

Novel Aminoguanidine Hydrazone Analogues: From Potential Antimicrobial Agents to Potent Cholinesterase Inhibitors

Martin Krátký ^{1,*}, Šárka Štěpánková ², Klára Konečná ³, Katarína Svrčková ², Jana Maixnerová ⁴, Markéta Švarcová ^{1,5}, Ondřej Jand'ourek ³, František Trejtnar ⁴ and Jarmila Vinšová ¹

¹ Department of Organic and Bioorganic Chemistry, Faculty of Pharmacy in Hradec Králové, Charles University, Akademika Heyrovského 1203, 500 05 Hradec Králové, Czech Republic; komloova@seznam.cz (M.Š.); vinsova@faf.cuni.cz (J.V.)

² Department of Biological and Biochemical Sciences, Faculty of Chemical Technology, University of Pardubice, Studentská 573, 532 10 Pardubice, Czech Republic; sarka.stepankova@upce.cz (Š.Š.); katarina.svrckova@upce.cz (K.S.)

³ Department of Biological and Medical Sciences, Faculty of Pharmacy in Hradec Králové, Charles University, Akademika Heyrovského 1203, 500 05 Hradec Králové, Czech Republic; konecna@faf.cuni.cz (K.K.); jando6aa@faf.cuni.cz (O.J.)

⁴ Department of Pharmacology and Toxicology, Faculty of Pharmacy in Hradec Králové, Charles University, Akademika Heyrovského 1203, 500 05 Hradec Králové, Czech Republic; maixj6a1@faf.cuni.cz (J.M.); trejtnarf@faf.cuni.cz (F.T.)

⁵ Department of Chemistry, Faculty of Science, J. E. Purkinje University, Pasteurova 3632/15, 400 96 Ústí nad Labem, Czech Republic

1. NMR spectra of the representative compounds

Figure. S1. ^1H NMR spectrum (500 MHz, $\text{DMSO}-d_6$) of (*E*)-2-(6-chloro-2-hydroxybenzylidene)hydrazine-1-carboximidamide **1h**.

