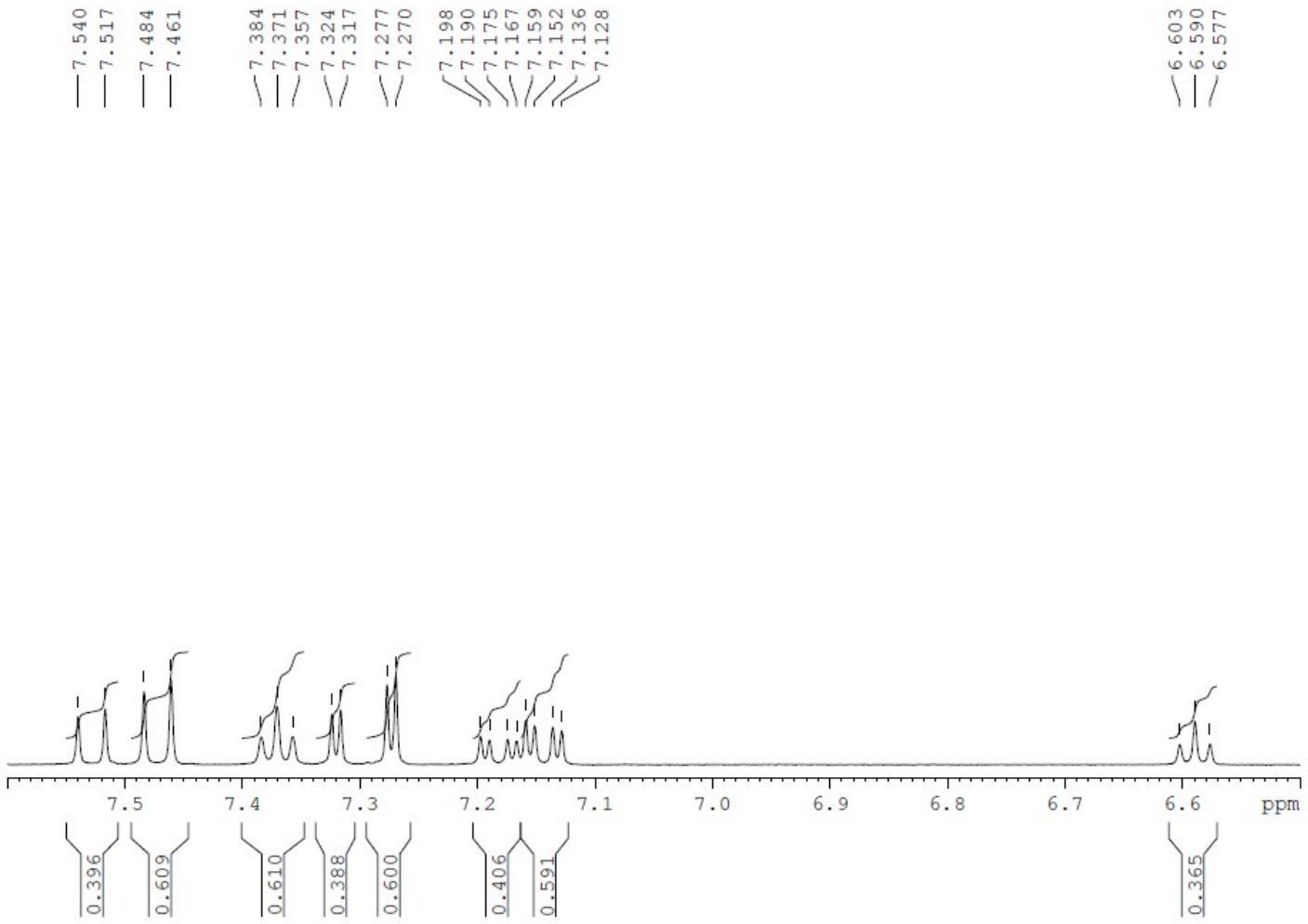

Figure ESI4: ^{1}H NMR spectrum of hydrazone **3f** derived from pentanal, expanded view

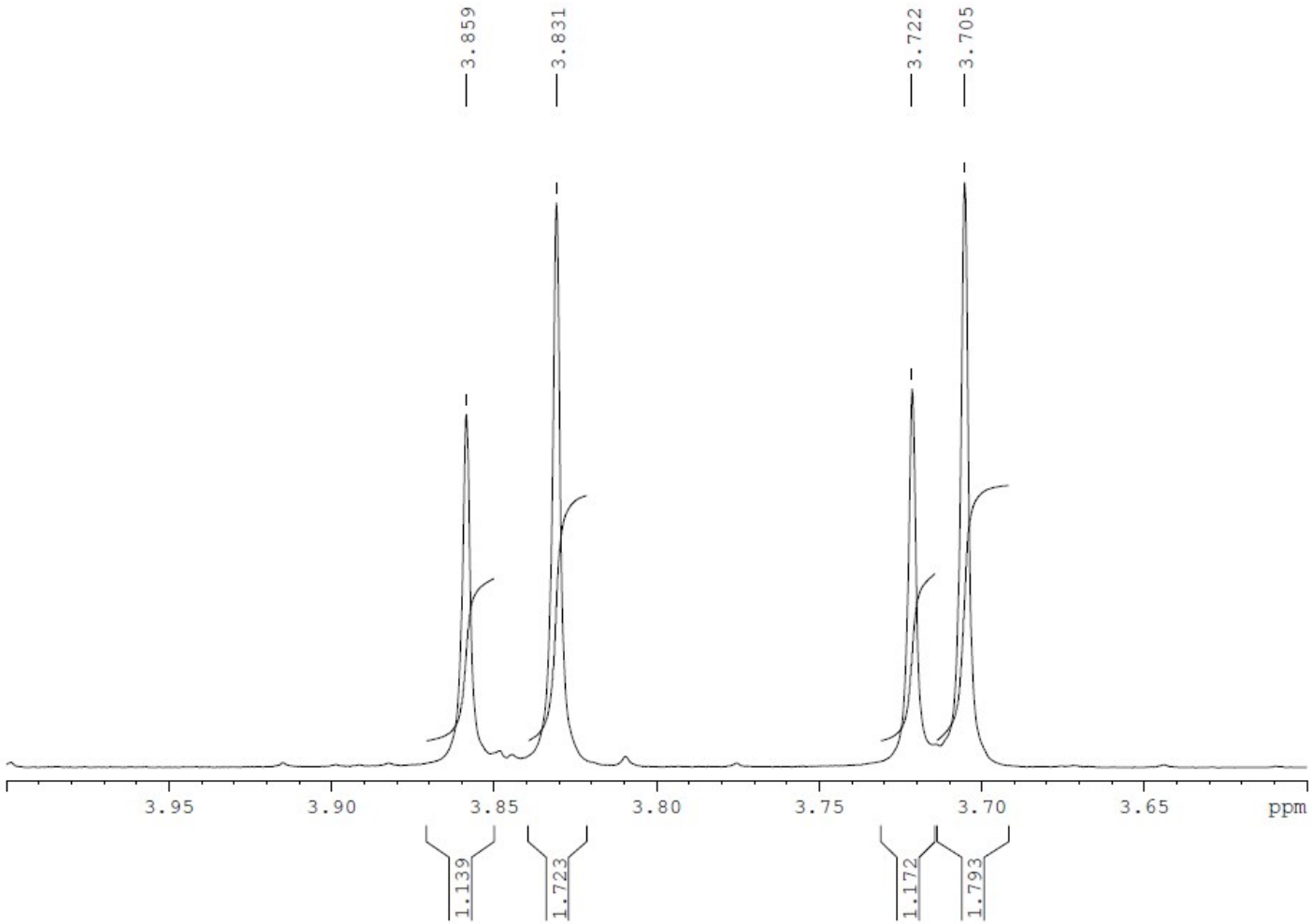

Figure ESI5: ^{1}H NMR spectrum of hydrazone **3f** derived from pentanal, expanded view

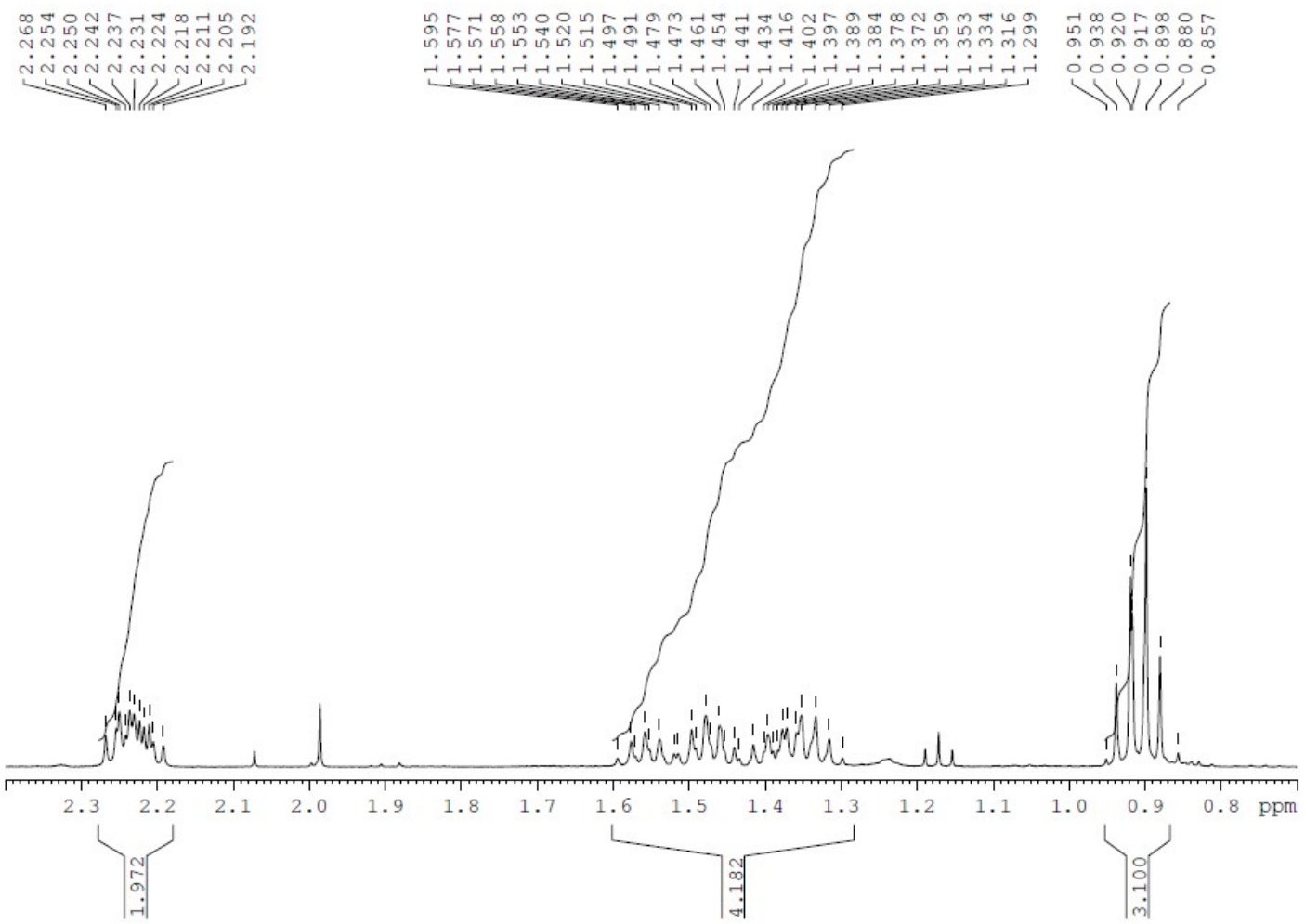

Figure ESI6: ^{1}H NMR spectrum of hydrazone **3f** derived from pentanal, expanded view

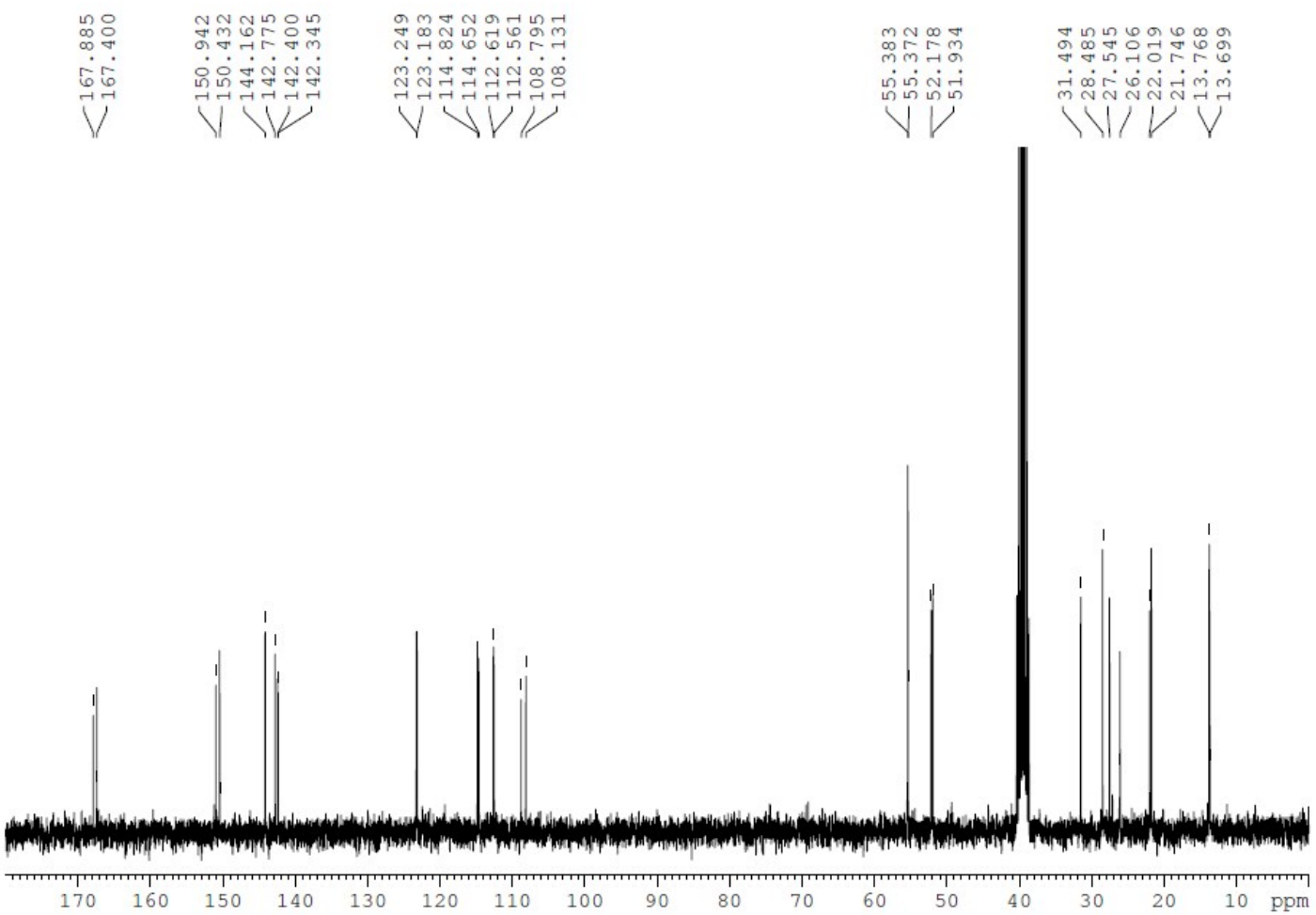

Figure ESI7: ^{13}C NMR spectrum of hydrazone **3f** derived from pentanal, full view

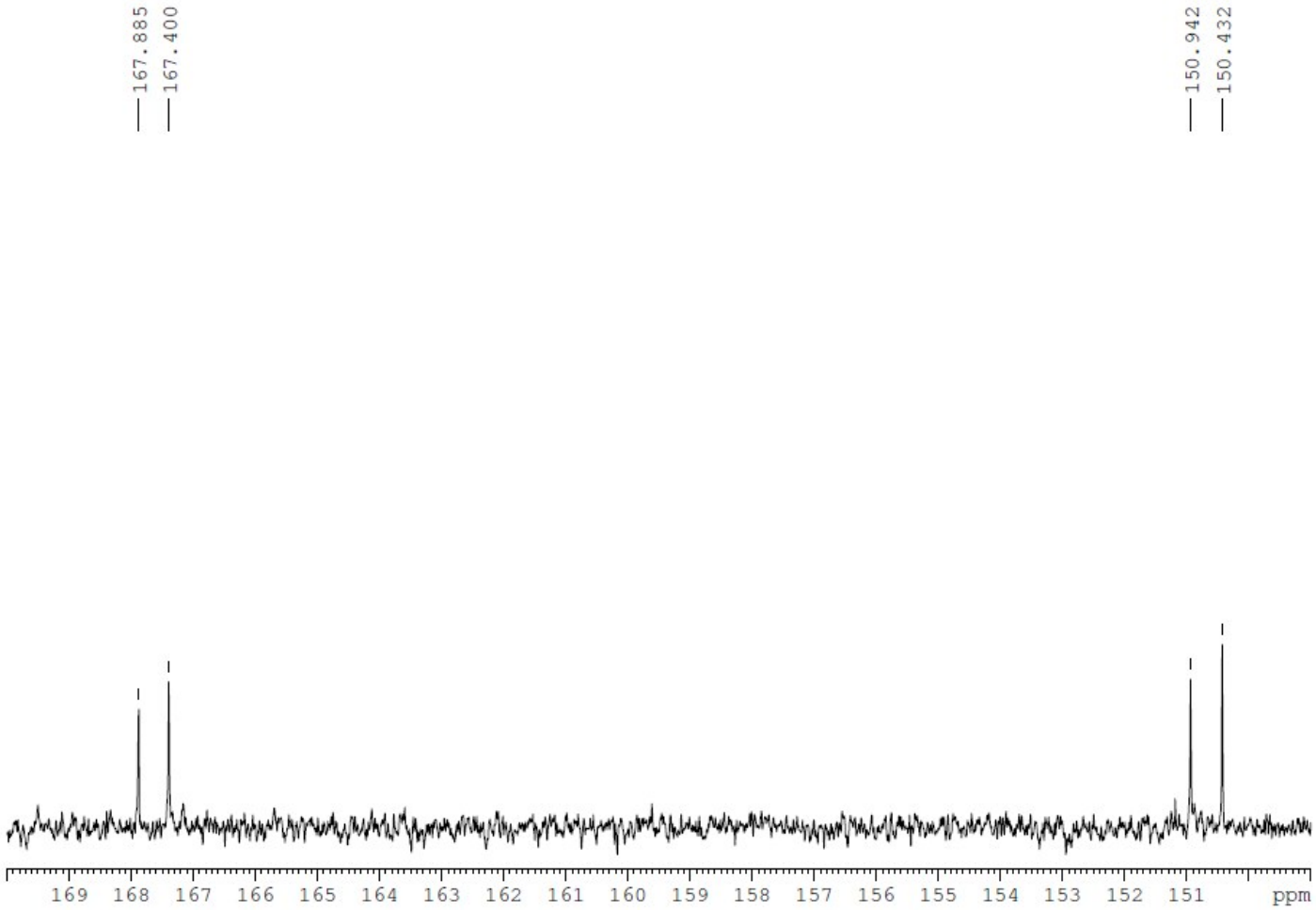

Figure ESI8: ^{13}C NMR spectrum of hydrazone **3f** derived from pentanal, expanded view

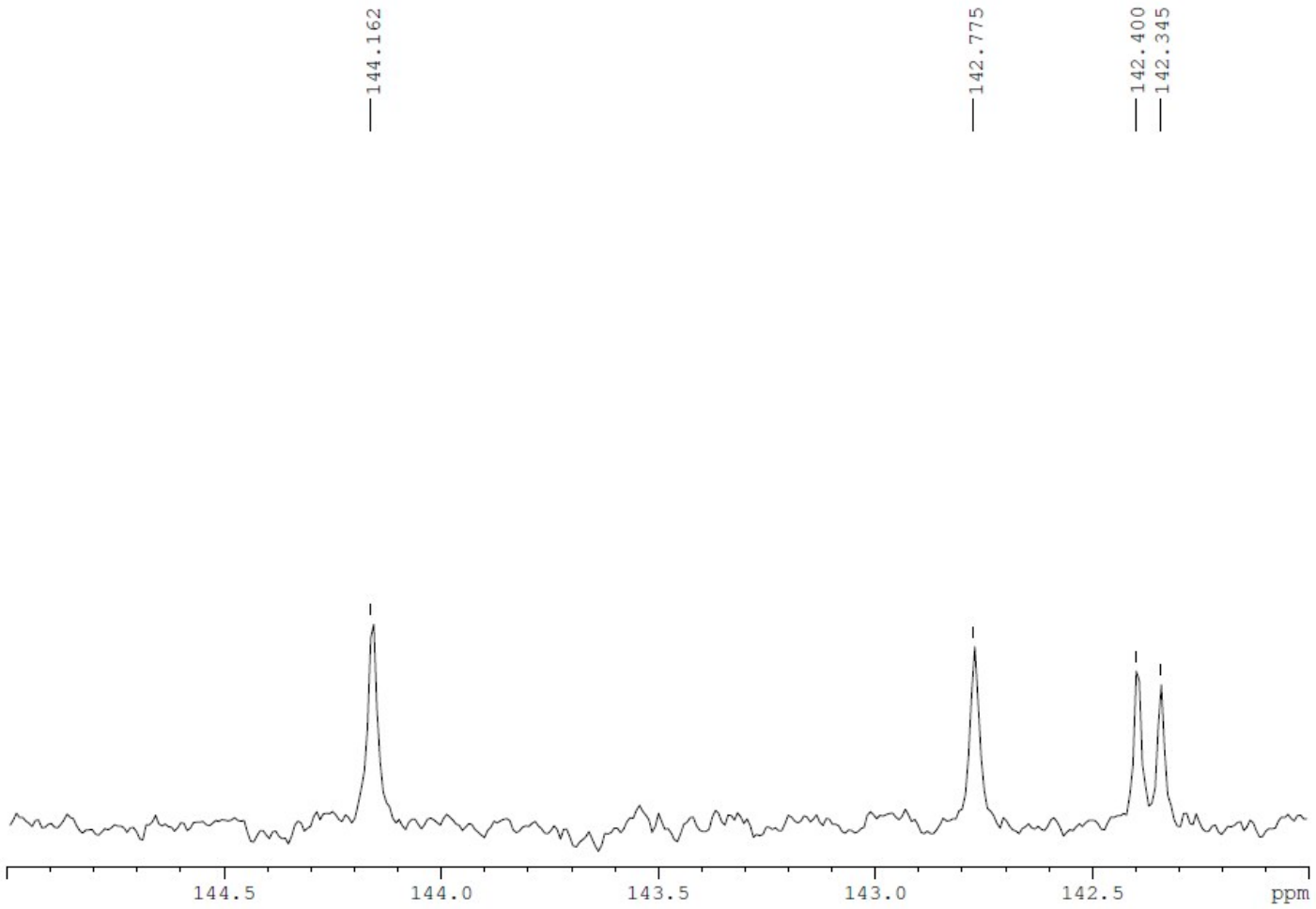

Figure ESI9: ^{13}C NMR spectrum of hydrazone **3f** derived from pentanal, expanded view