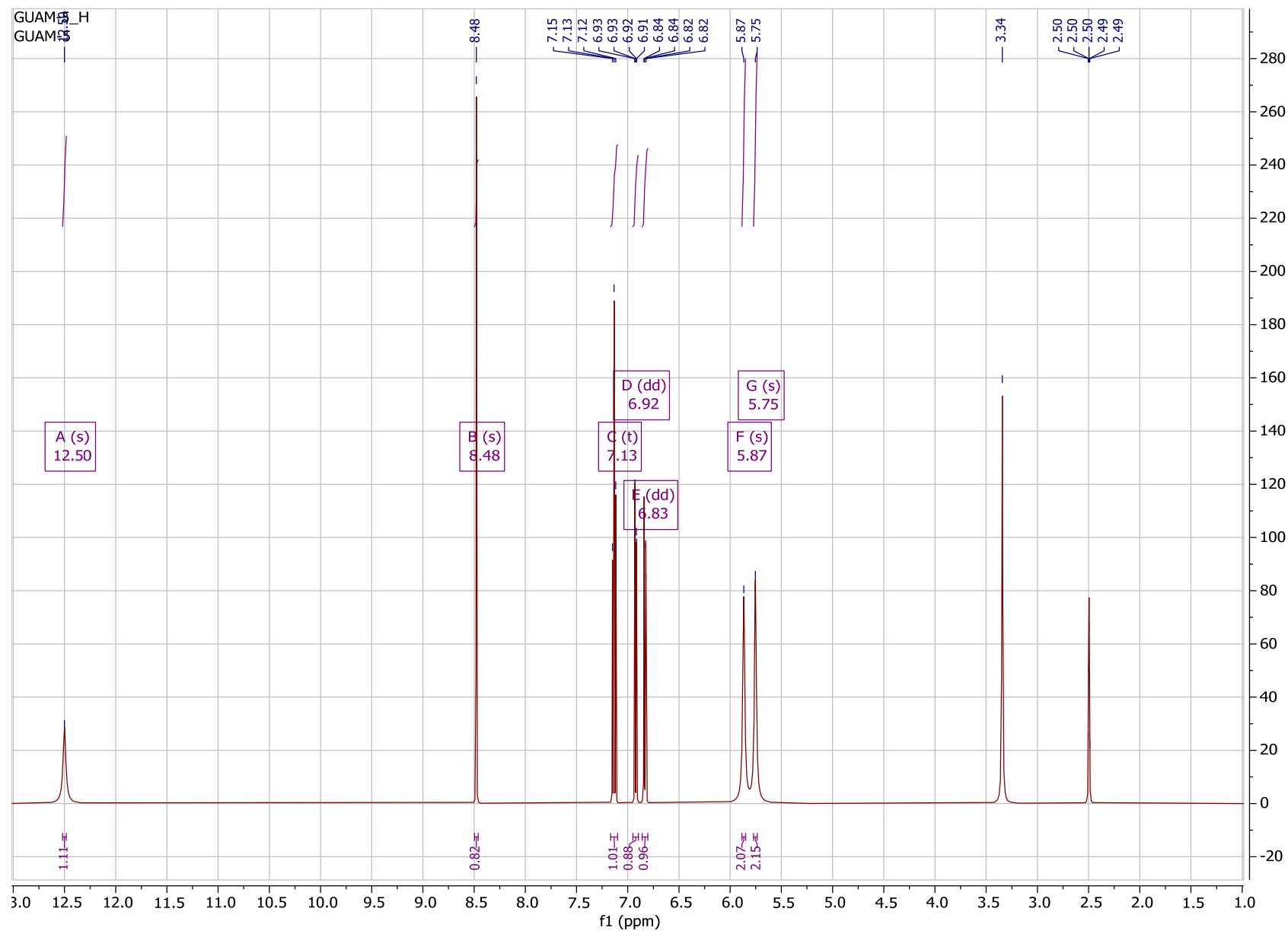


Figure. S2. ^{13}C NMR spectrum (126 MHz, $\text{DMSO-}d_6$) of (*E*)-2-(6-chloro-2-hydroxybenzylidene)hydrazine-1-carboximidamide **1h**.

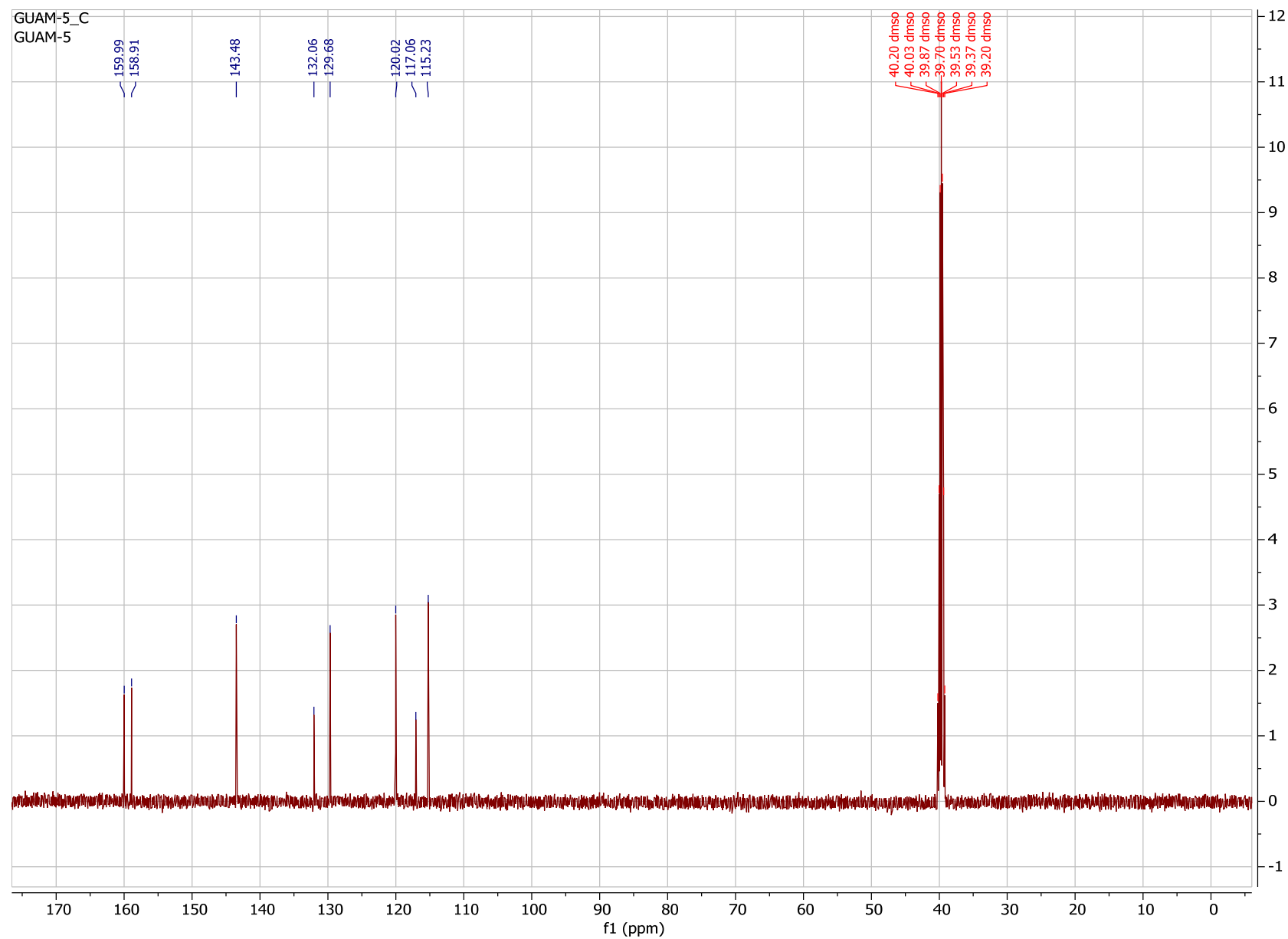


Figure. S3. ^1H NMR spectrum (600 MHz, $\text{DMSO-}d_6$) of (*E*)-2-[(5-nitrofur-2-yl)methylene]hydrazine-1-carboximidamide **1n**.

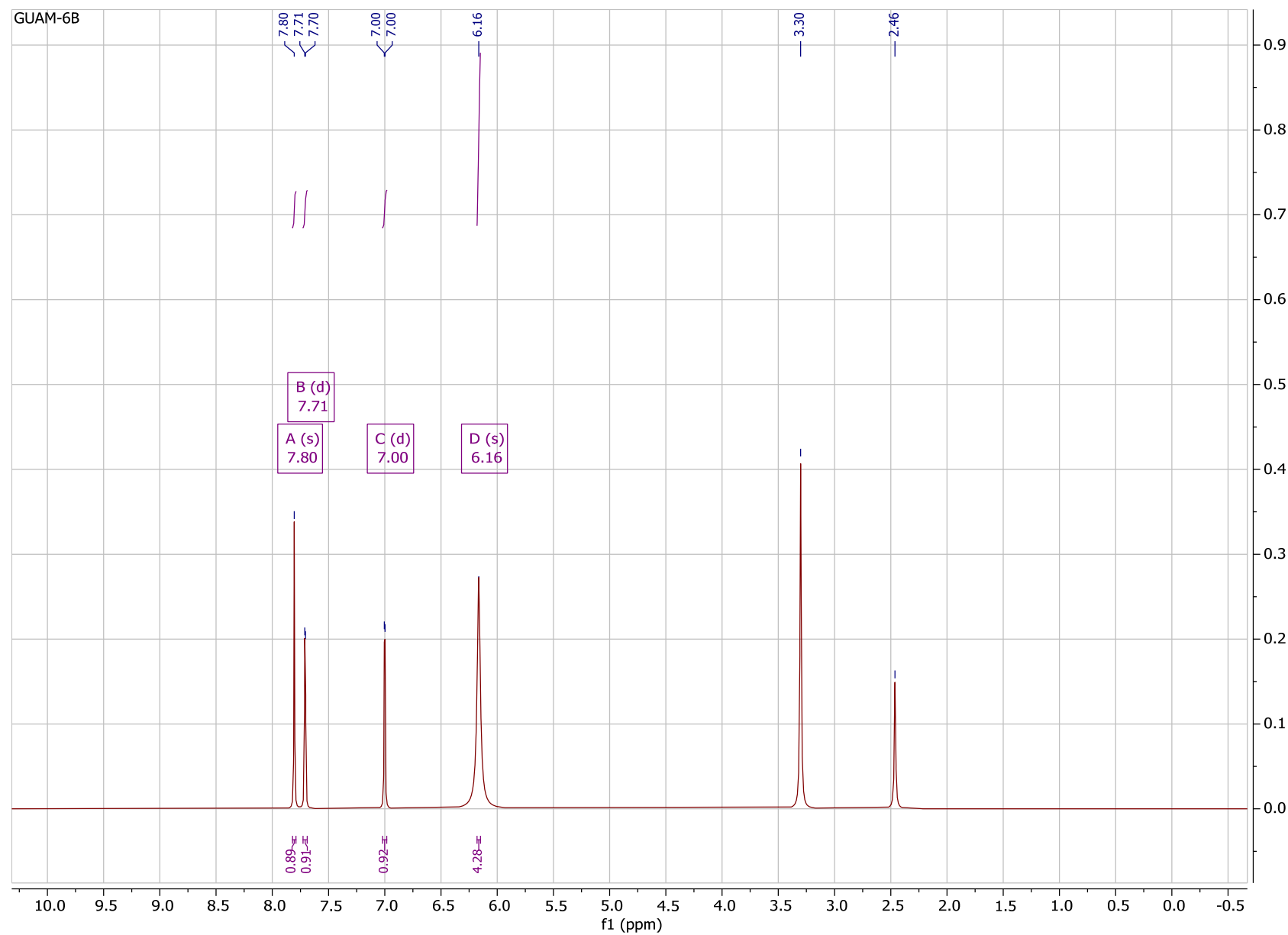


Figure. S4. ^{13}C NMR spectrum (151 MHz, $\text{DMSO-}d_6$) of (*E*)-2-[(5-nitrofur-2-yl)methylene]hydrazine-1-carboximidamide **1n**.