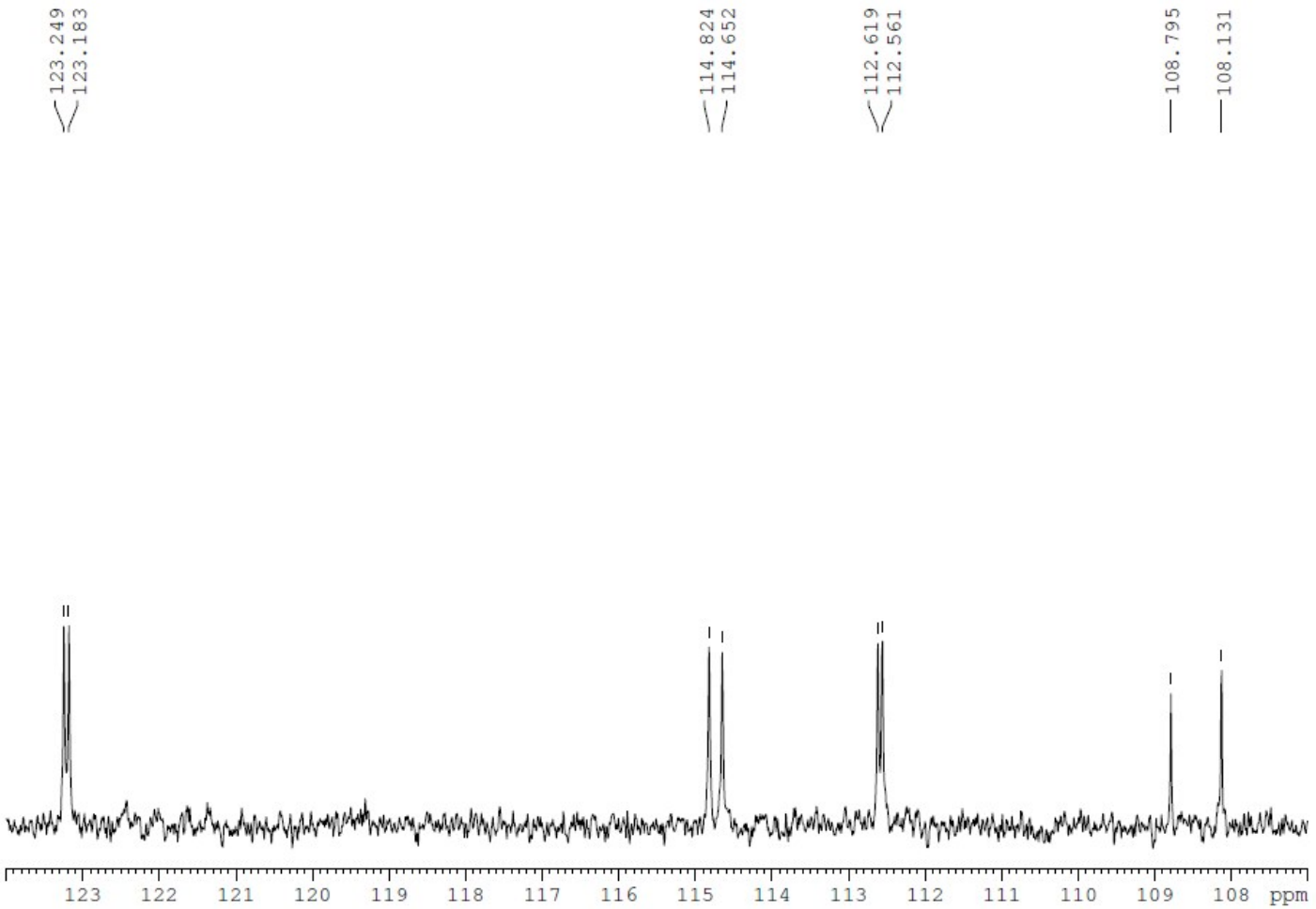

Figure ESI10: ^{13}C NMR spectrum of hydrazone **3f** derived from pentanal, expanded view

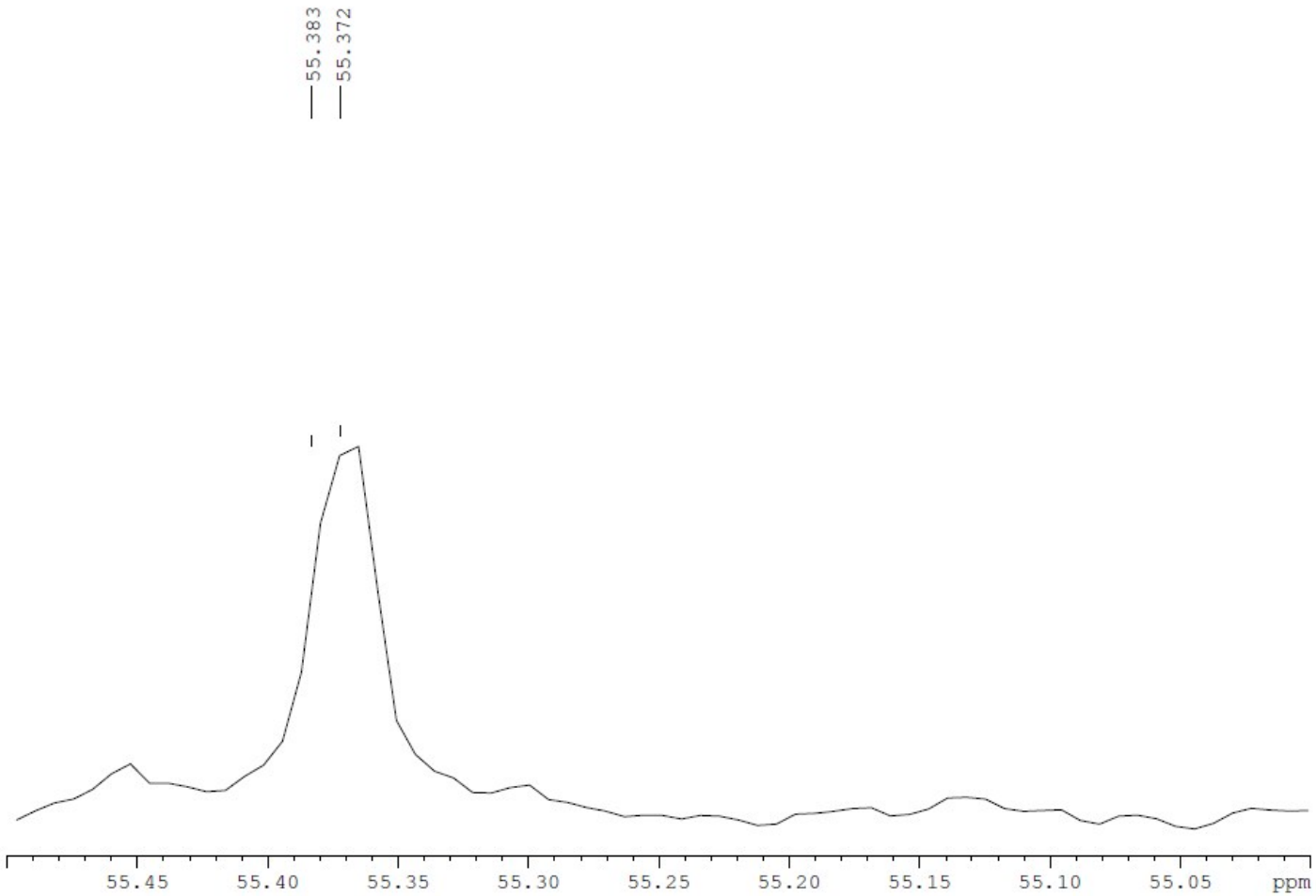

Figure ESI11: ^{13}C NMR spectrum of hydrazone **3f** derived from pentanal, expanded view

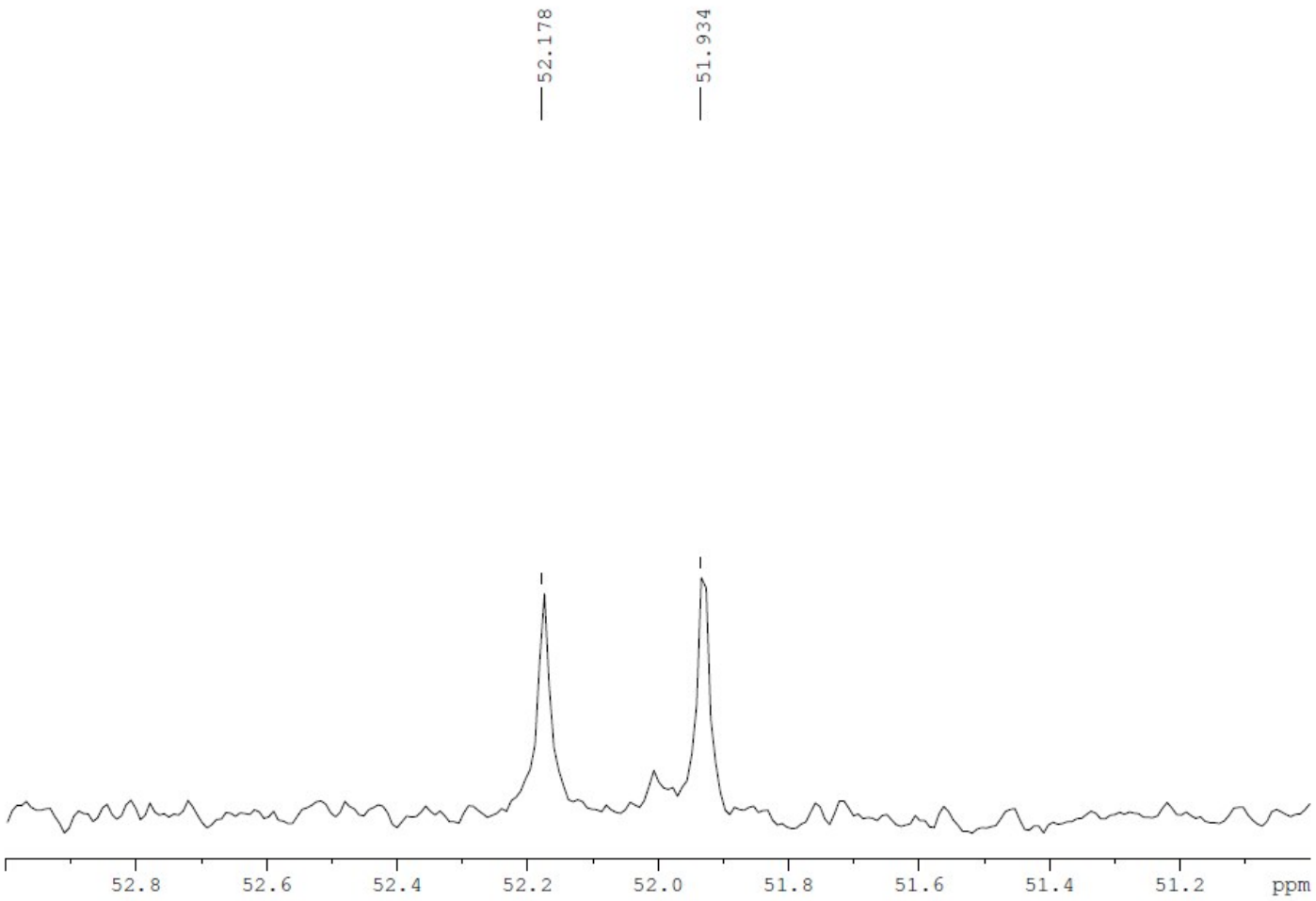

Figure ESI12: ^{13}C NMR spectrum of hydrazone **3f** derived from pentanal, expanded view

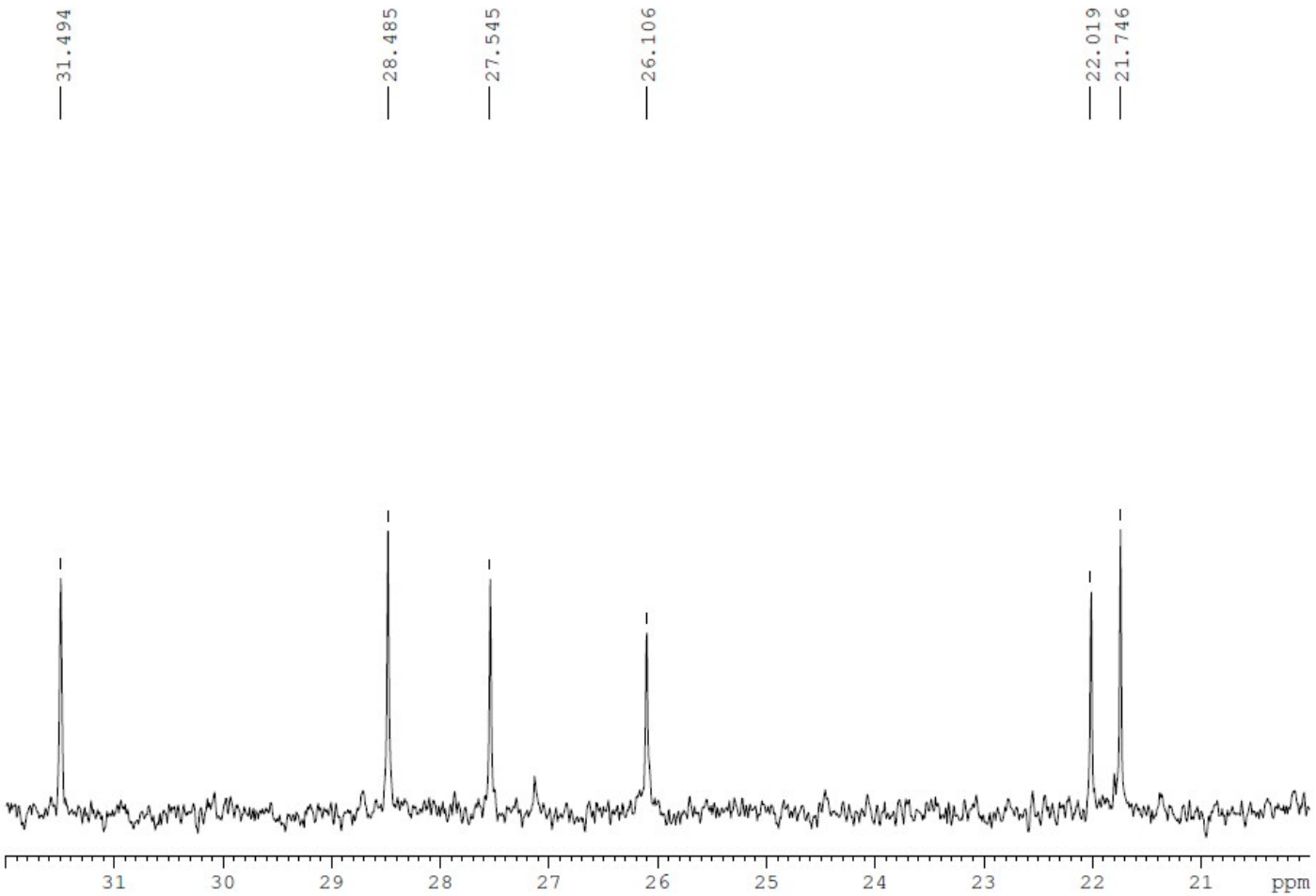

Figure ESI13: ^{13}C NMR spectrum of hydrazone **3f** derived from pentanal, expanded view

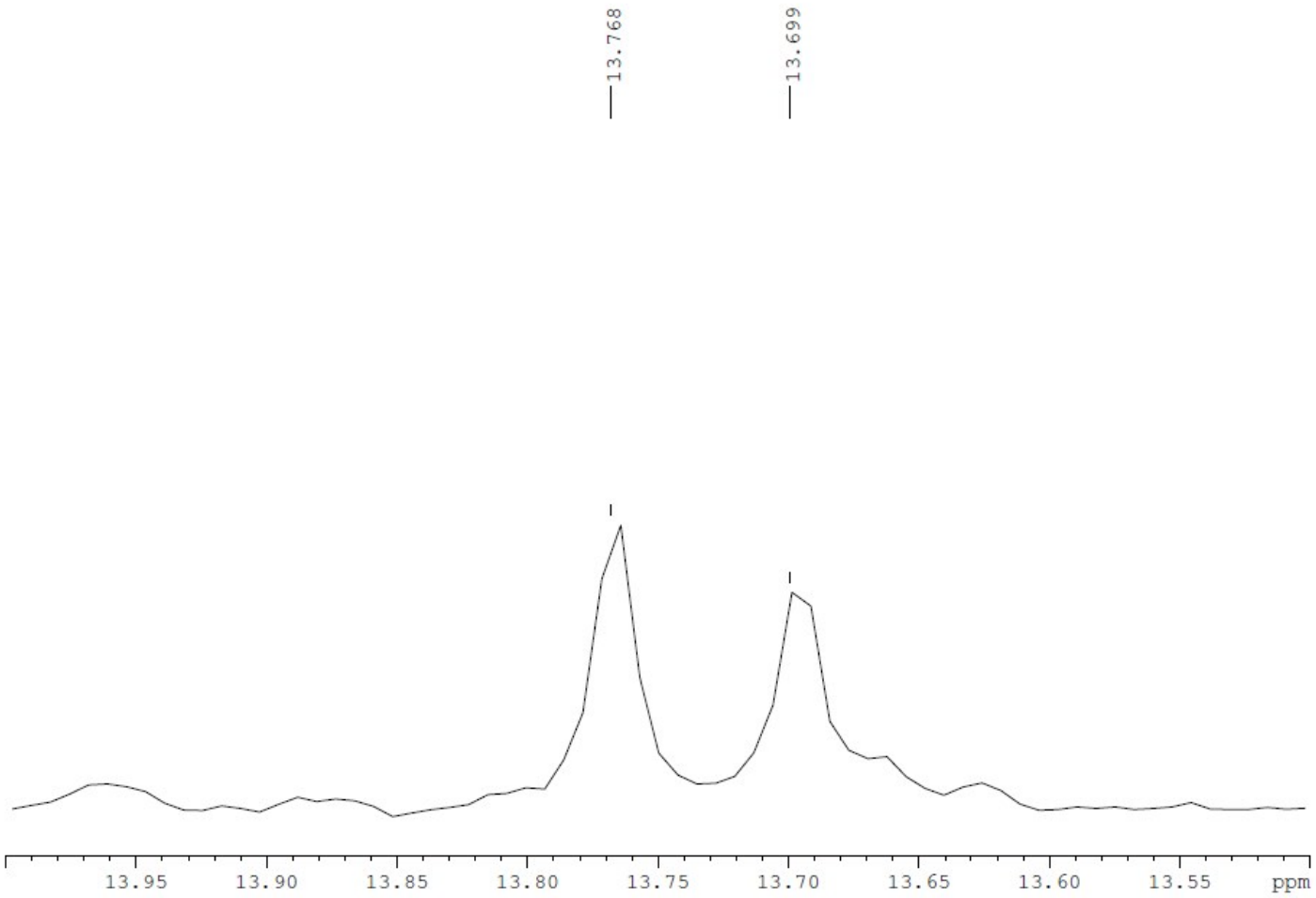

Figure ESI14: ^{13}C NMR spectrum of hydrazone **3f** derived from pentanal, expanded view