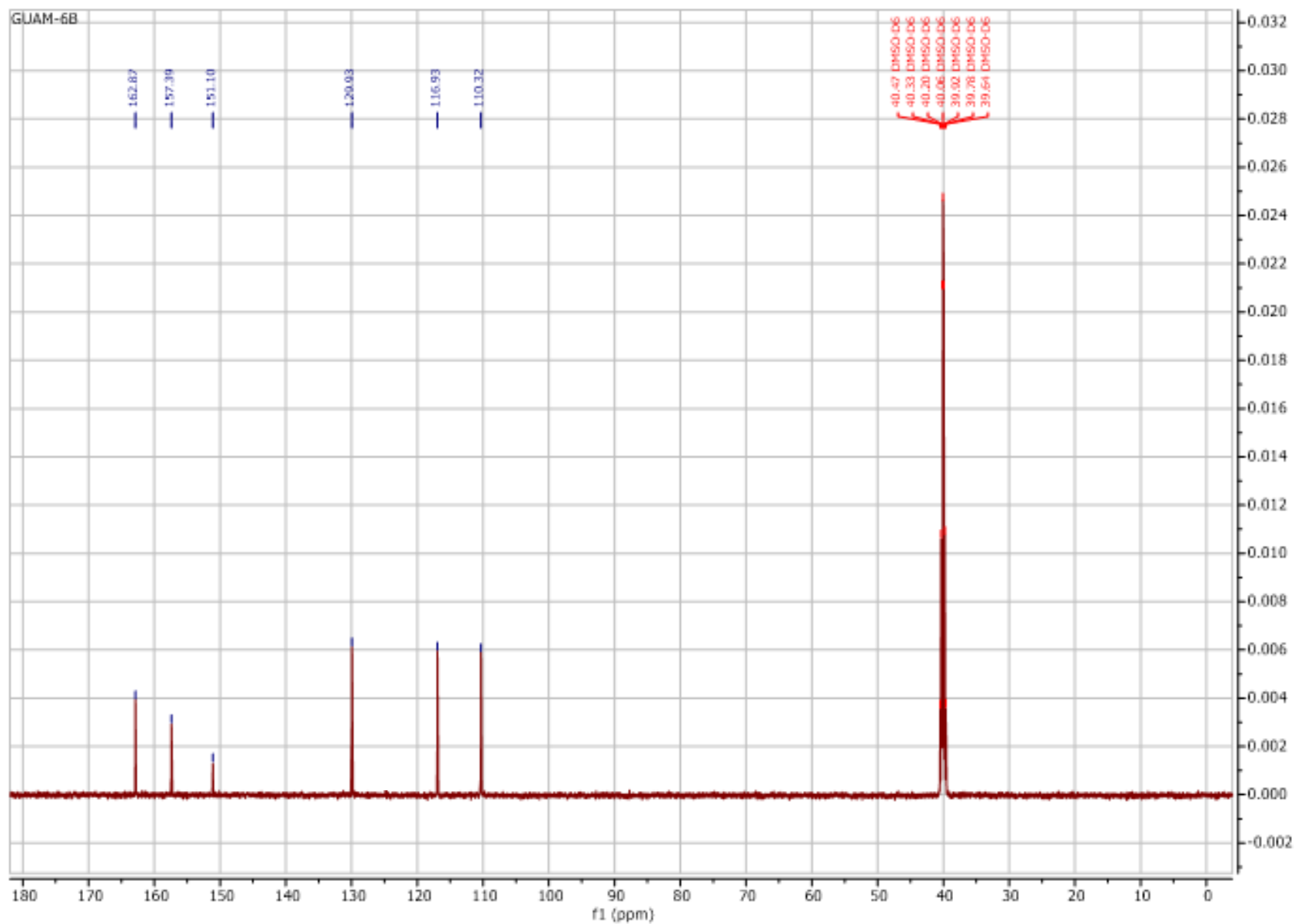


Figure. S5. ^1H NMR spectrum (600 MHz, $\text{DMSO}-d_6$) of (*E*)-2-(3,5-diiodobenzylidene)hydrazine-1-carboximidamide **2c**.

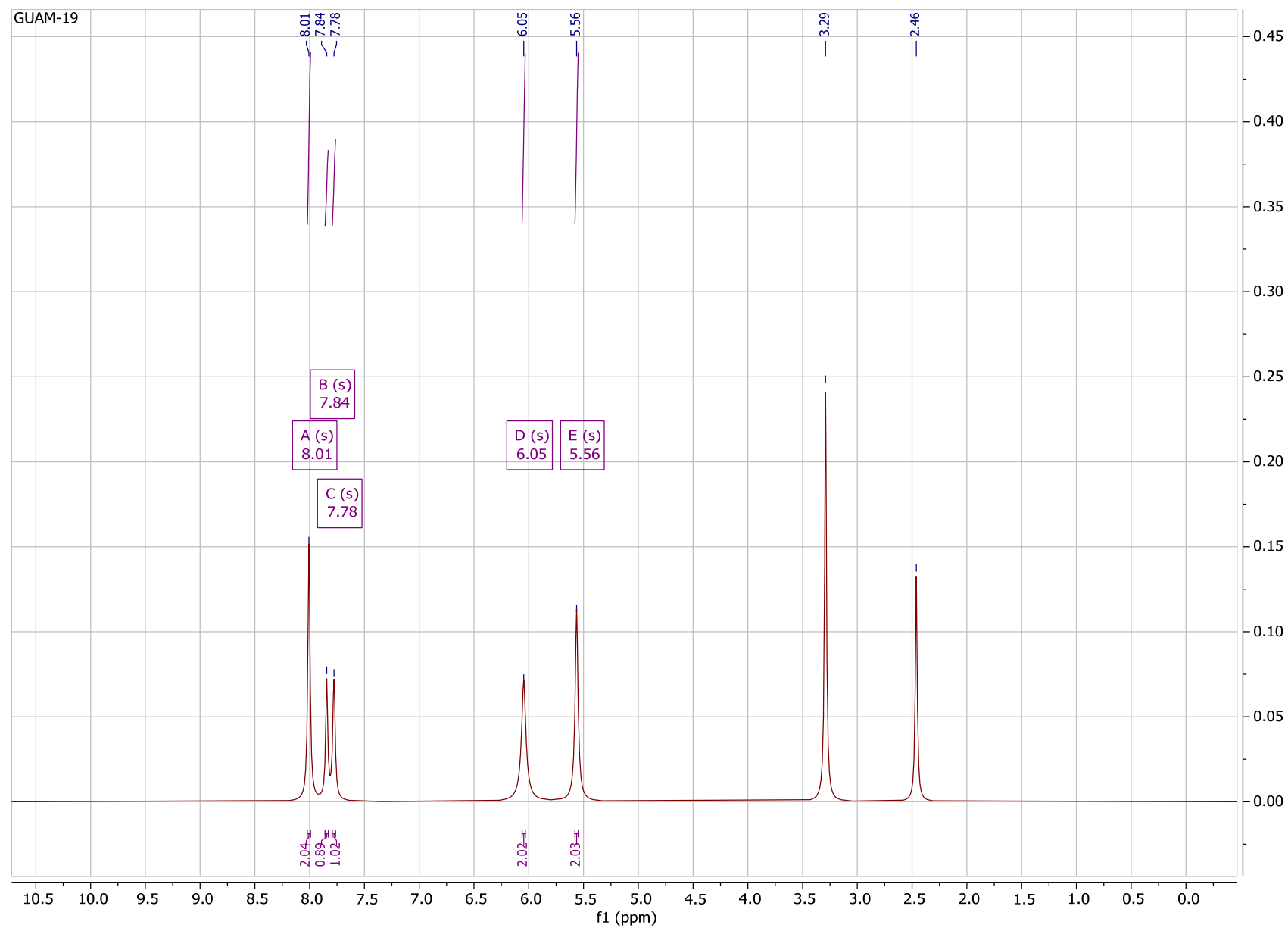


Figure. S6. ^{13}C NMR spectrum (151 MHz, $\text{DMSO-}d_6$) of (*E*)-2-(3,5-diiodobenzylidene)hydrazine-1-carboximidamide **2c**.