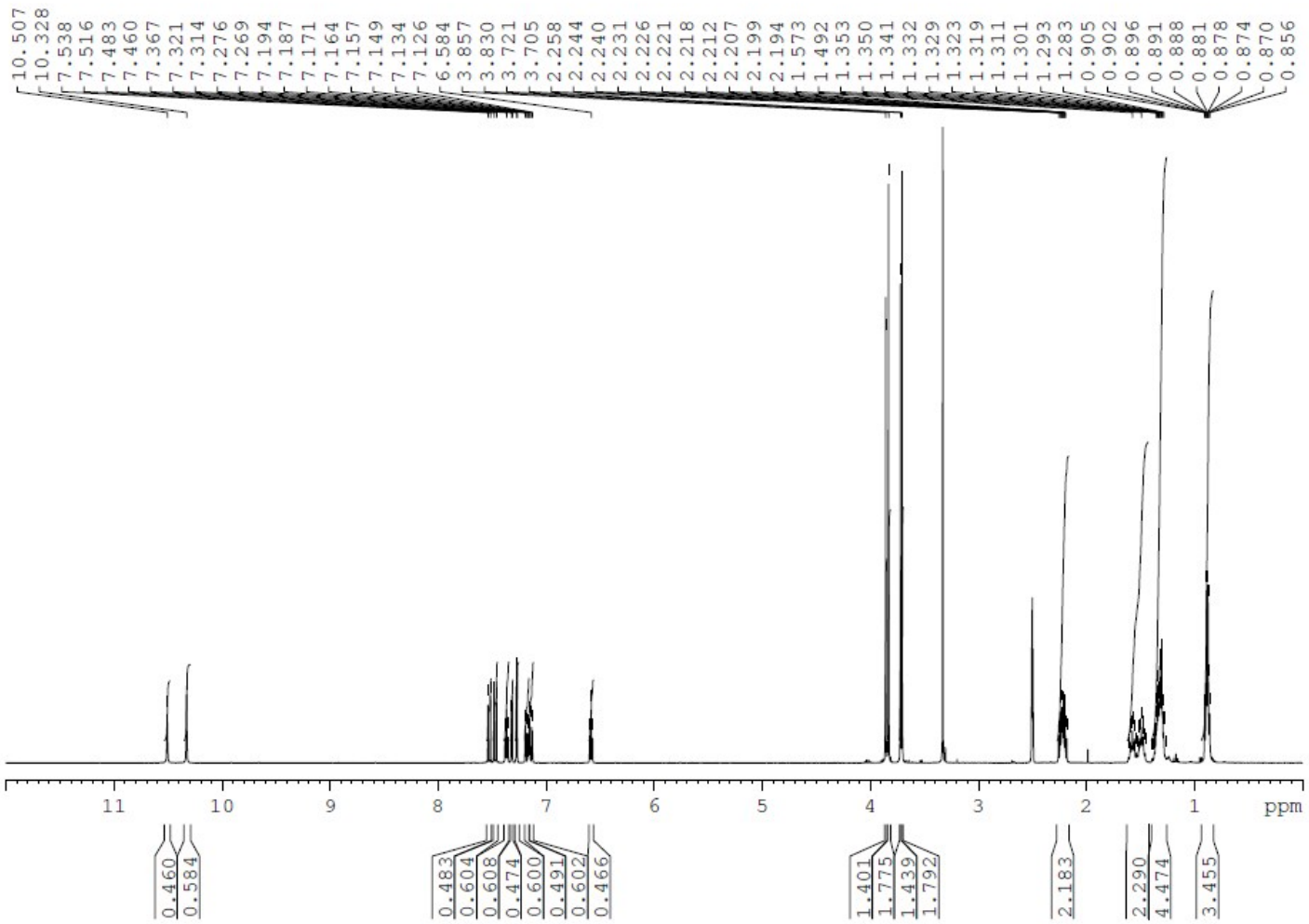

Figure ESI15: ^{1}H NMR spectrum of hydrazone **3g** derived from hexanal, full view

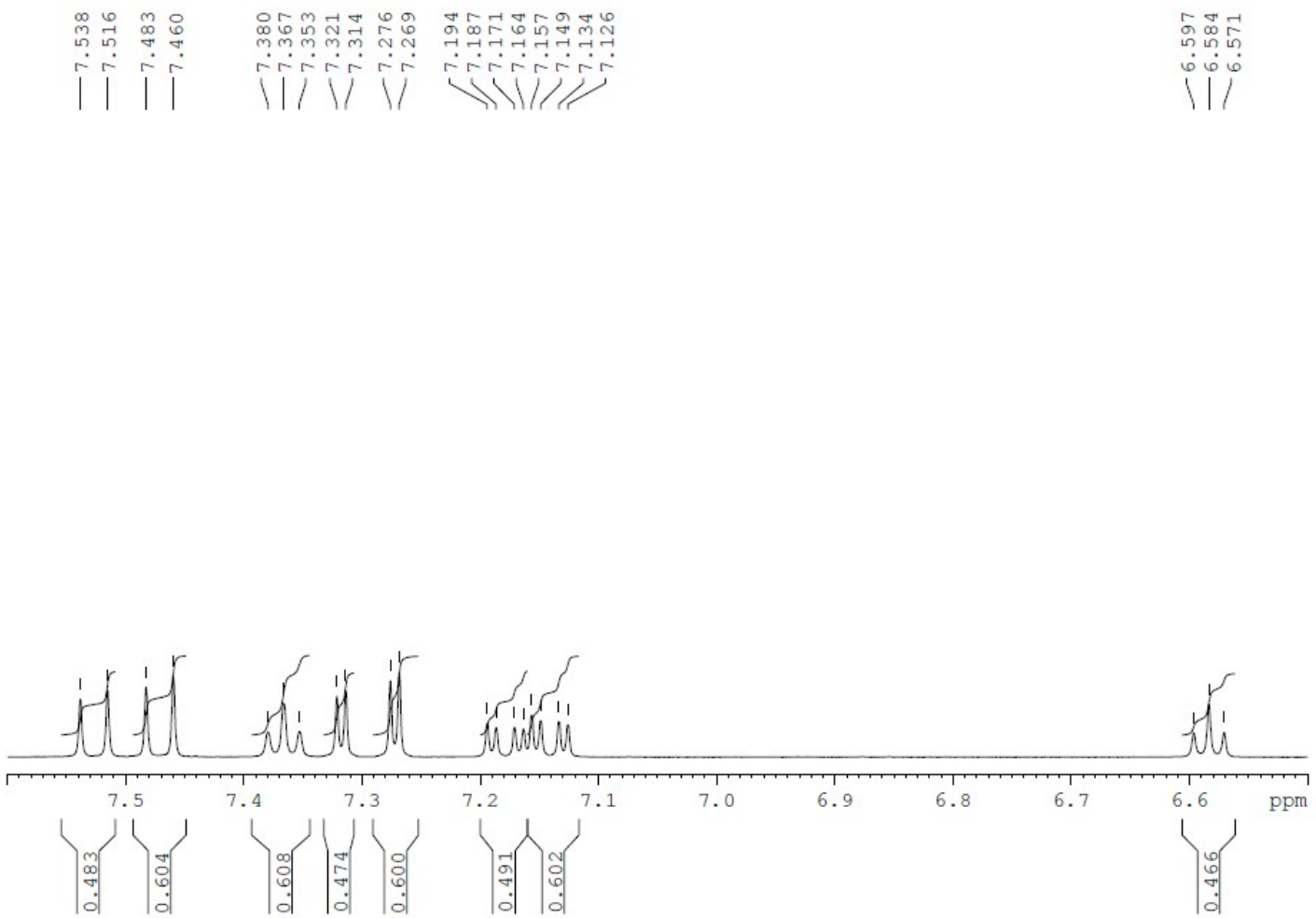

Figure ESI16: ^{1}H NMR spectrum of hydrazone **3g** derived from hexanal, expanded view

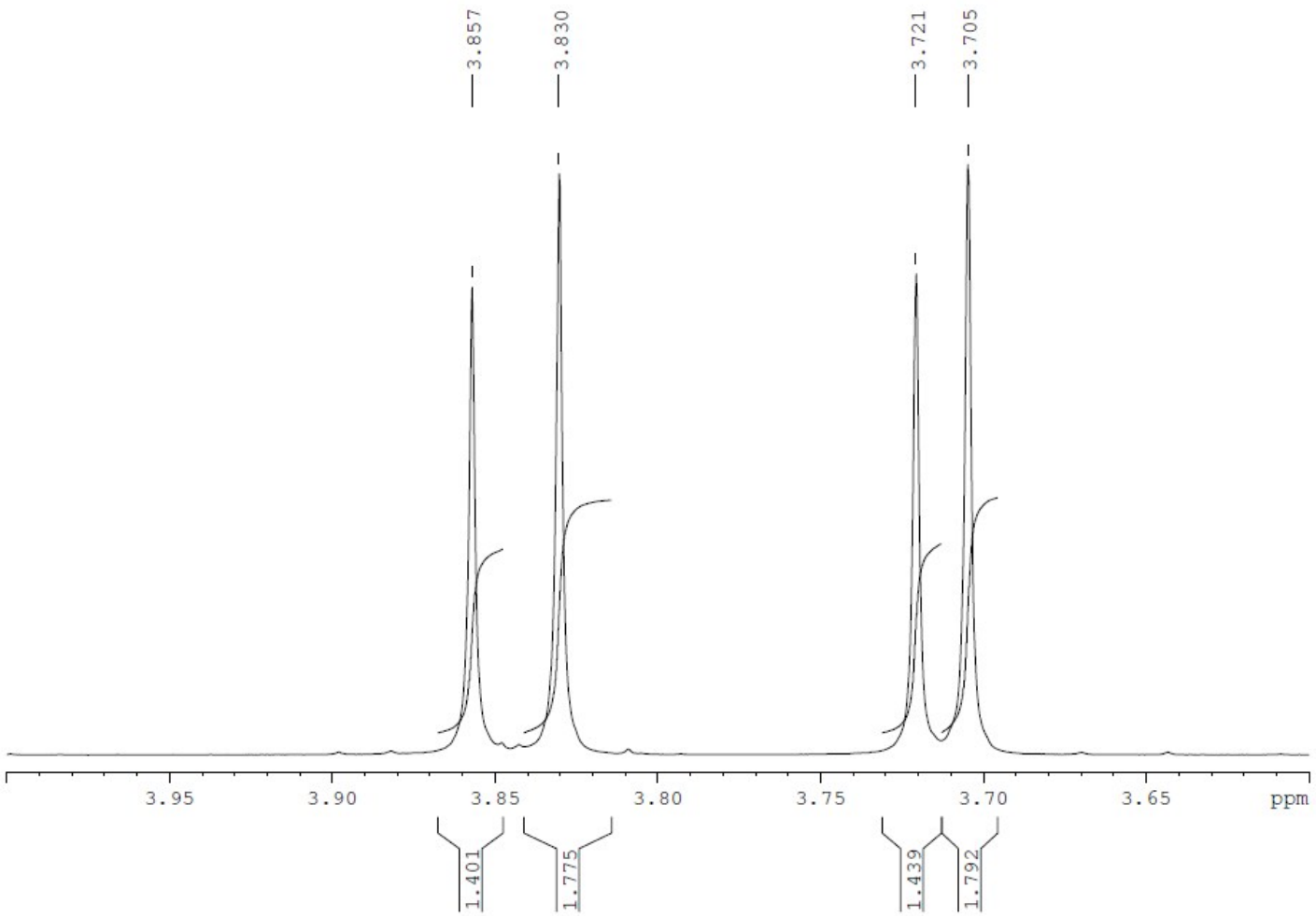

Figure ESI17: ^{1}H NMR spectrum of hydrazone **3g** derived from hexanal, expanded view

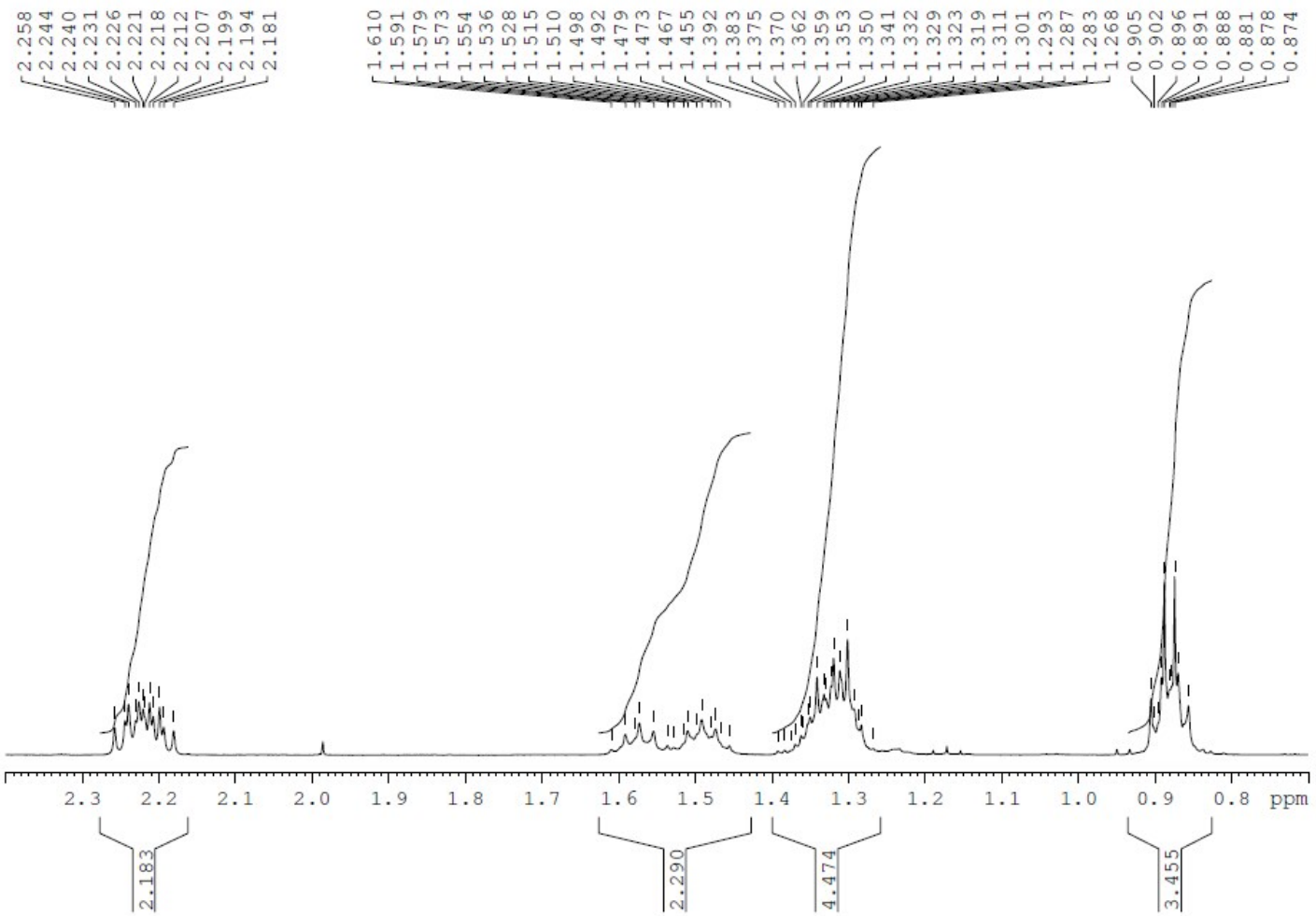

Figure ESI18: ^{1}H NMR spectrum of hydrazone **3g** derived from hexanal, expanded view

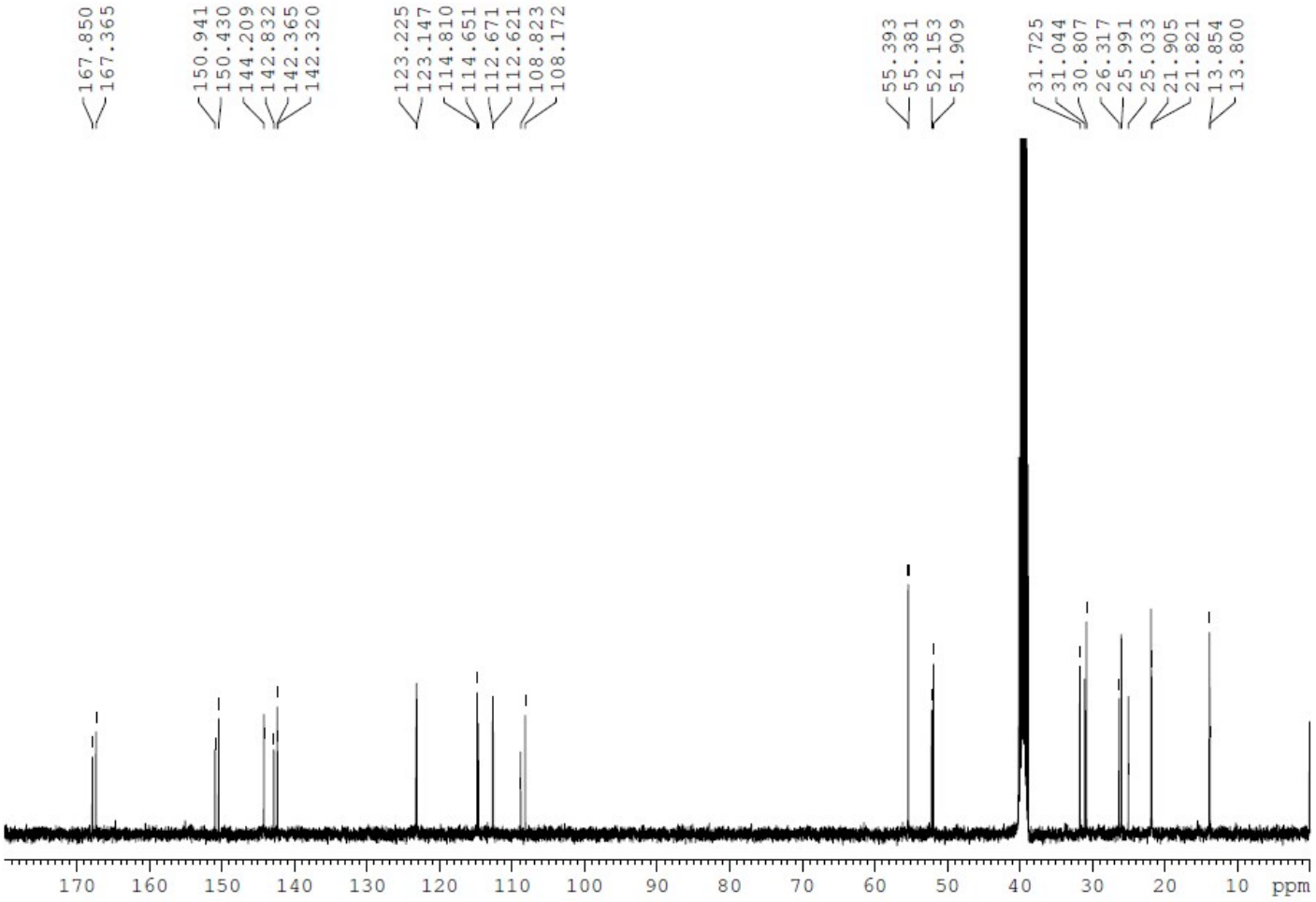

Figure ESI19: ^{13}C NMR spectrum of hydrazone **3g** derived from hexanal, full view

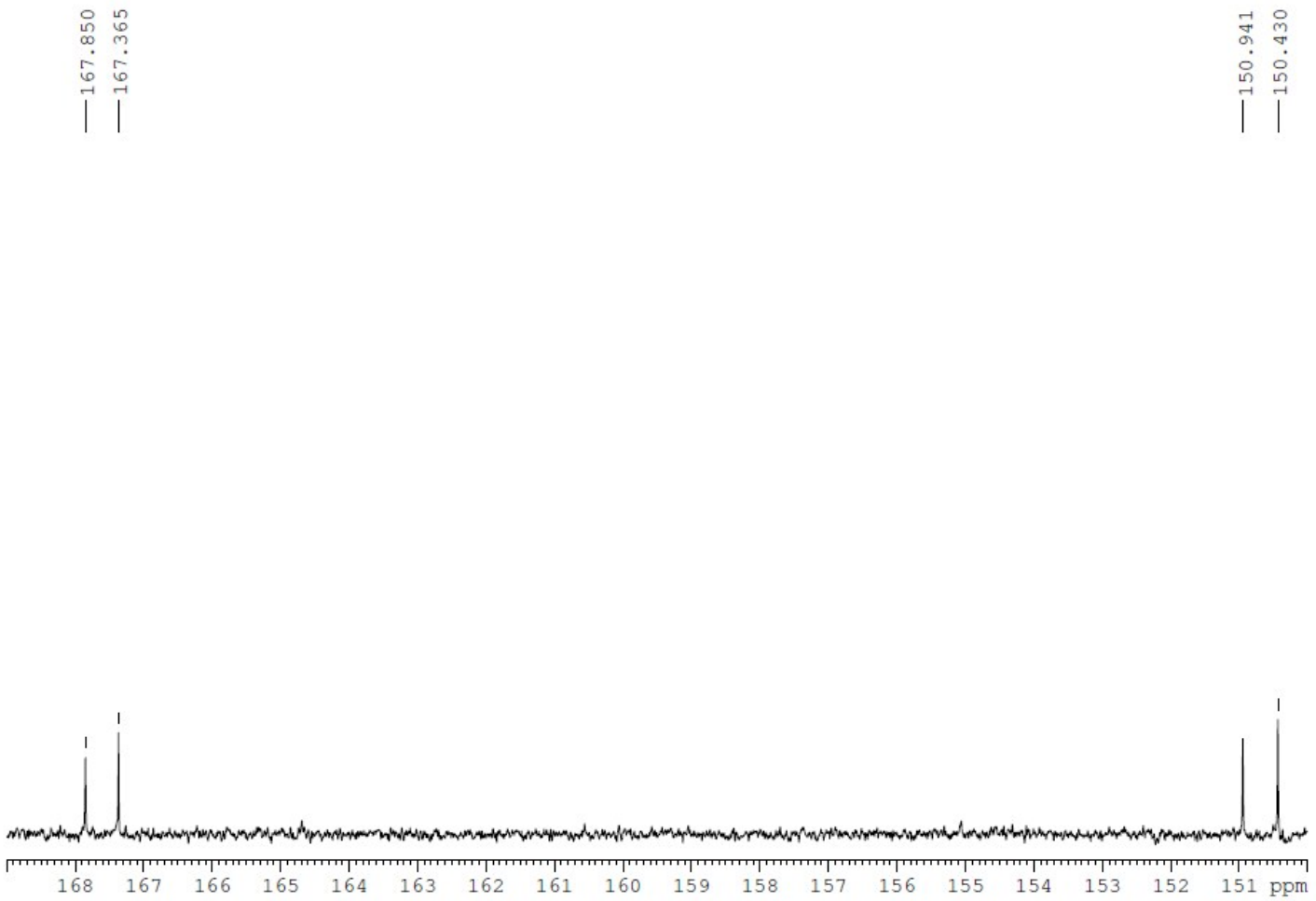

Figure ESI20: ^{13}C NMR spectrum of hydrazone **3g** derived from hexanal, expanded view

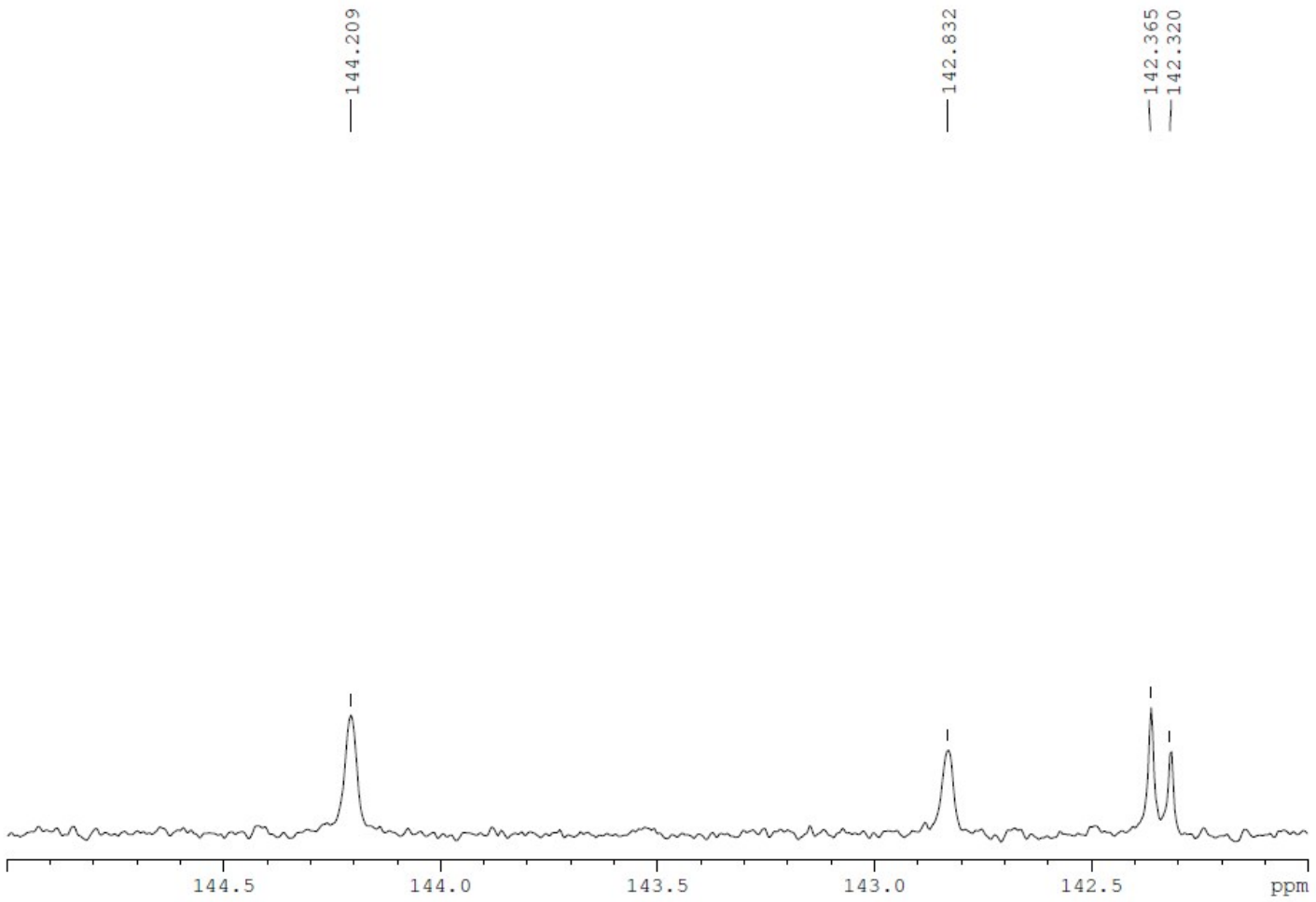

Figure ESI21: ^{13}C NMR spectrum of hydrazone **3g** derived from hexanal, expanded view

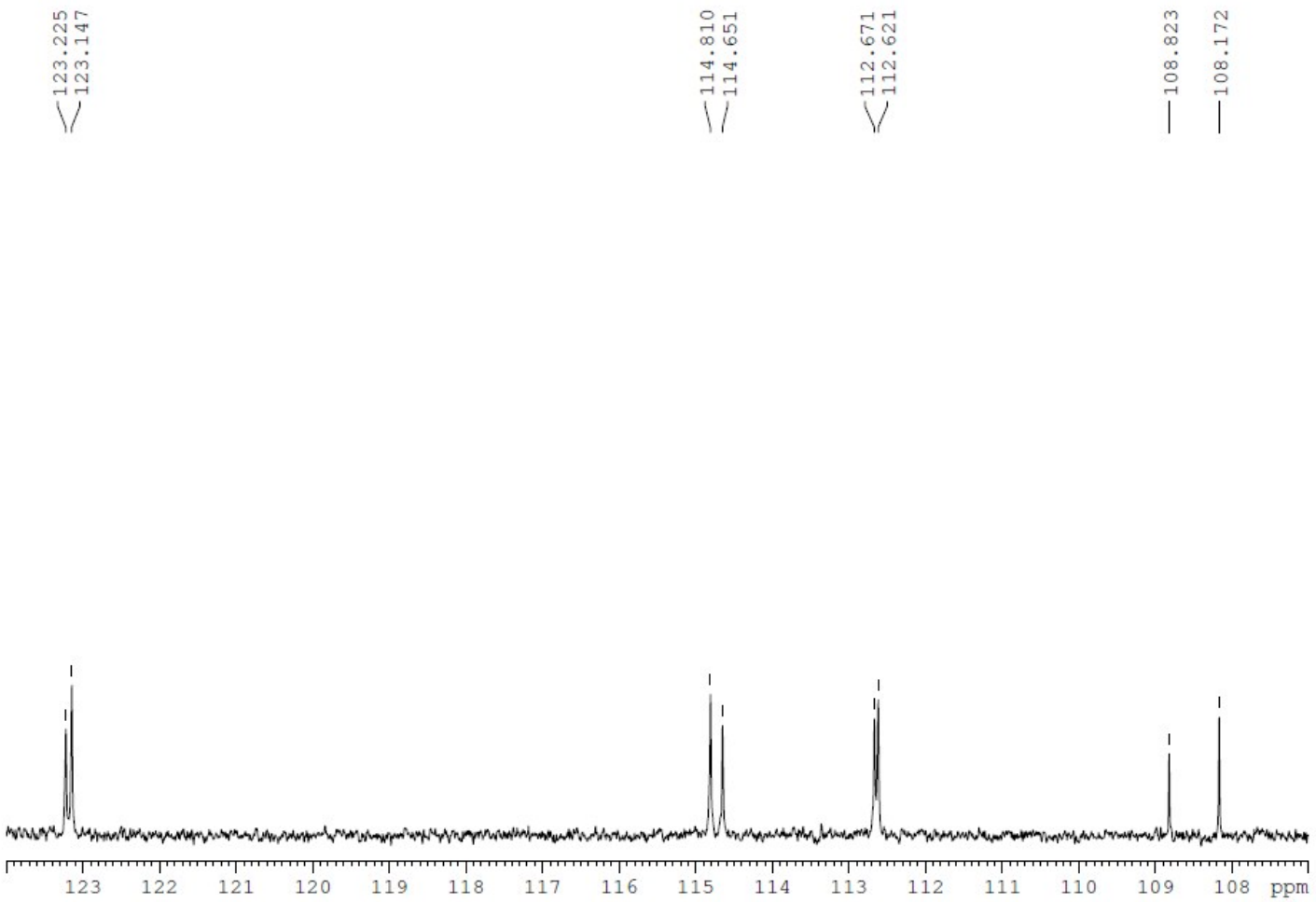

Figure ESI22: ^{13}C NMR spectrum of hydrazone **3g** derived from hexanal, expanded view

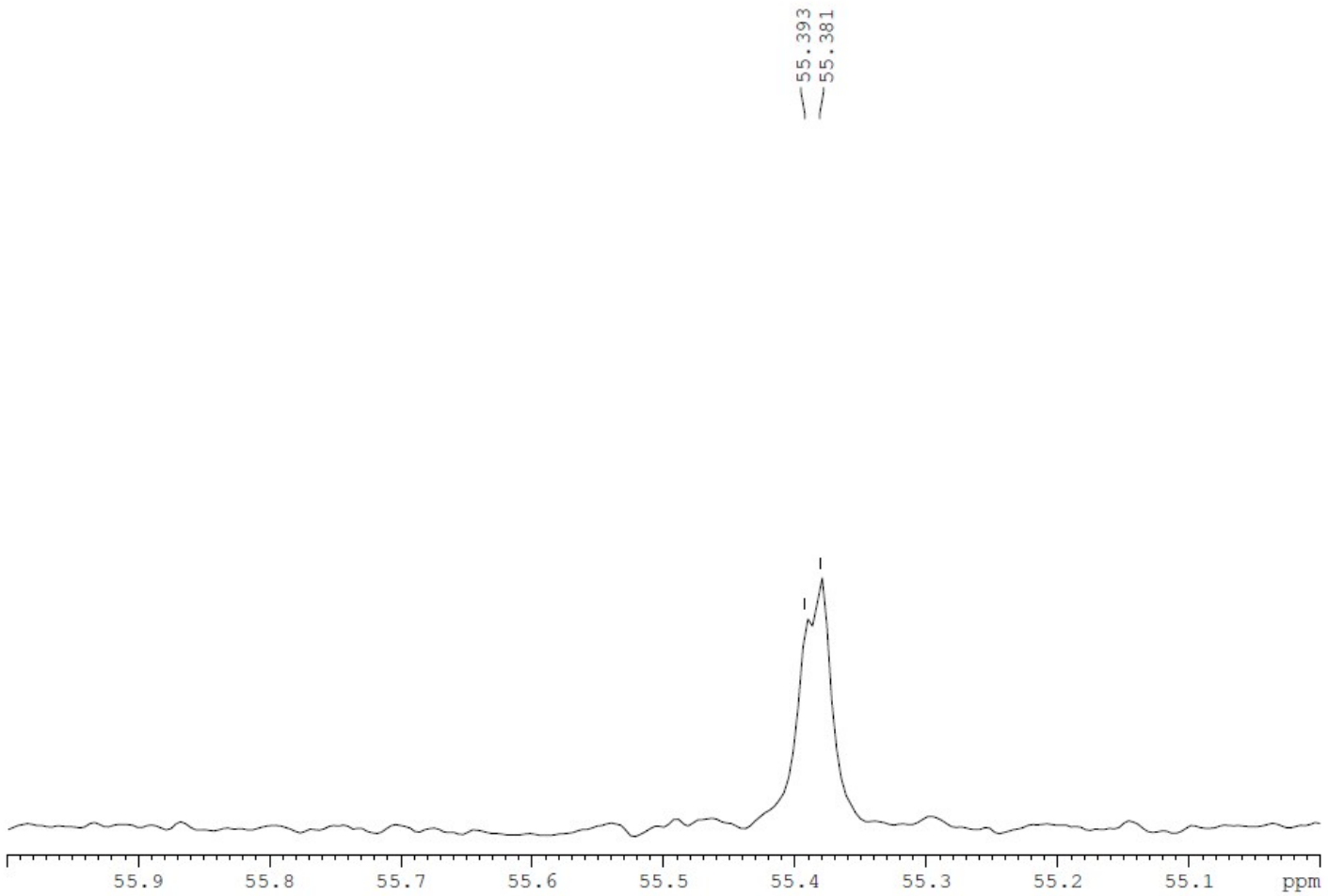

Figure ESI23: ^{13}C NMR spectrum of hydrazone **3g** derived from hexanal, expanded view

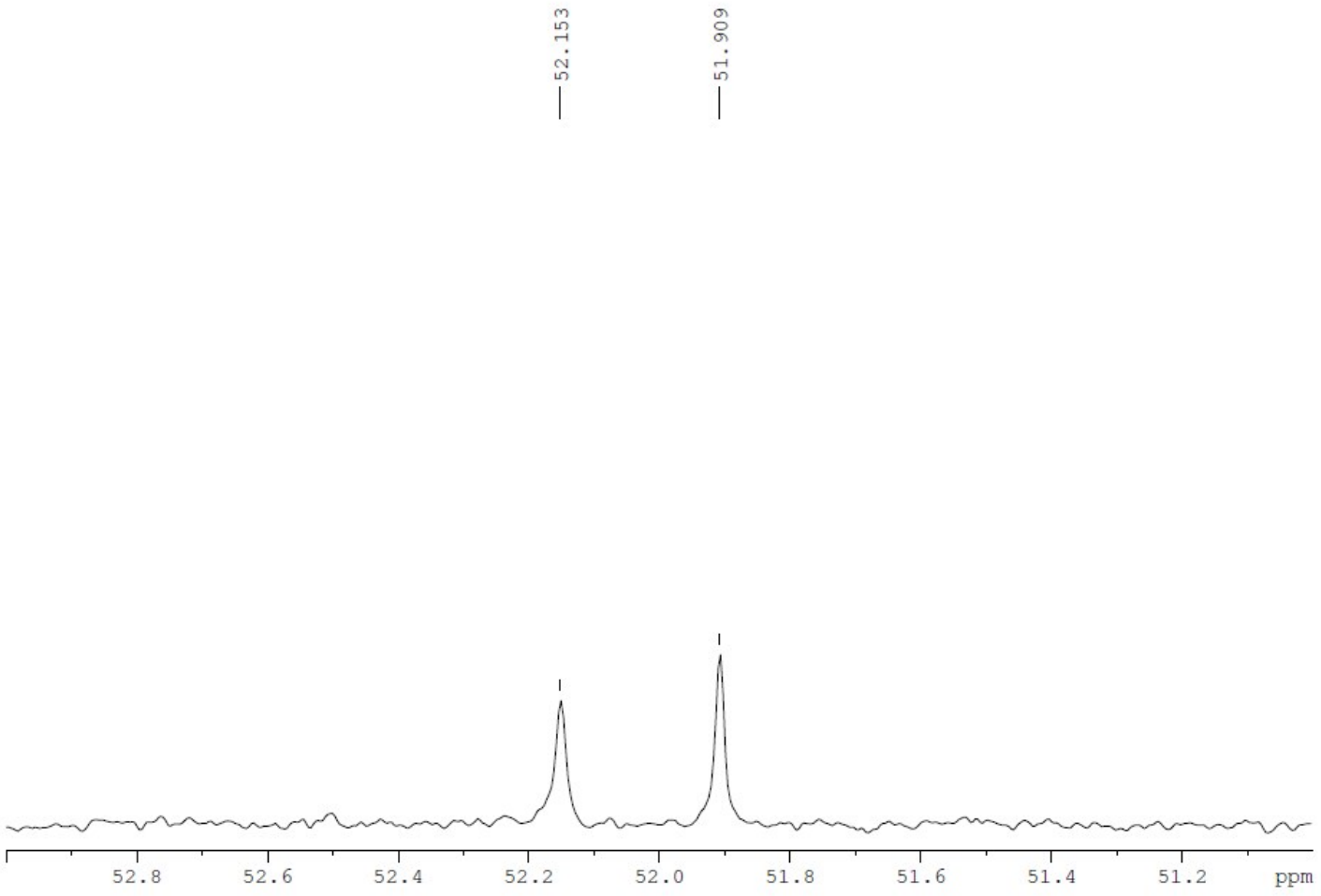

Figure ESI24: ^{13}C NMR spectrum of hydrazone **3g** derived from hexanal, expanded view

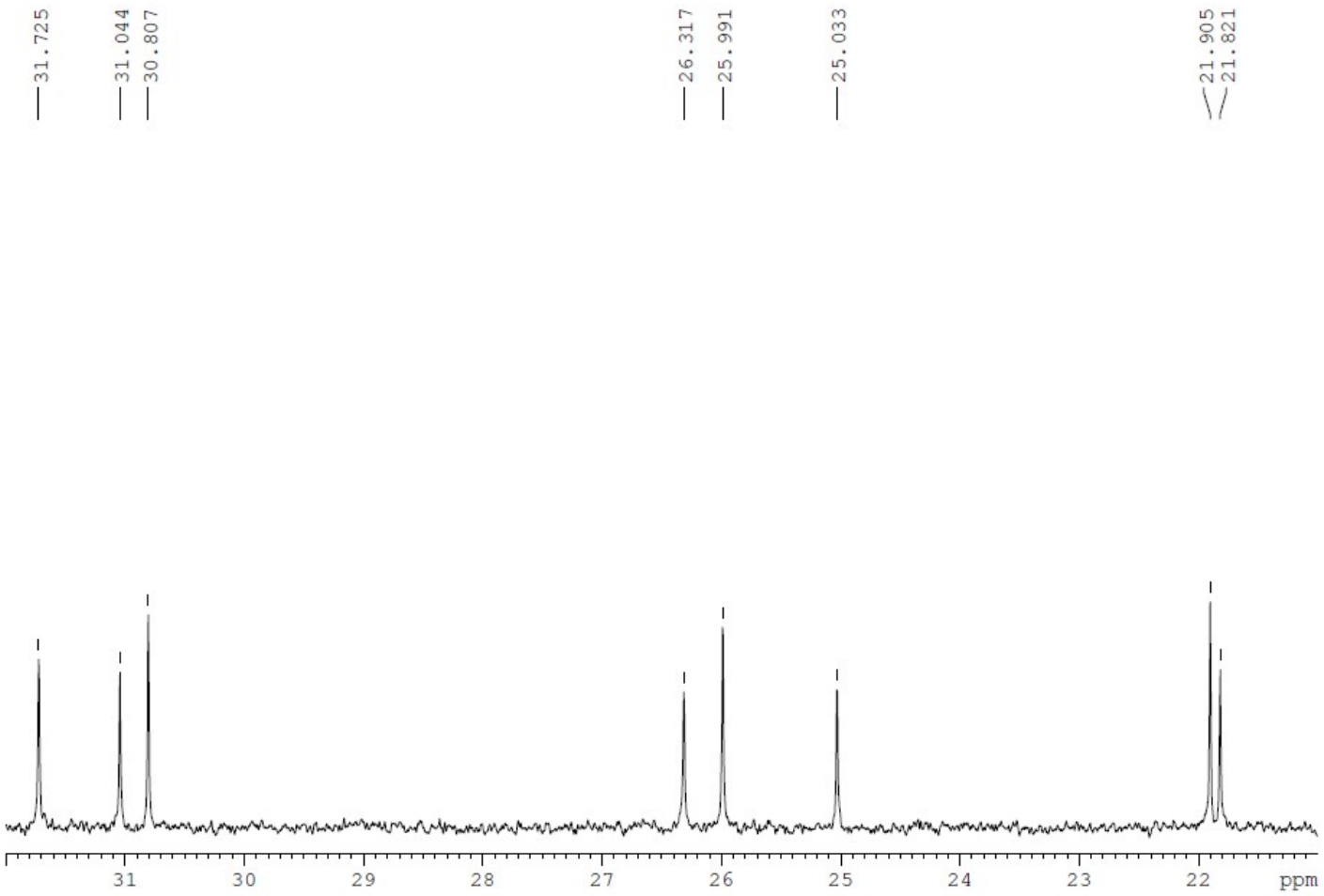

Figure ESI25: ^{13}C NMR spectrum of hydrazone **3g** derived from hexanal, expanded view

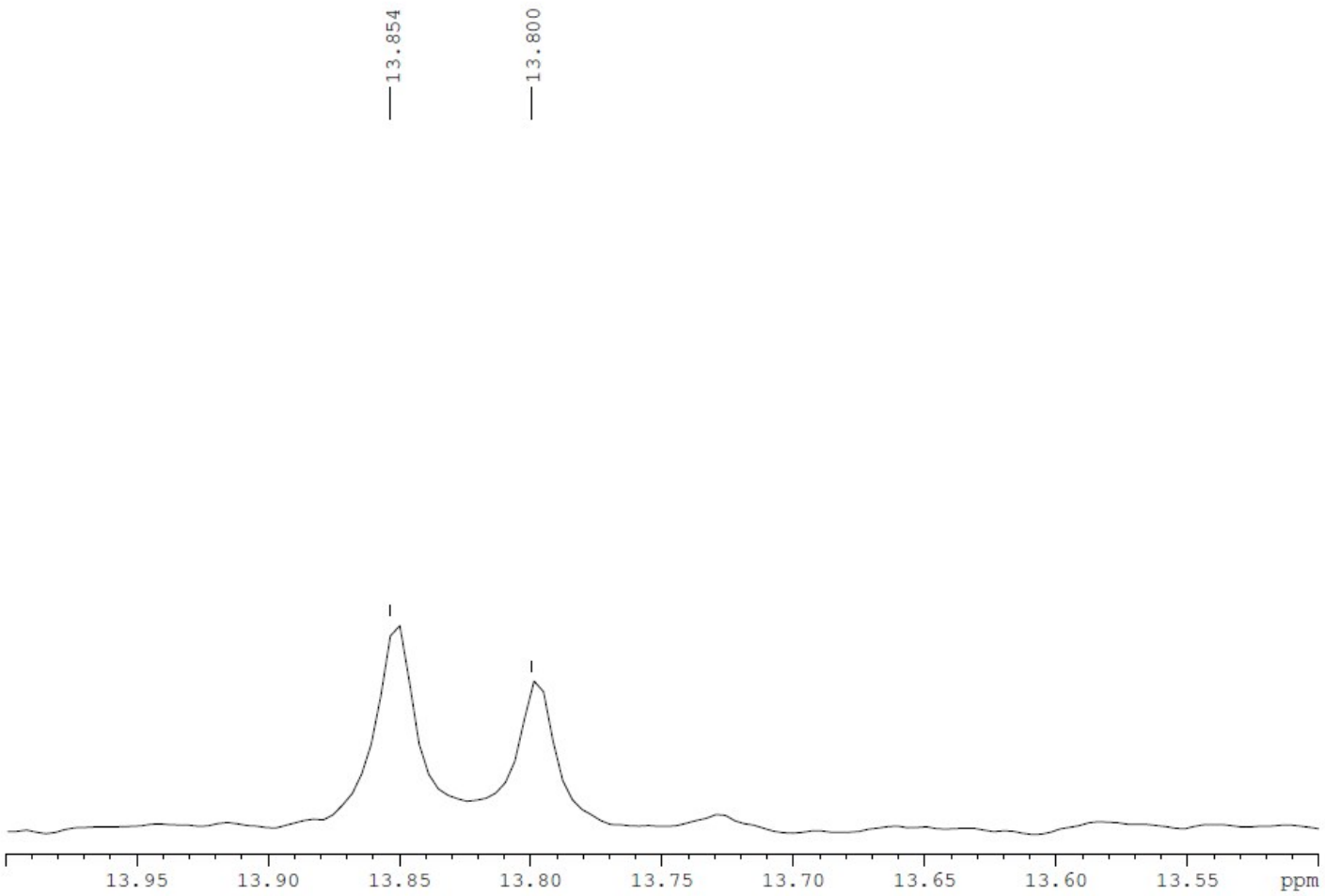

Figure ESI26: ^{13}C NMR spectrum of hydrazone **3g** derived from hexanal, expanded view