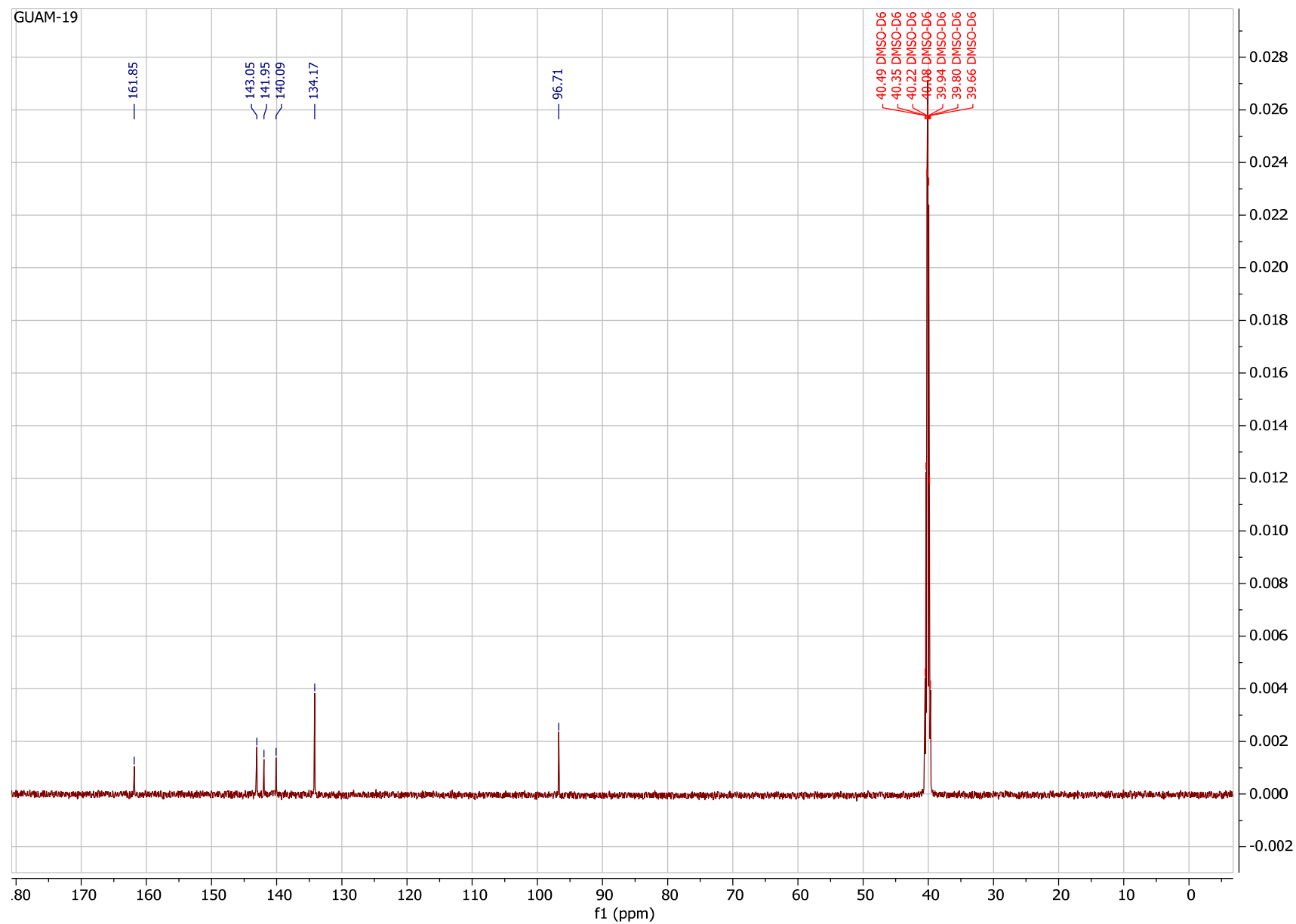


Figure. S7. ^1H NMR spectrum (600 MHz, $\text{DMSO}-d_6$) of (*E*)-2-(2-hydroxy-3,5-diiodobenzylidene)-*N*-nitrohydrazine-1-carboximidamide **2f**.