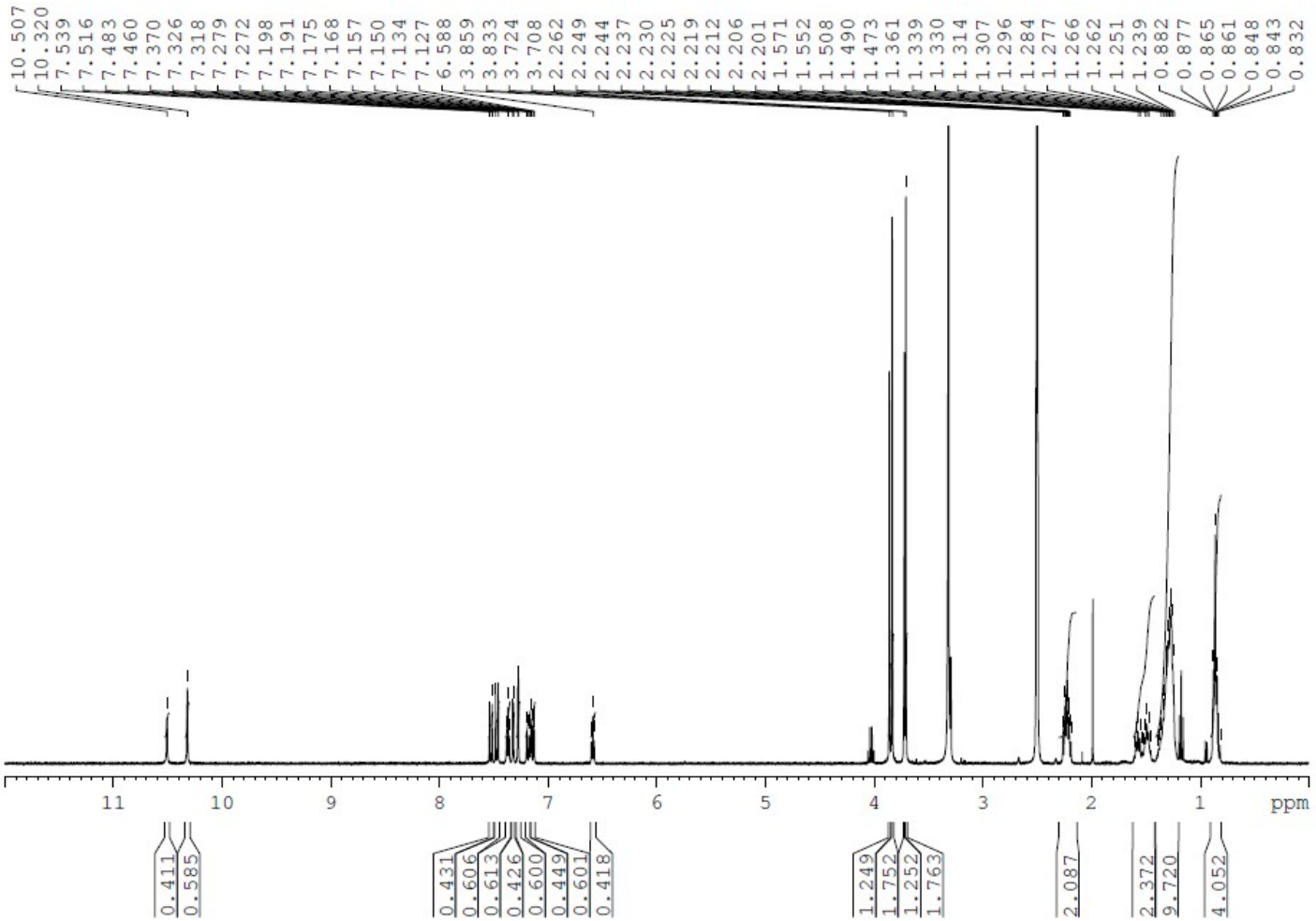

Figure ESI27: ^{1}H NMR spectrum of hydrazone **3h** derived from octanal, full view

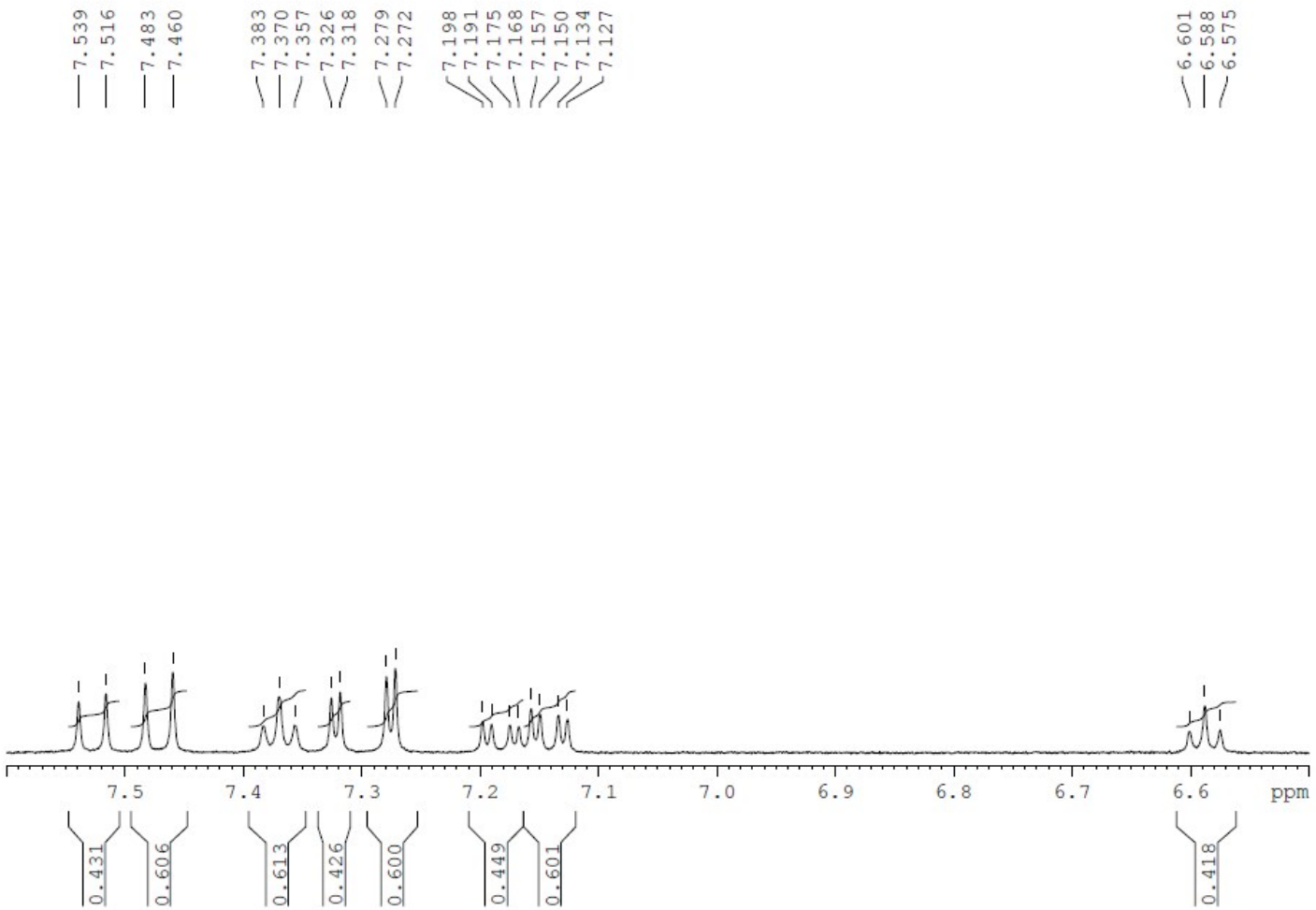

Figure ESI28: ^{1}H NMR spectrum of hydrazone **3h** derived from octanal, expanded view

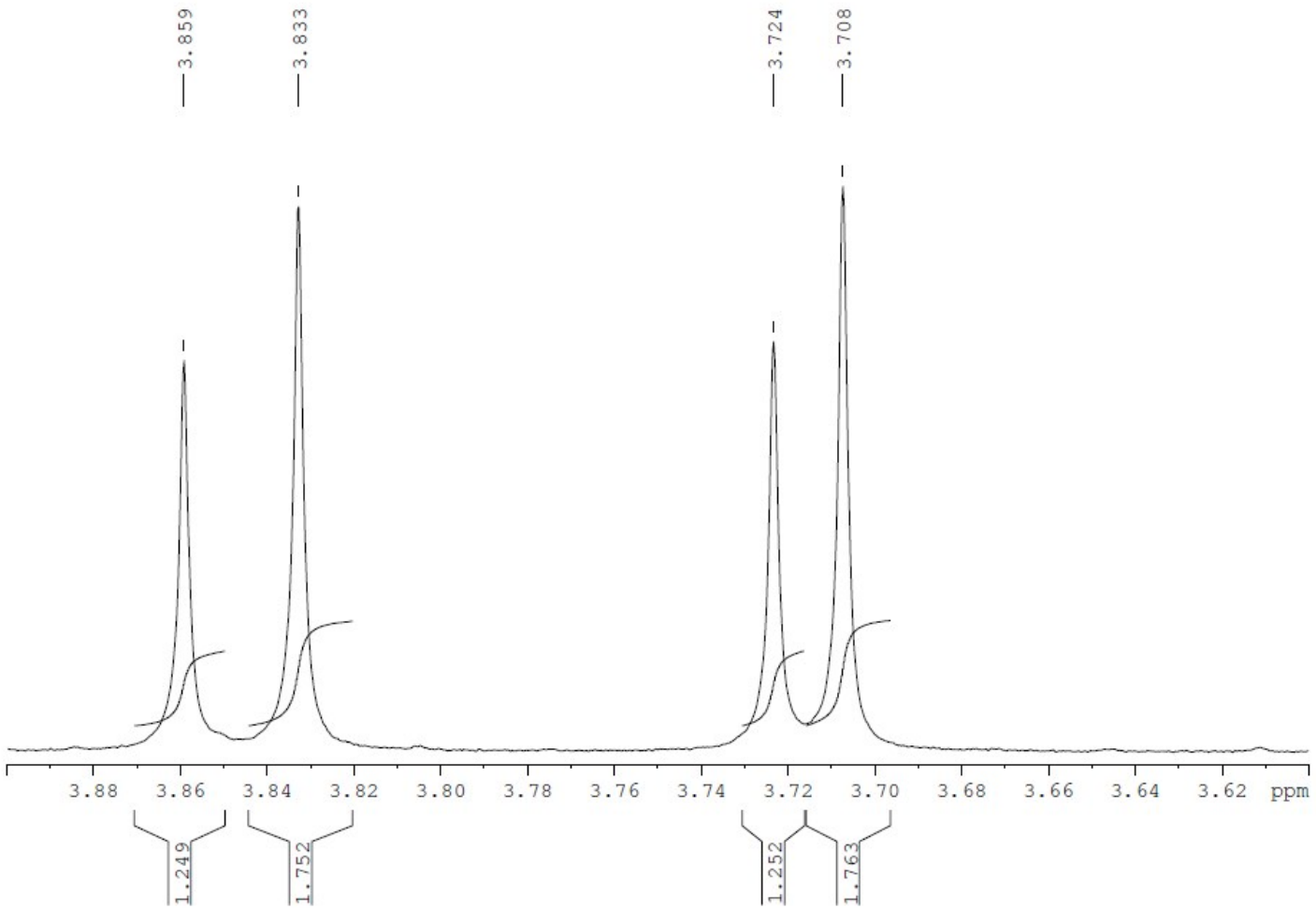

Figure ESI29: ^{1}H NMR spectrum of hydrazone **3h** derived from octanal, expanded view

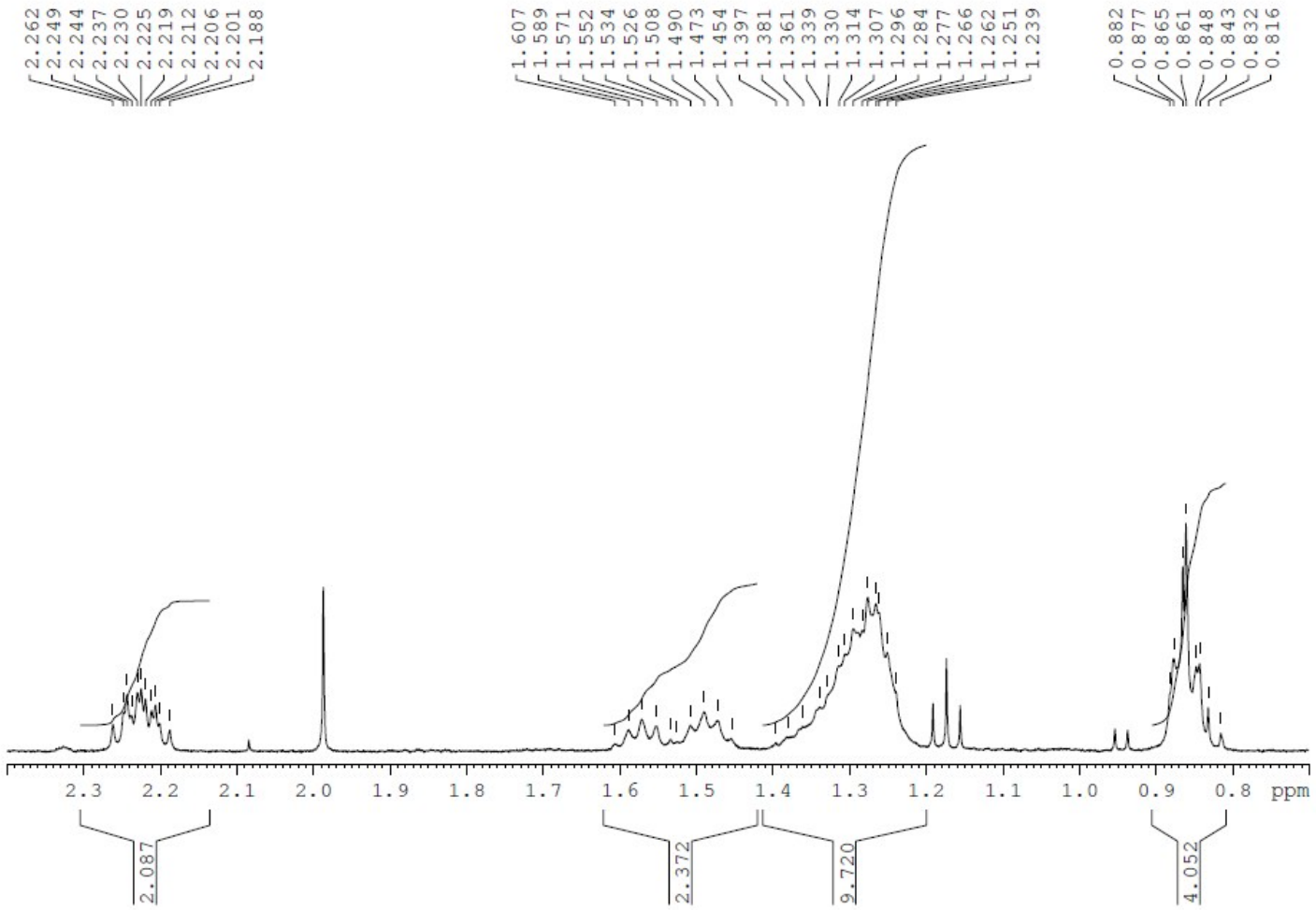

Figure ESI30: ^{1}H NMR spectrum of hydrazone **3h** derived from octanal, expanded view

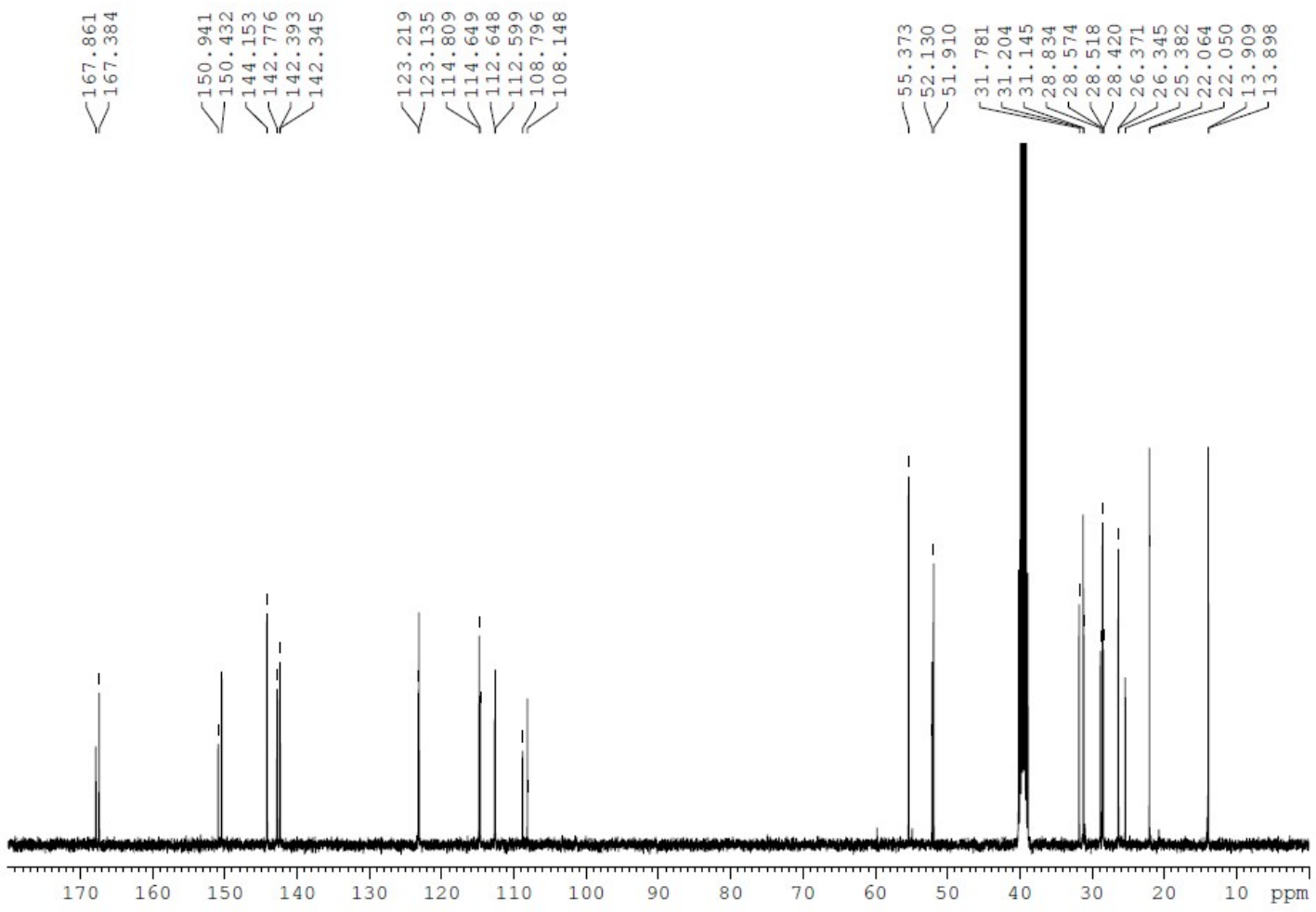

Figure ESI31: ^{13}C NMR spectrum of hydrazone **3h** derived from octanal, full view

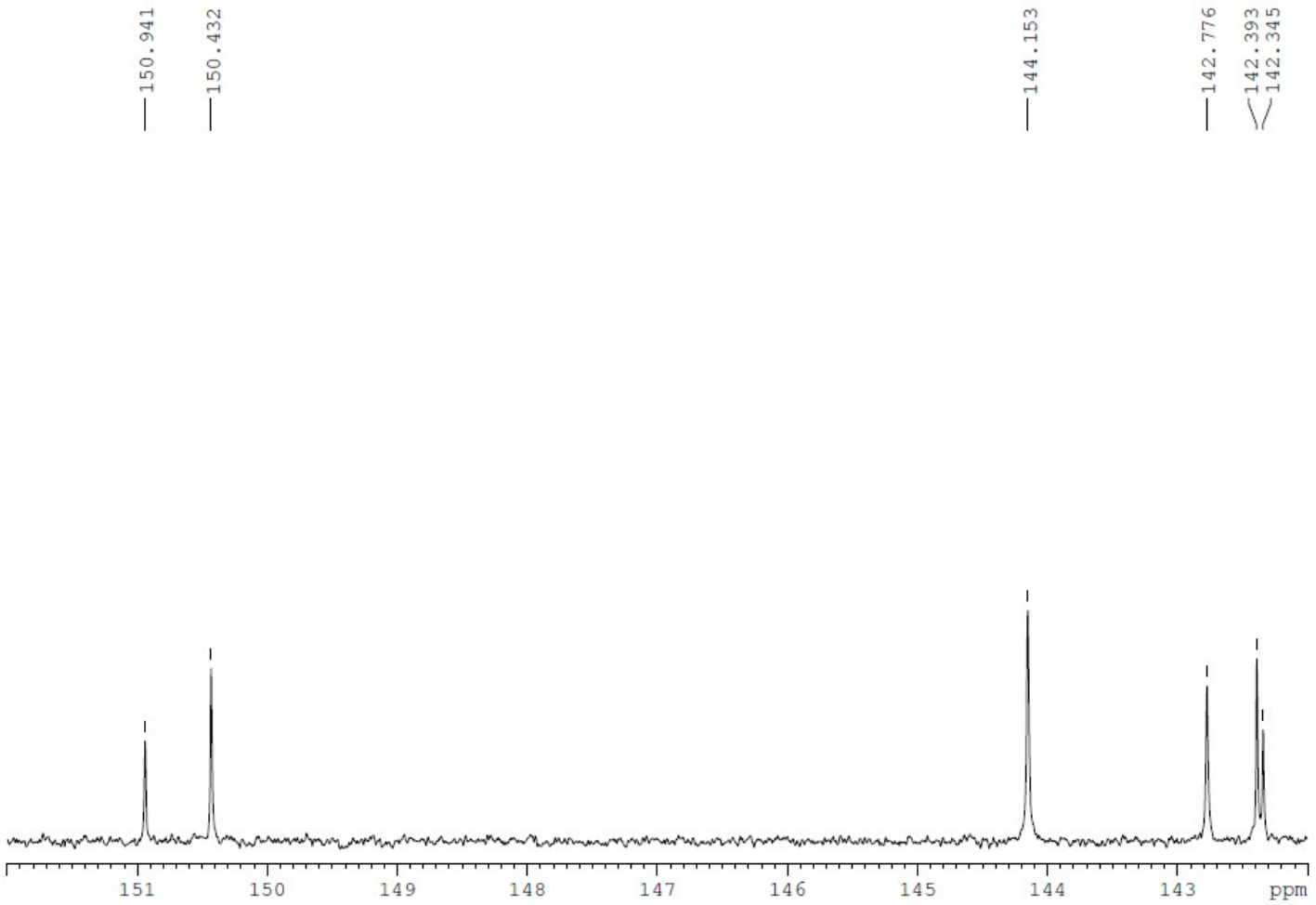

Figure ESI32: ^{13}C NMR spectrum of hydrazone **3h** derived from octanal, expanded view

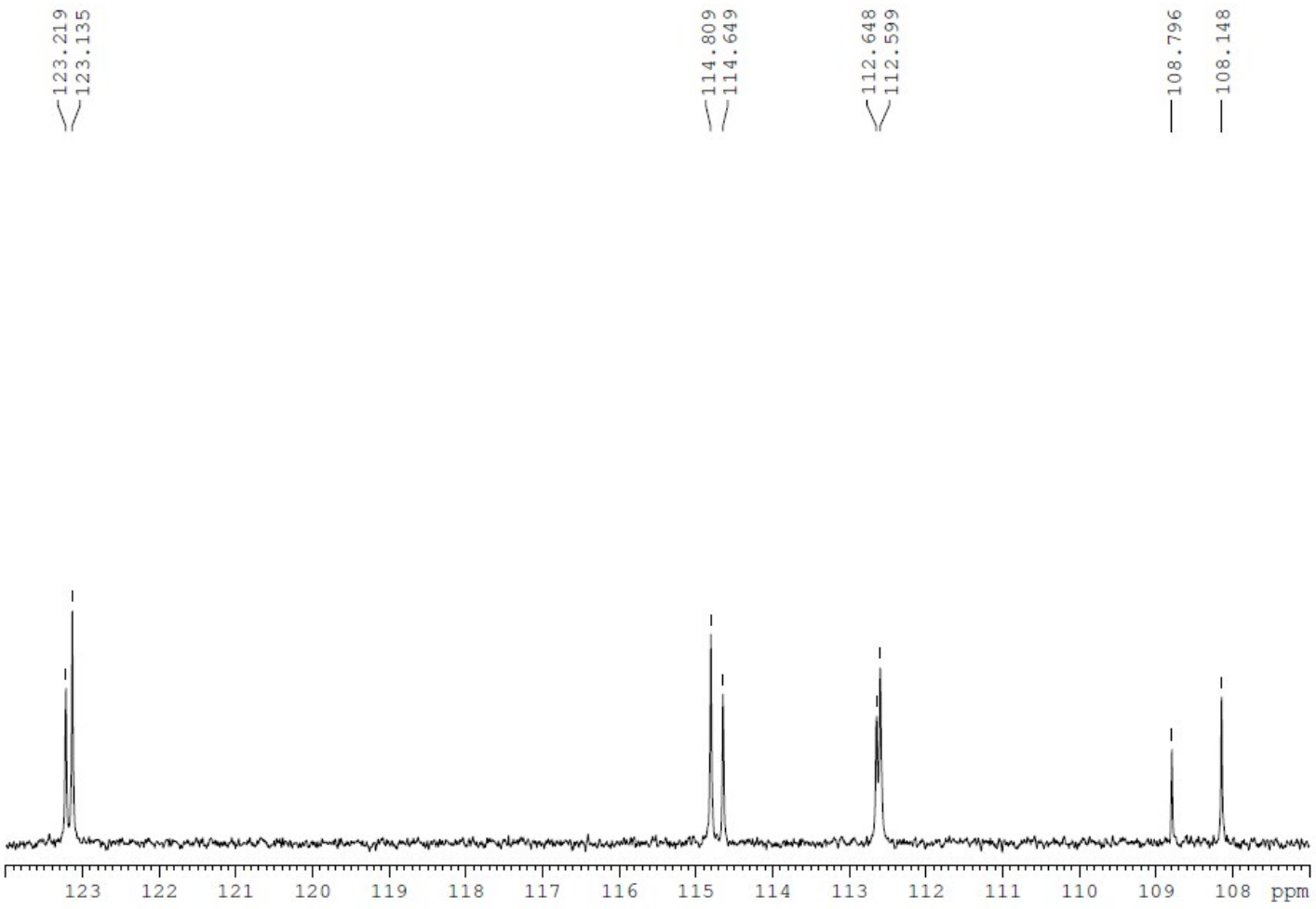

Figure ESI33: ^{13}C NMR spectrum of hydrazone **3h** derived from octanal, expanded view

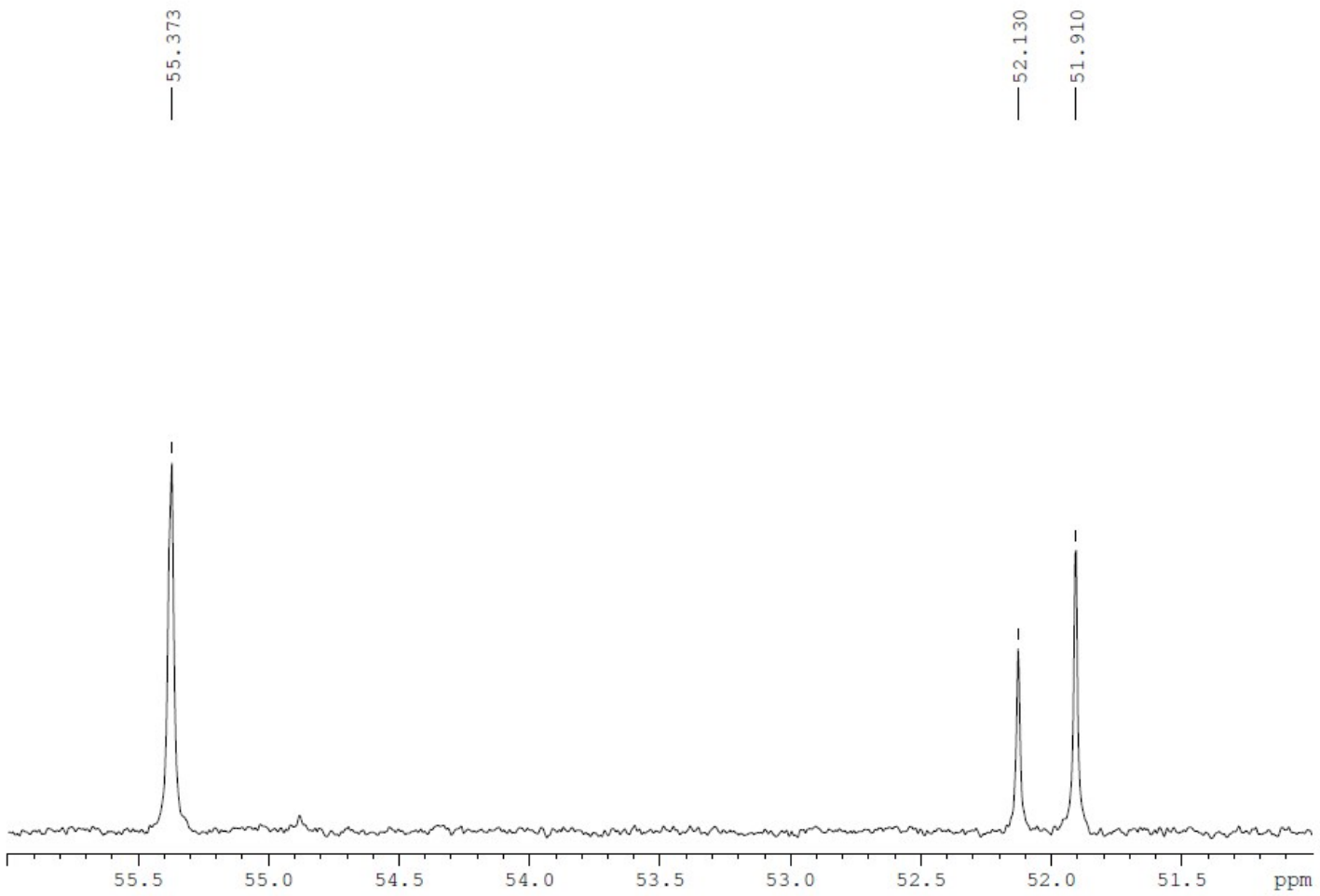

Figure ESI34: ^{13}C NMR spectrum of hydrazone **3h** derived from octanal, expanded view

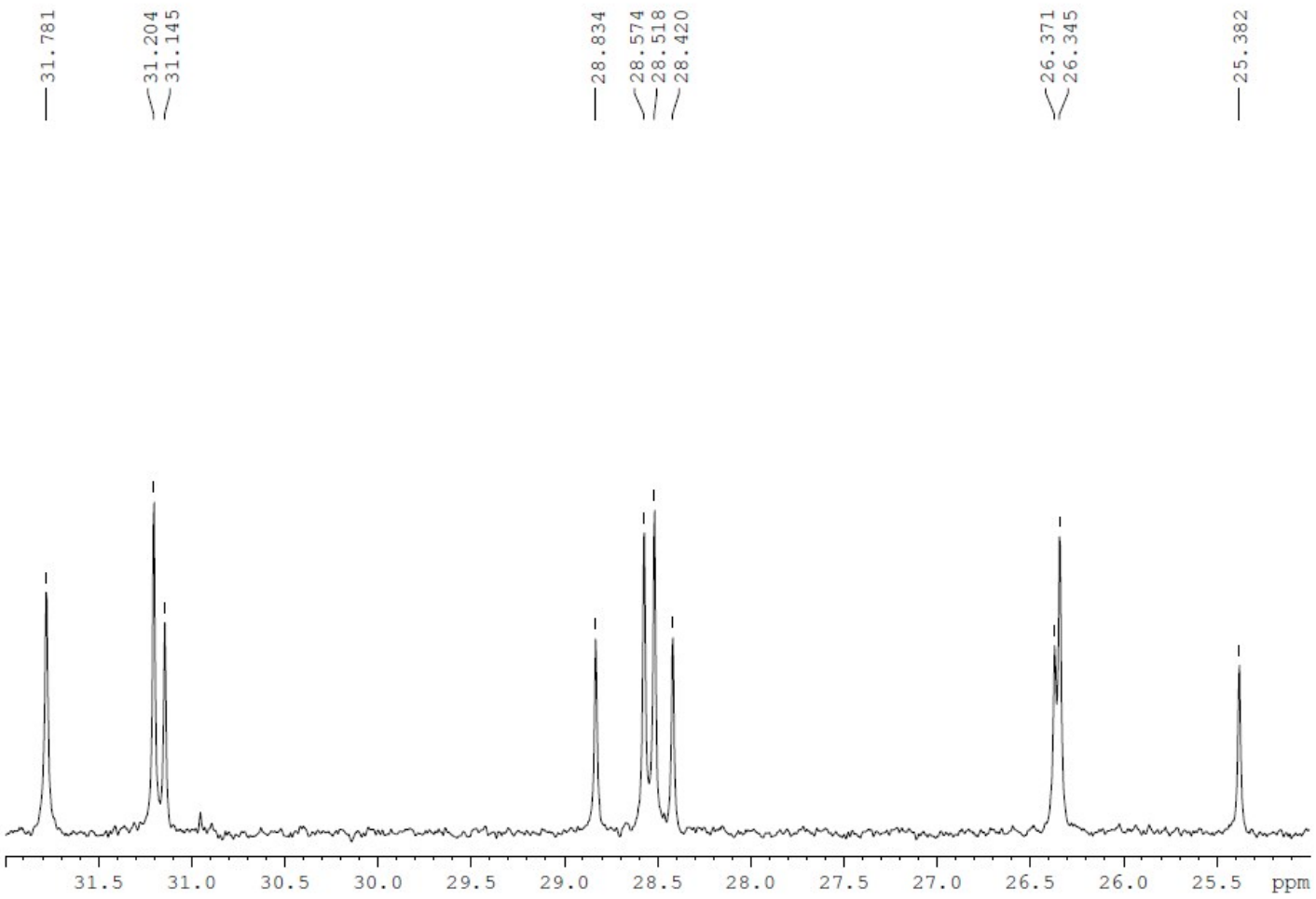

Figure ESI35: ^{13}C NMR spectrum of hydrazone **3h** derived from octanal, expanded view

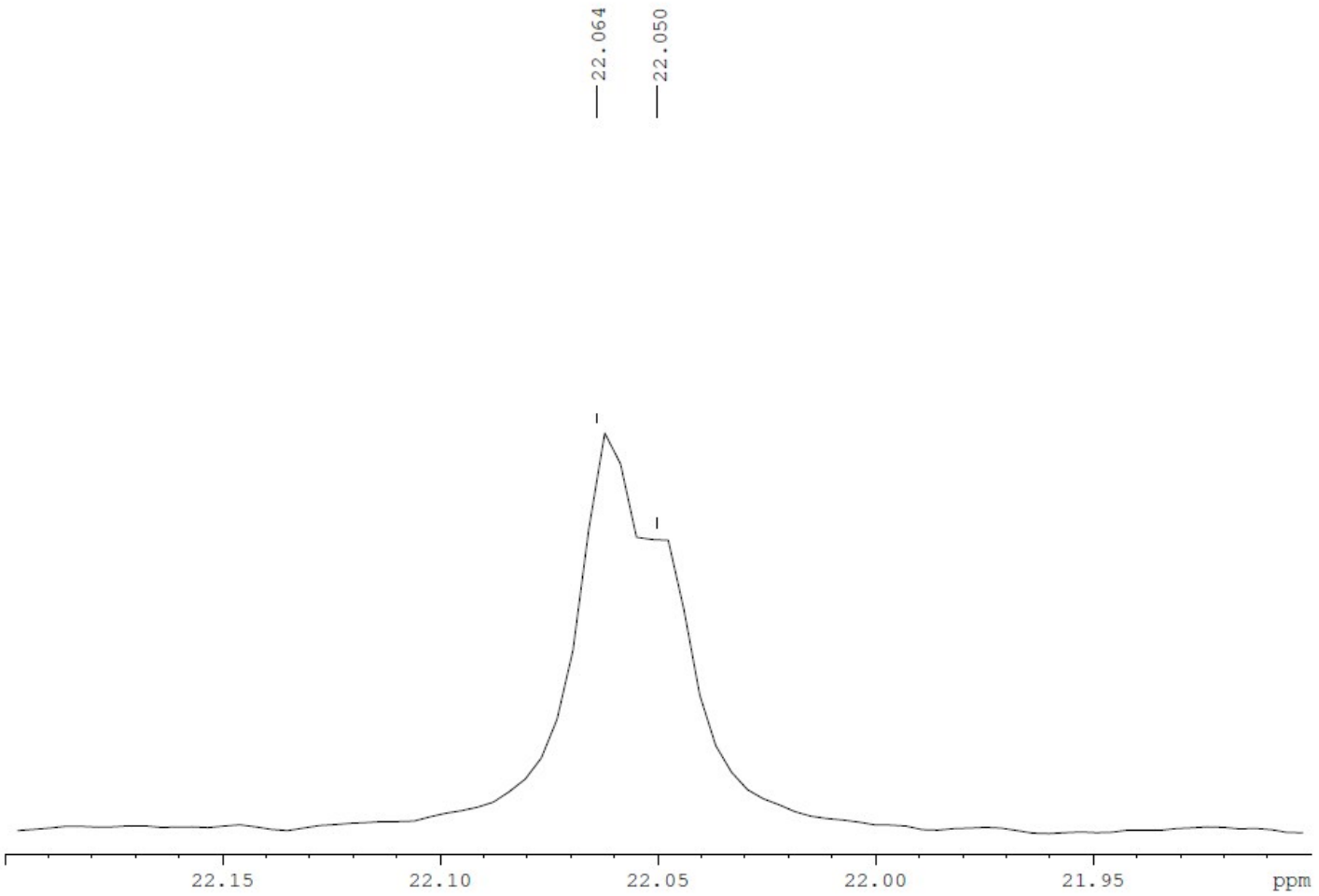

Figure ESI36: ^{13}C NMR spectrum of hydrazone **3h** derived from octanal, expanded view

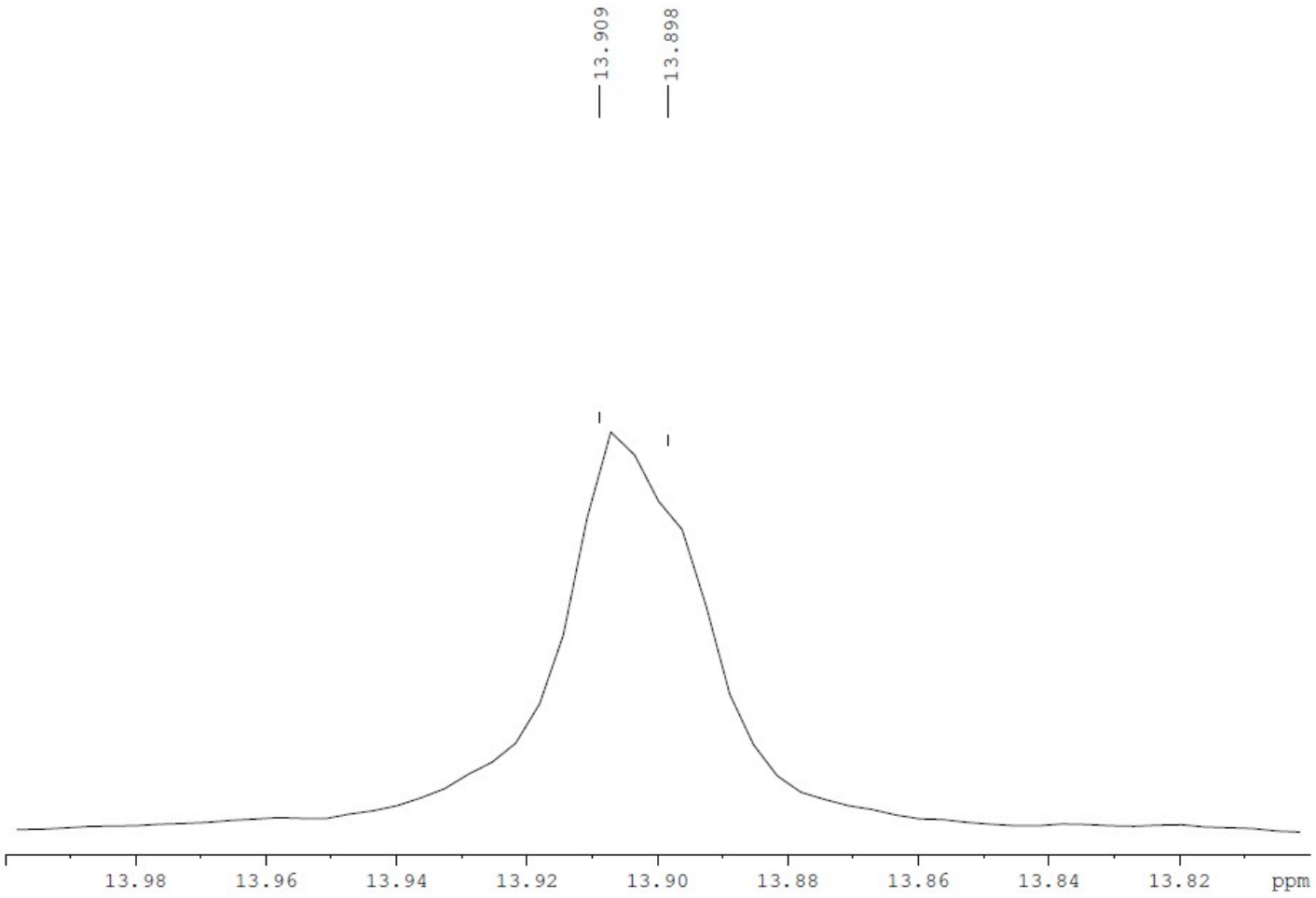

Figure ESI37: ^{13}C NMR spectrum of hydrazone **3h** derived from octanal, expanded view