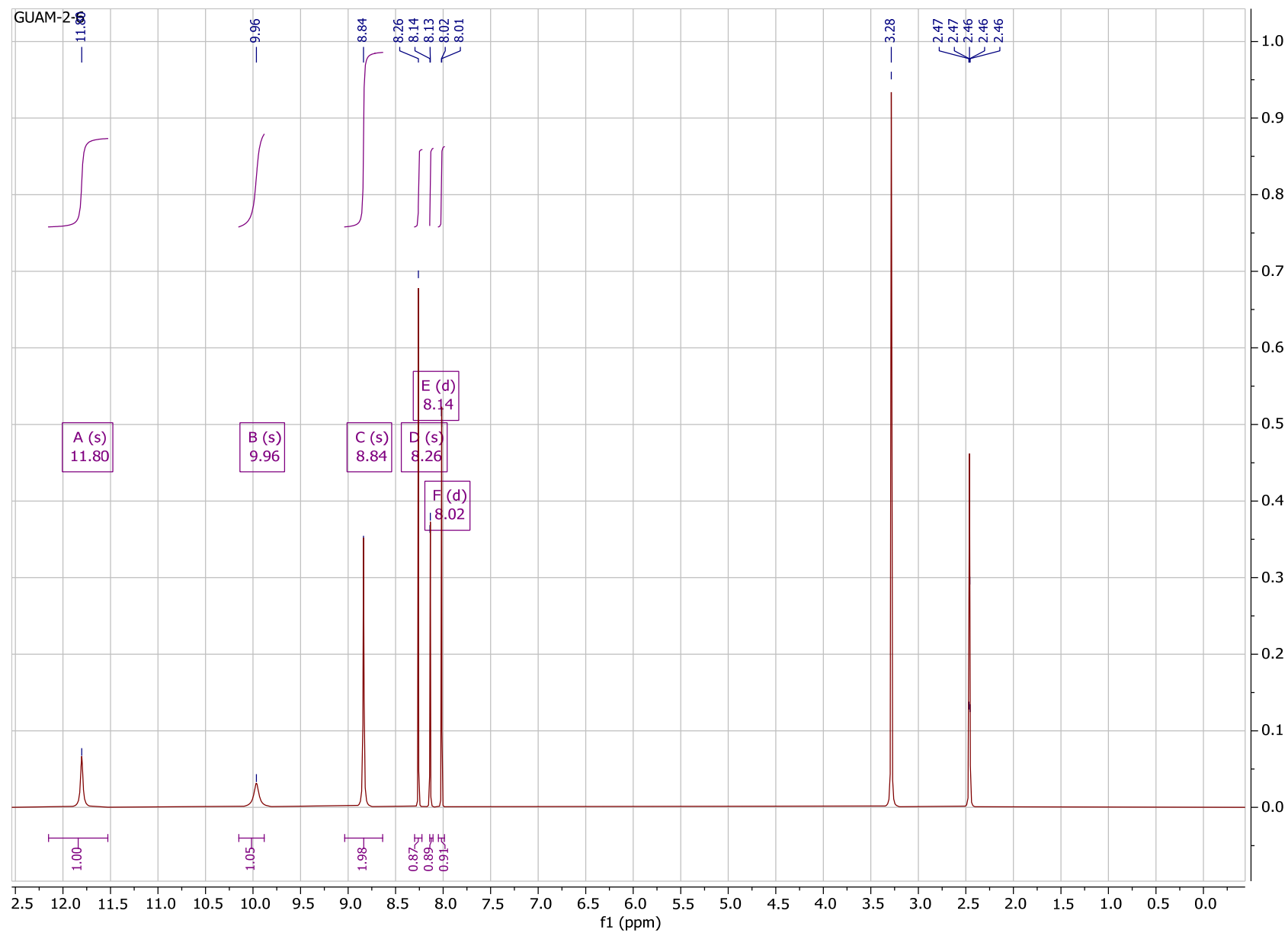


Figure. S8. ^{13}C NMR spectrum (151 MHz, $\text{DMSO-}d_6$) of (*E*)-2-(2-hydroxy-3,5-diiodobenzylidene)-*N*-nitrohydrazine-1-carboximidamide **2f**.