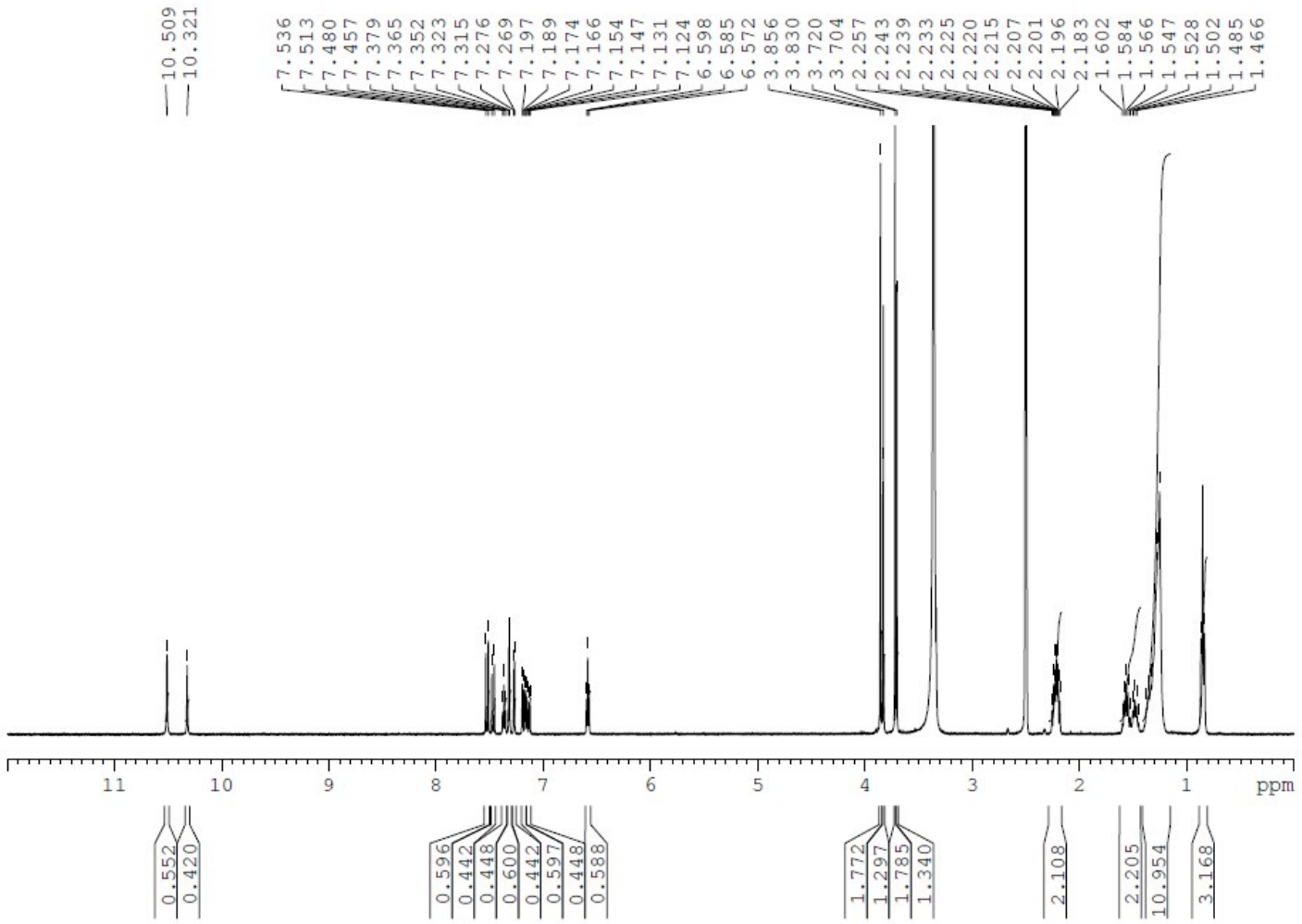

Figure ESI38: ^{1}H NMR spectrum of hydrazone **3i** derived from nonanal, full view

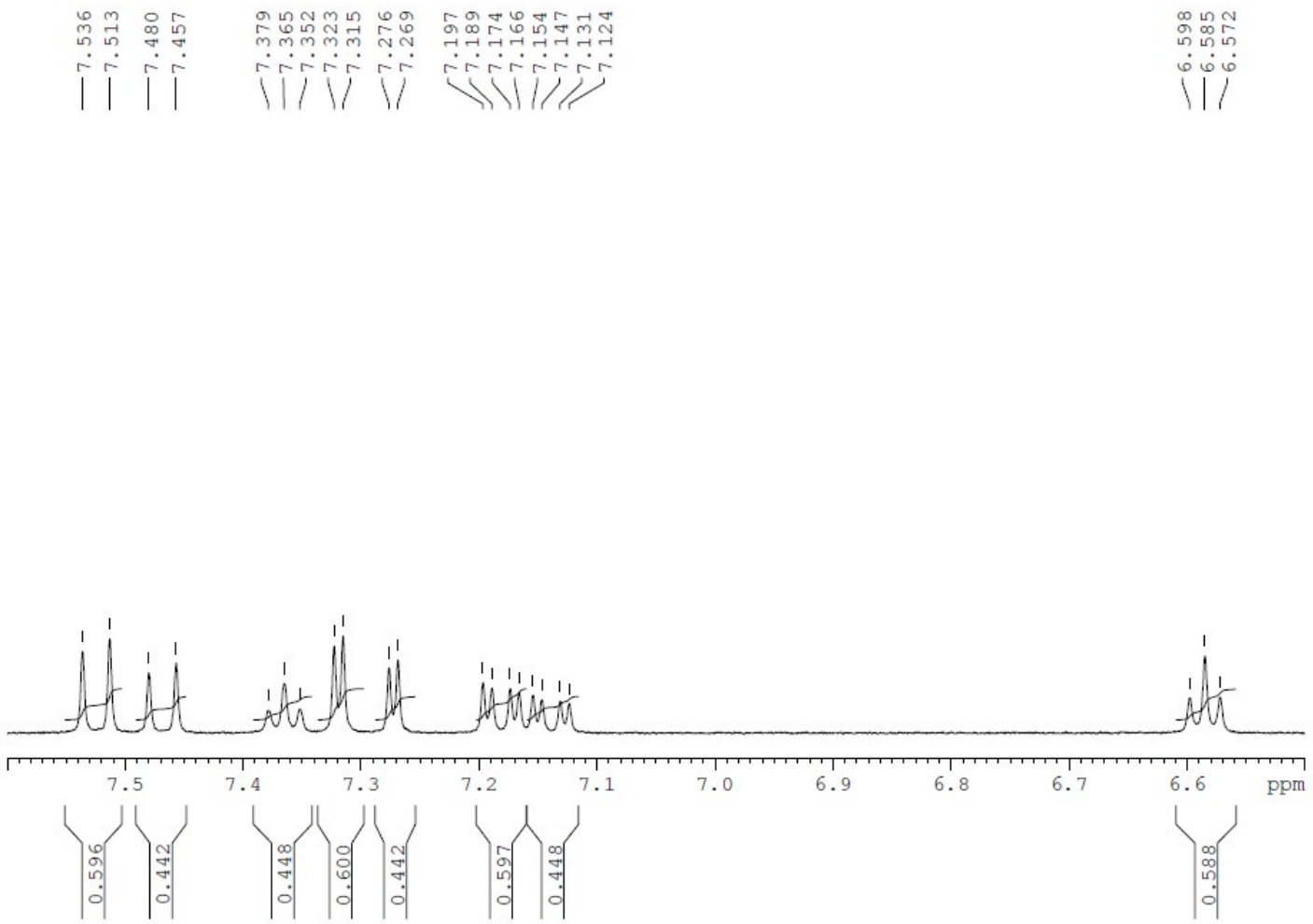

Figure ESI39: ^{1}H NMR spectrum of hydrazone **3i** derived from nonanal, expanded view

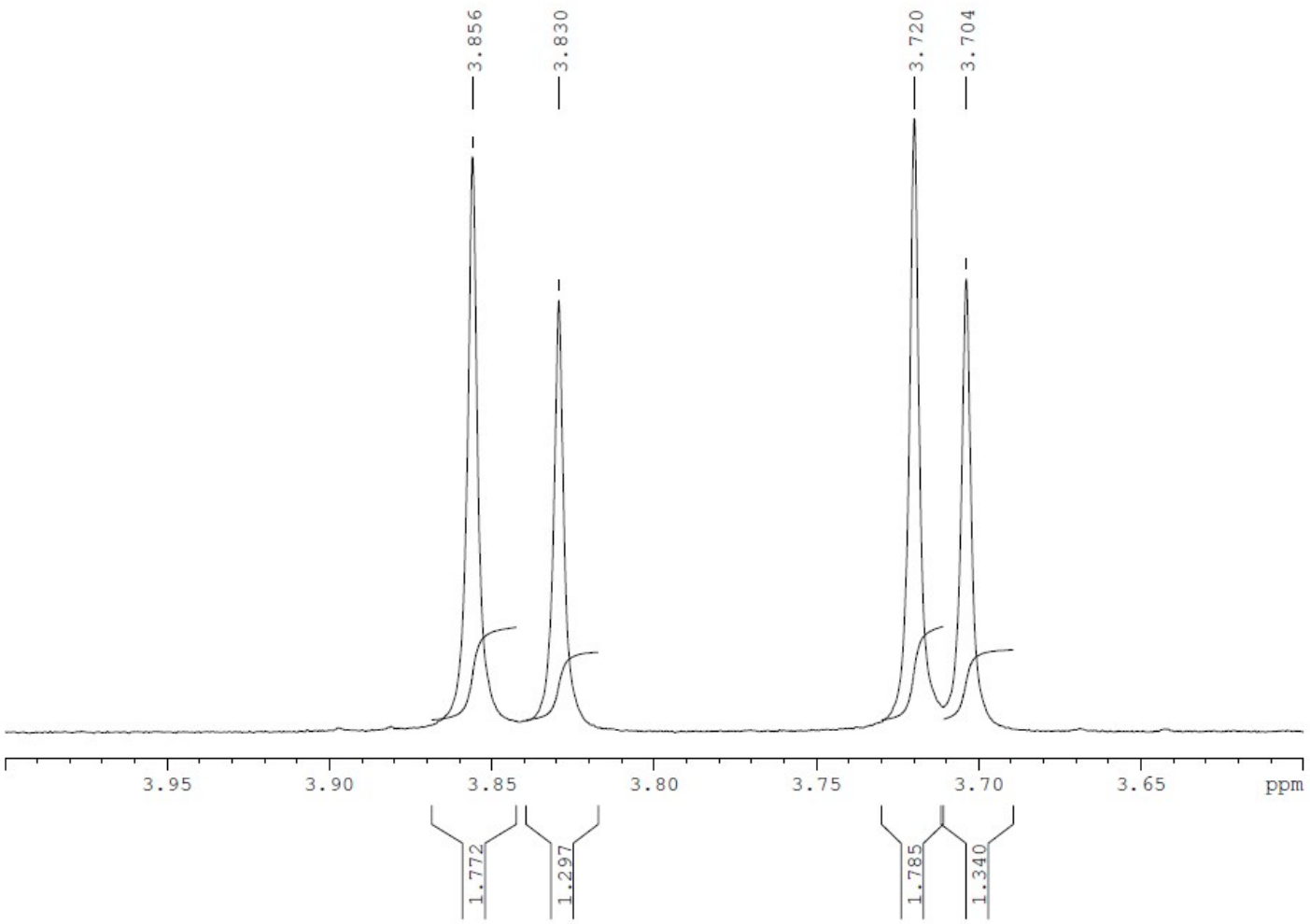

Figure ESI40: ^{1}H NMR spectrum of hydrazone **3i** derived from nonanal, expanded view

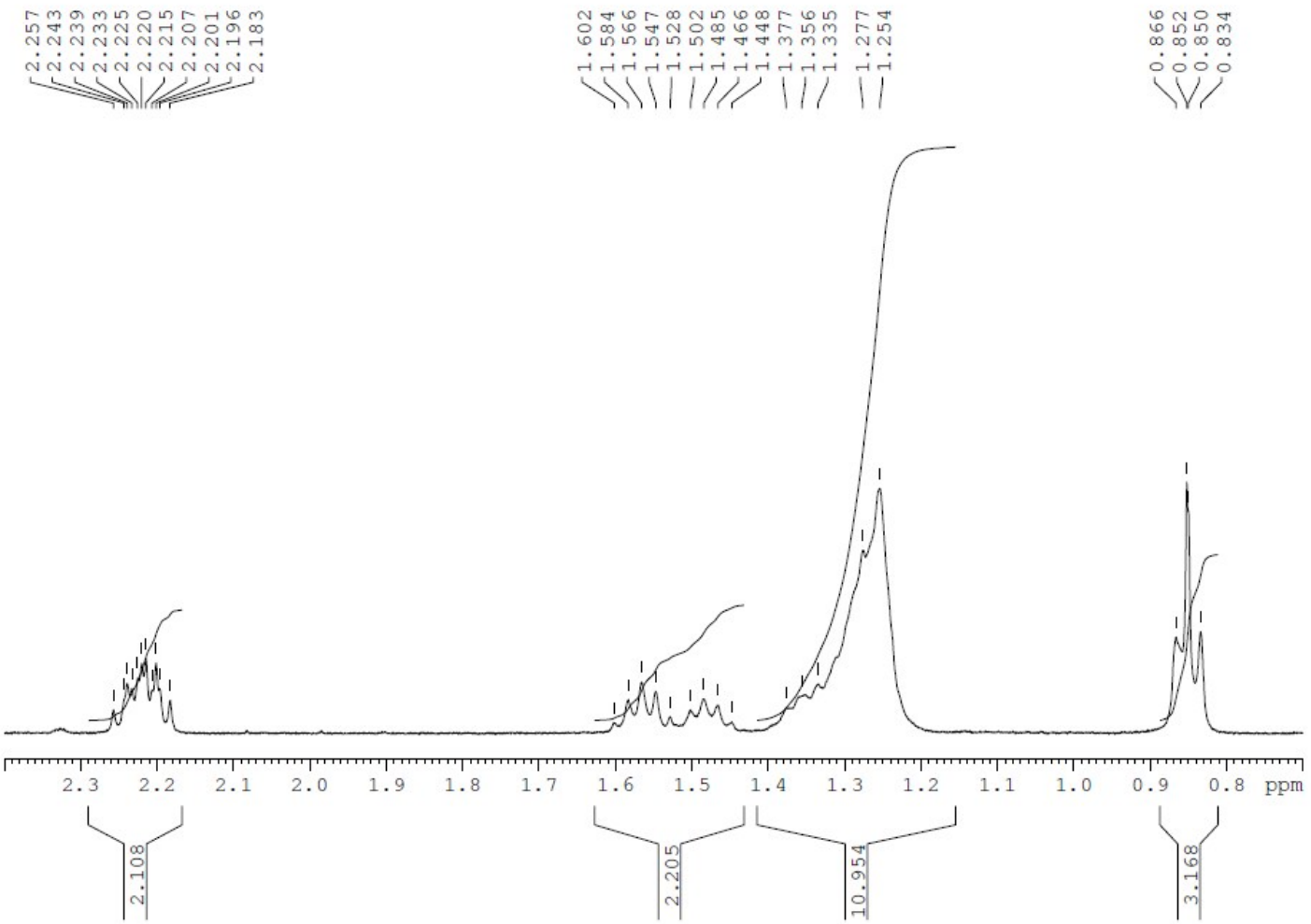

Figure ESI41: ^{1}H NMR spectrum of hydrazone **3i** derived from nonanal, expanded view

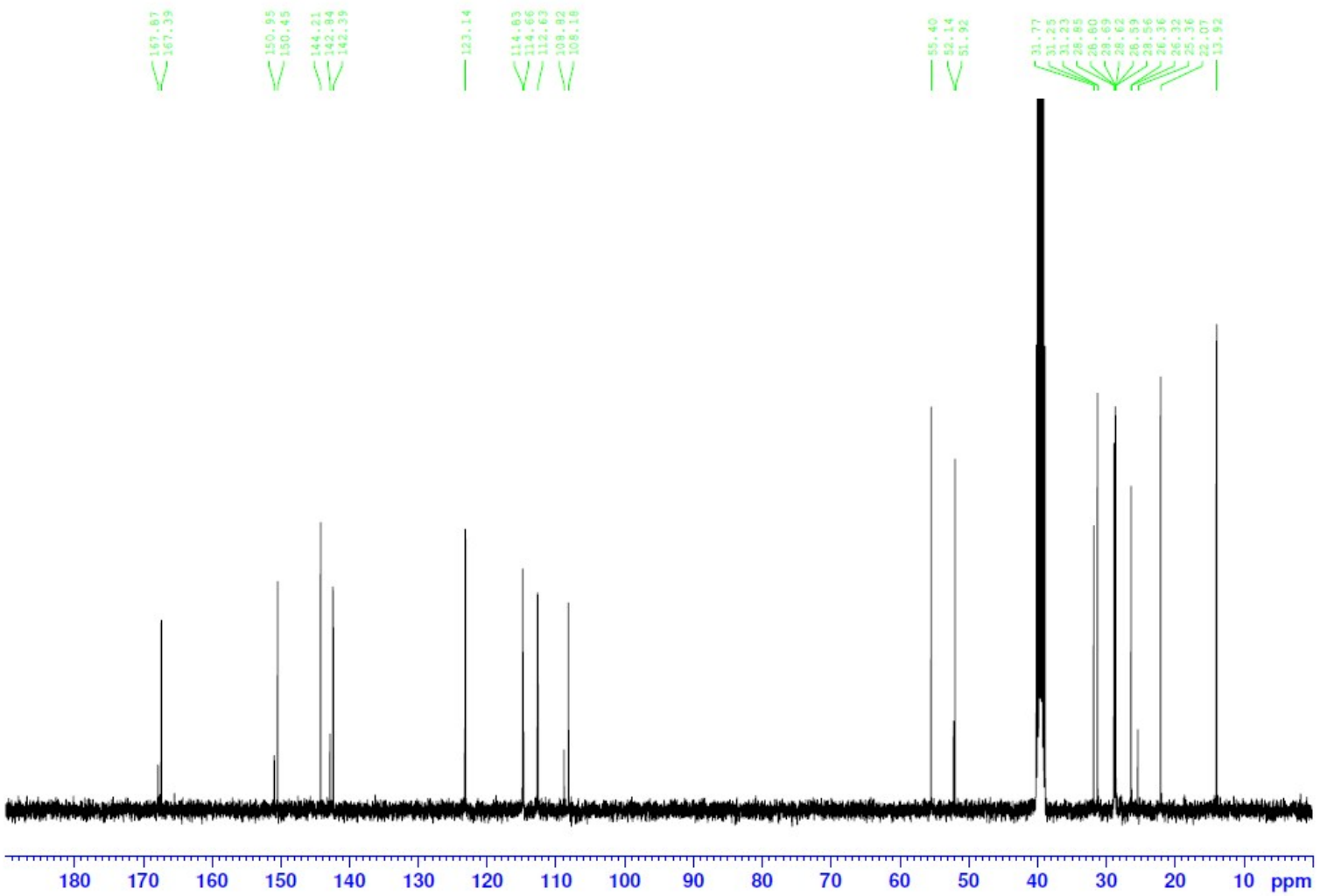

Figure ESI42: ^{13}C NMR spectrum of hydrazone **3i** derived from nonanal, full view

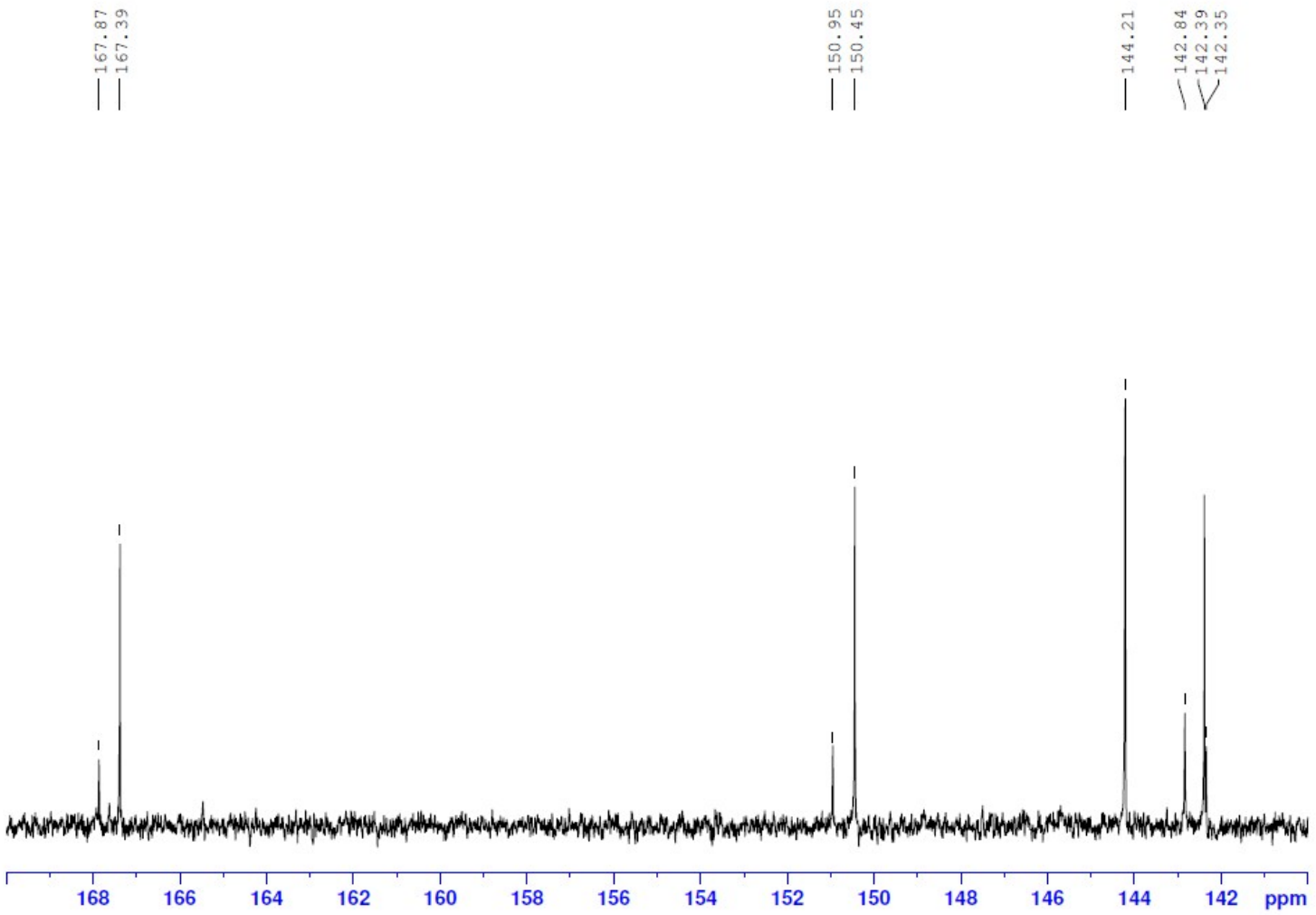

Figure ESI43: ^{13}C NMR spectrum of hydrazone **3i** derived from nonanal, expanded view