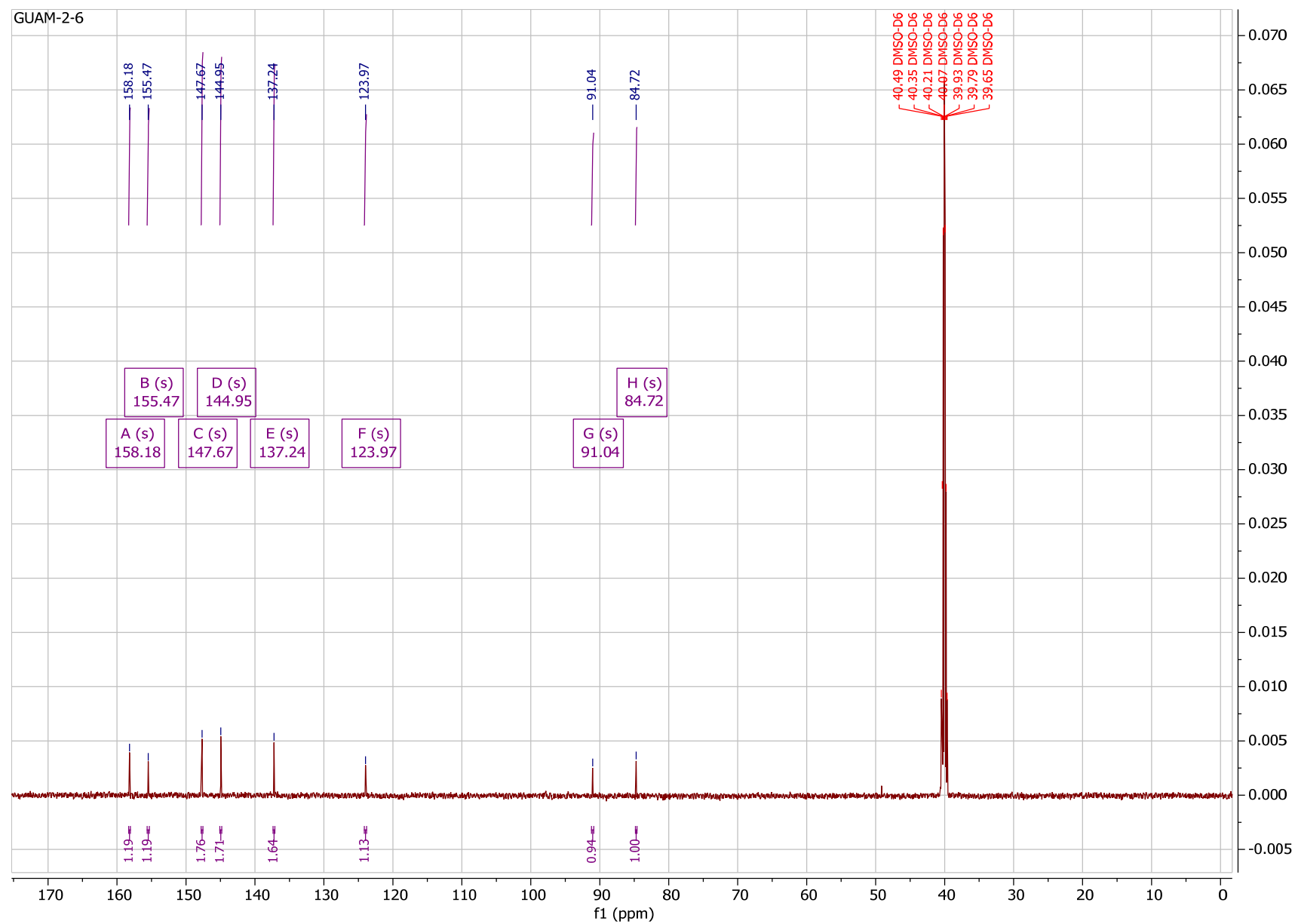


Figure. S9. ^1H NMR spectrum (600 MHz, $\text{DMSO}-d_6$) of (*E*)-2-(2-hydroxy-3,5-diiodobenzylidene)hydrazine-1-carboxamide **2h**.

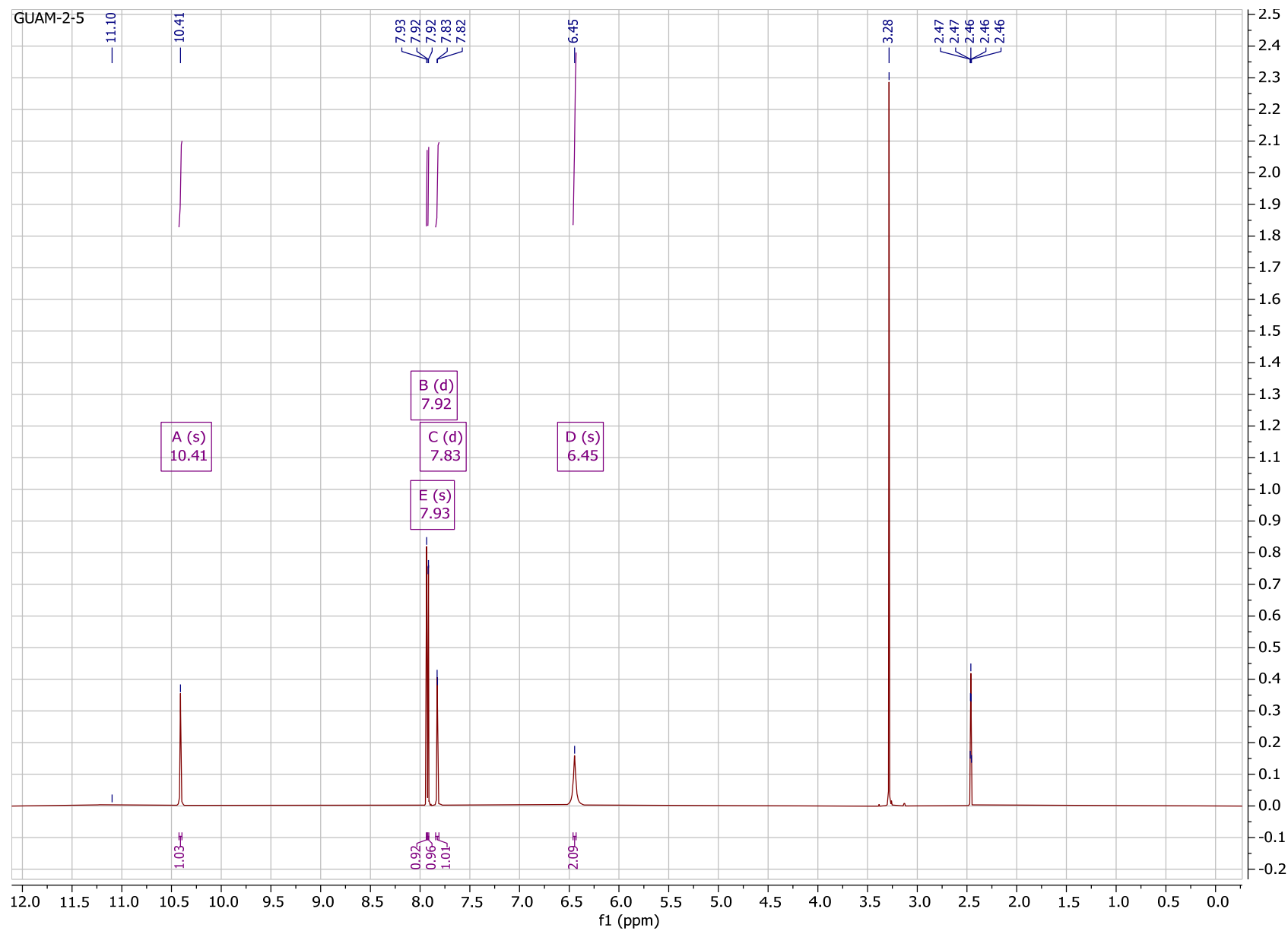


Figure. S10. ^{13}C NMR spectrum (151 MHz, $\text{DMSO-}d_6$) of (*E*)-2-(2-hydroxy-3,5-diiodobenzylidene)hydrazine-1-carboxamide **2h**.