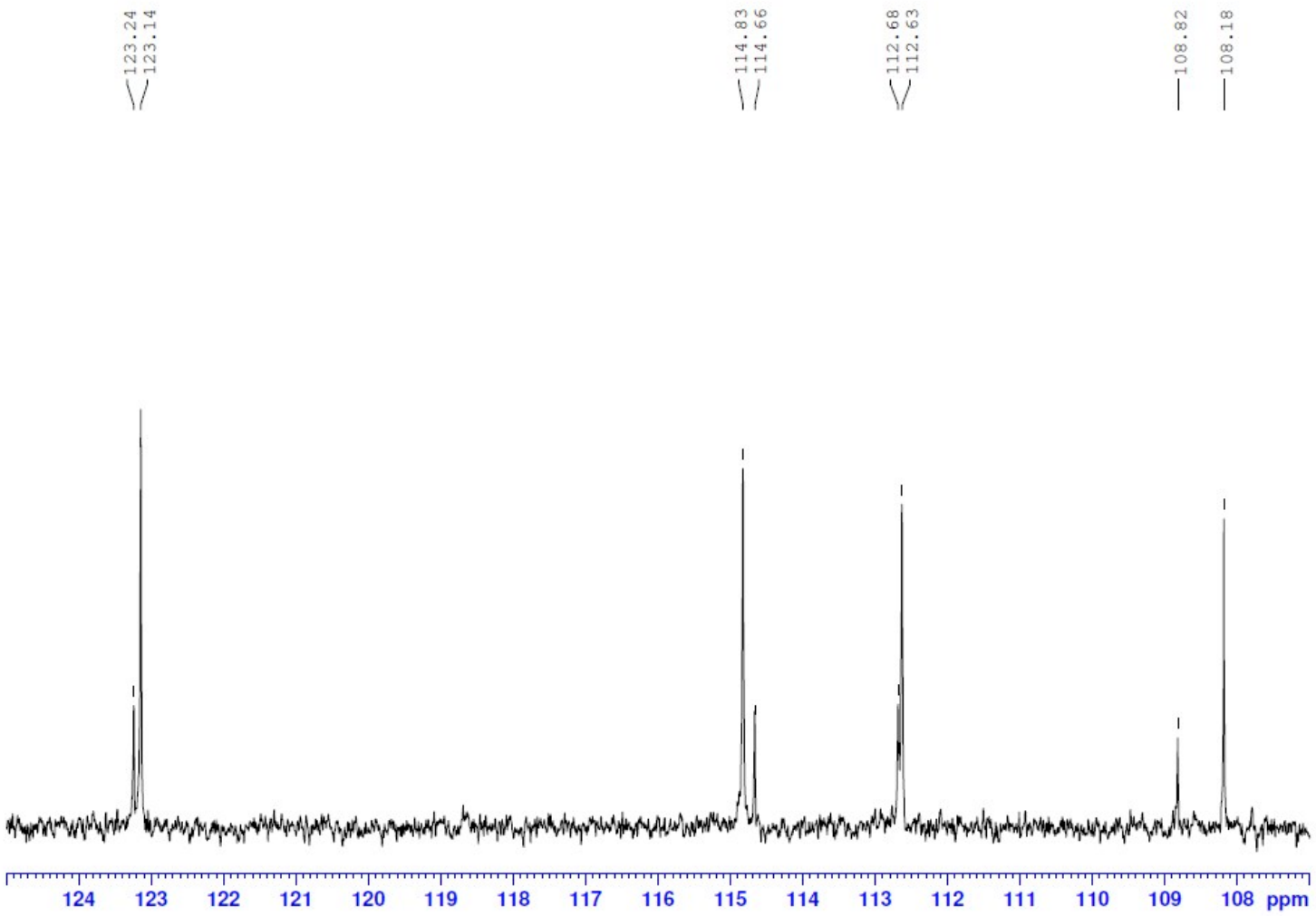

Figure ESI44: ^{13}C NMR spectrum of hydrazone **3i** derived from nonanal, expanded view

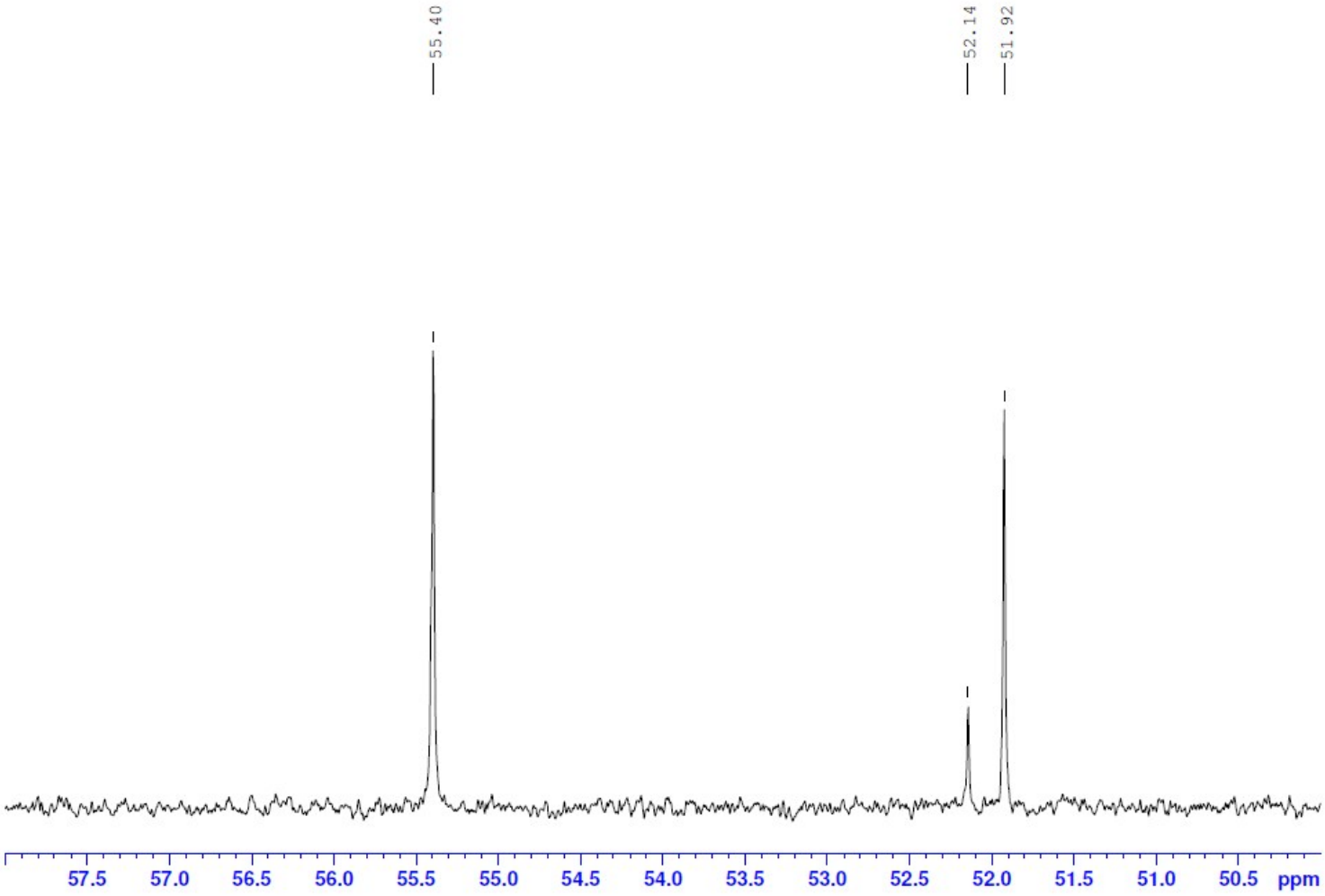

Figure ESI45: ^{13}C NMR spectrum of hydrazone **3i** derived from nonanal, expanded view

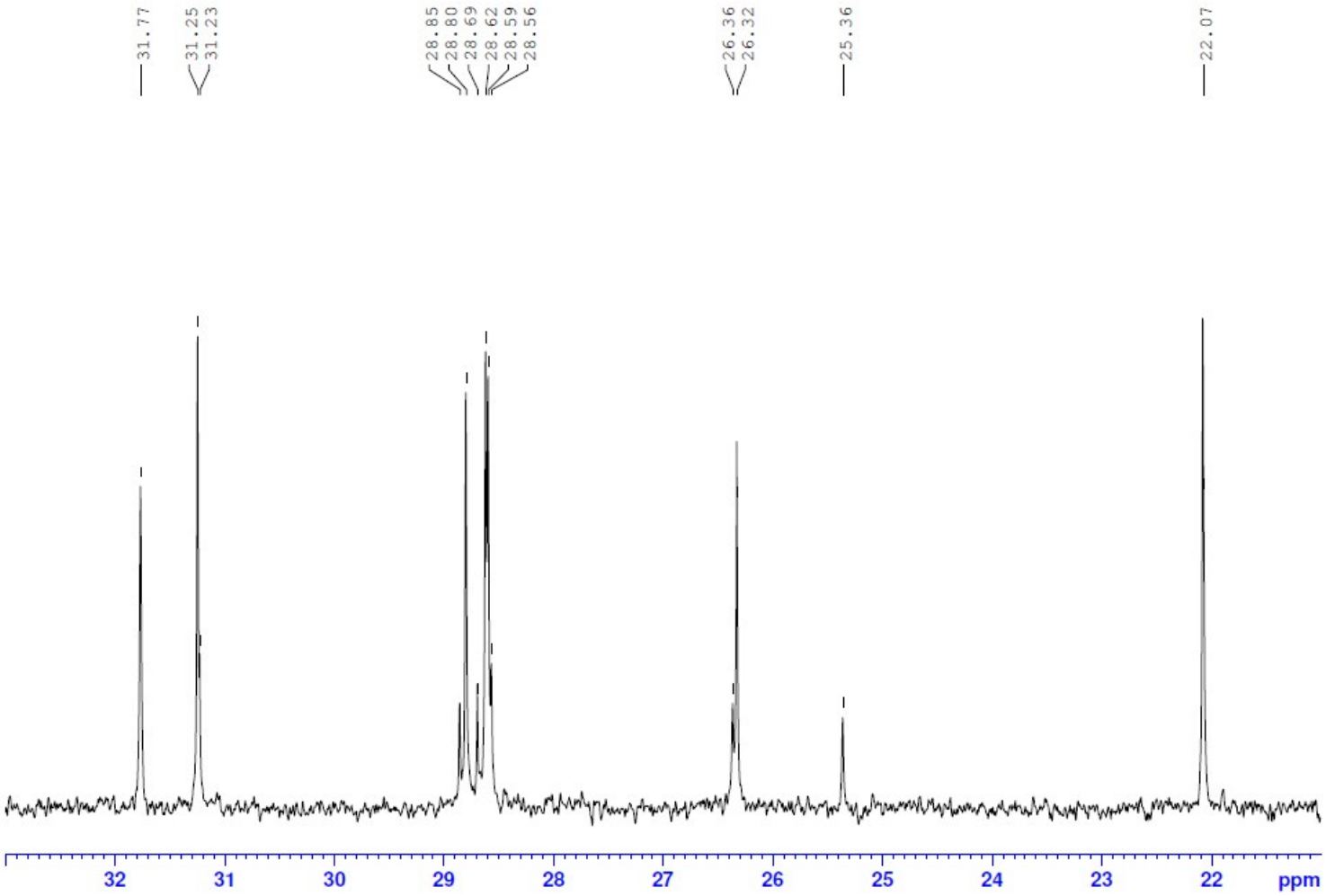

Figure ESI46: ^{13}C NMR spectrum of hydrazone **3i** derived from nonanal, expanded view

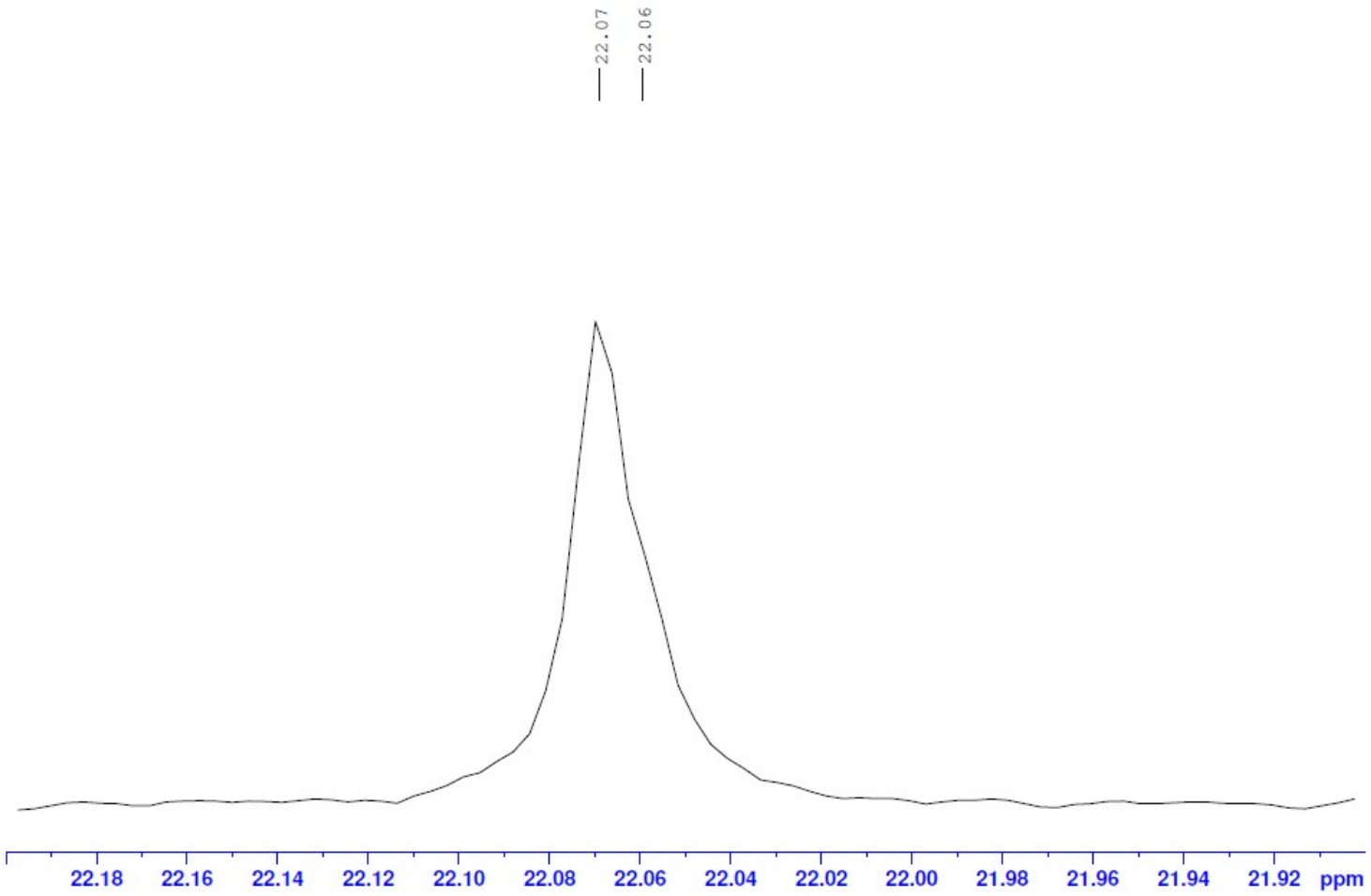

Figure ESI47: ^{13}C NMR spectrum of hydrazone **3i** derived from nonanal, expanded view

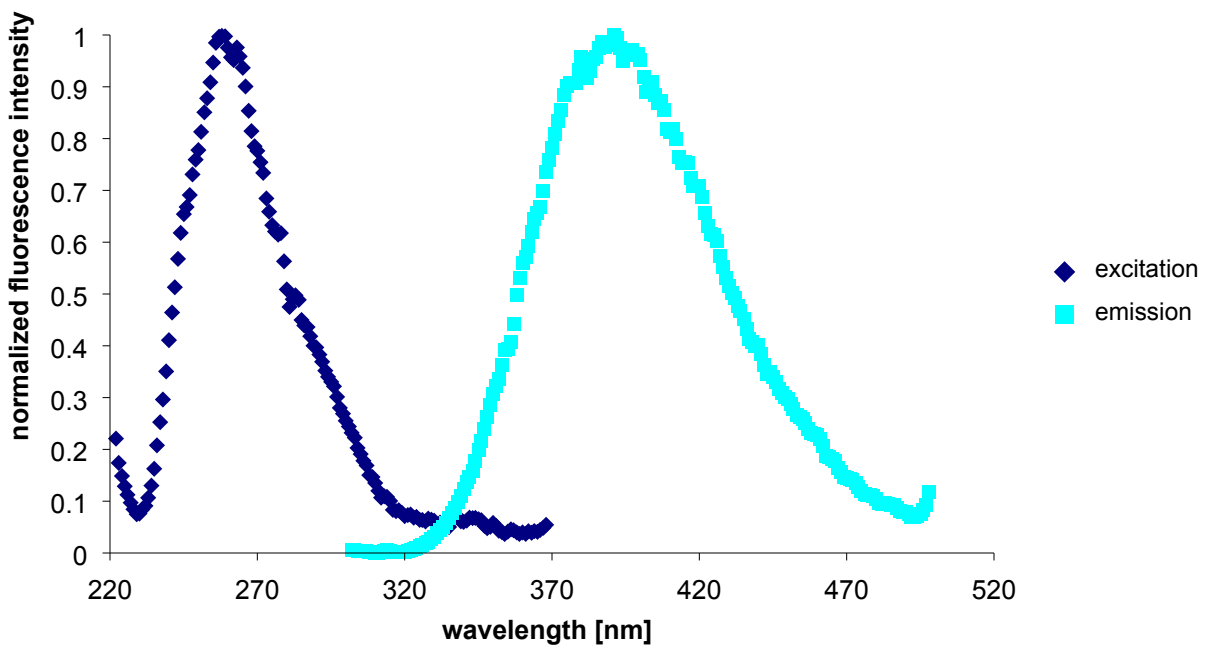

Figure ESI48: Fluorescence spectra of pyrazole **4a**

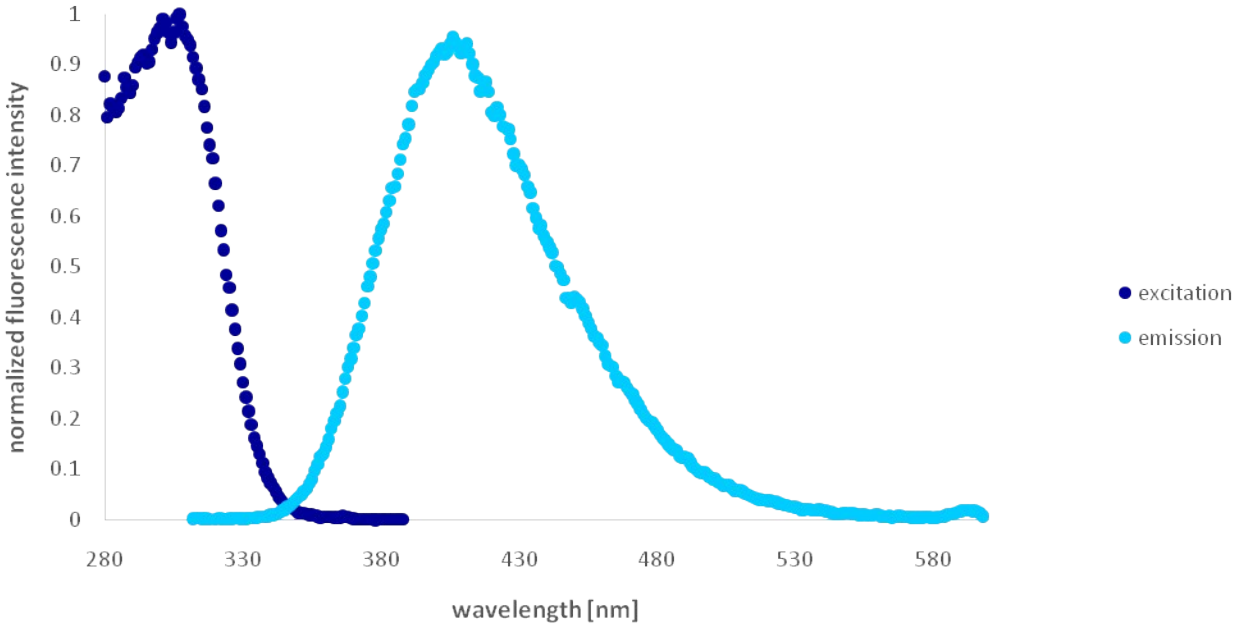

Figure ESI49: Fluorescence spectra of pyrazole **4b**

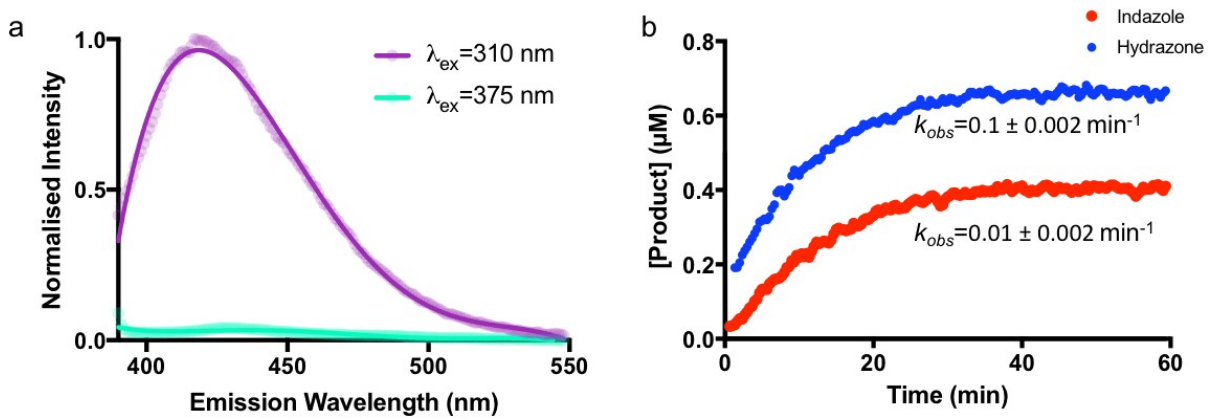

Figure ESI50: Spectral properties and comparative kinetics of hydrazone *versus* indazole formation. (a) Emission spectra are shown for the same solution of indazole **11** with excitation at 310 nm (purple) or 375 nm (cyan). (b) The pseudo-first order reaction kinetics for indazole formation (red) or hydrazone formation between **2b** and hexanal (blue) in PBS at 37°C are shown, with the associated observed rate constant provided below each respective curve.