Supplementary Information

Two step synthesis, characterization and anti-bacterial activity of series of 3-((5-chloro-1*H*-benzo[*d*]imidazol-1-yl)methyl)-1,2,4-oxadiazoles

Shabhari Prasad Suggala[a], Jagadeesh Kumar Ega*[a] & A Samba Shiva Rao[b]

[a] Department of Chemistry, Chaitanya (Deemed to be University), Himayathnagar, Hyderabad 500 075, Telangana, India

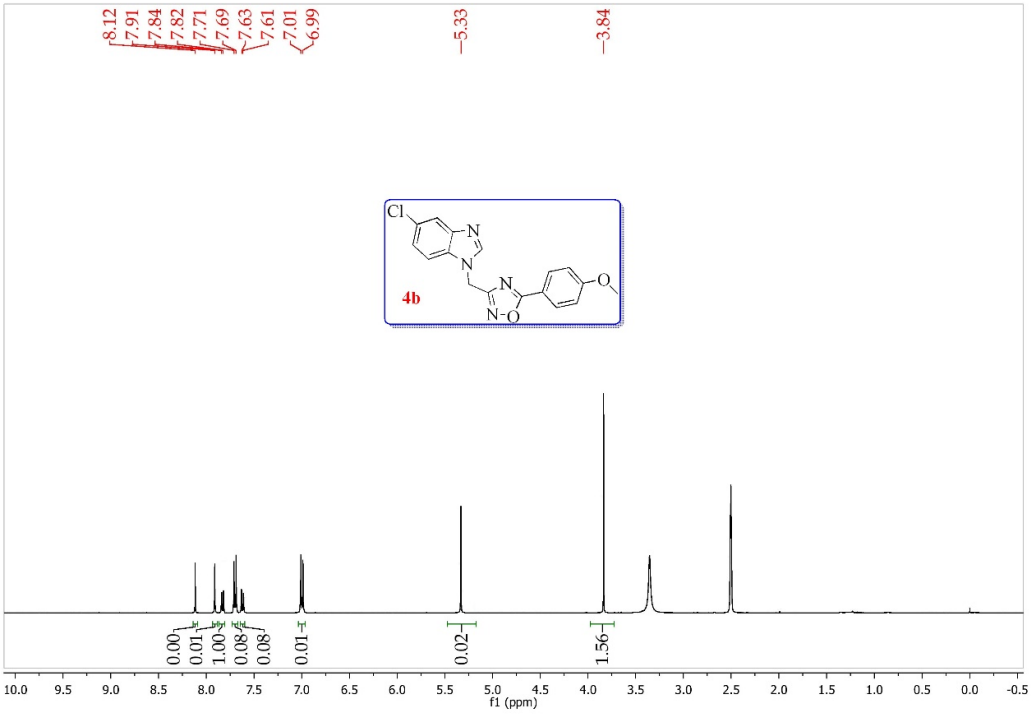
[b] Department of Applied Sciences and Humanities,Maturi Venkata Subba Rao Engineering College,Nadergul, Balapur, Hyderabad 501 510, Telangana, India

E-mail: jkjagadeeshkumare@gmail.com

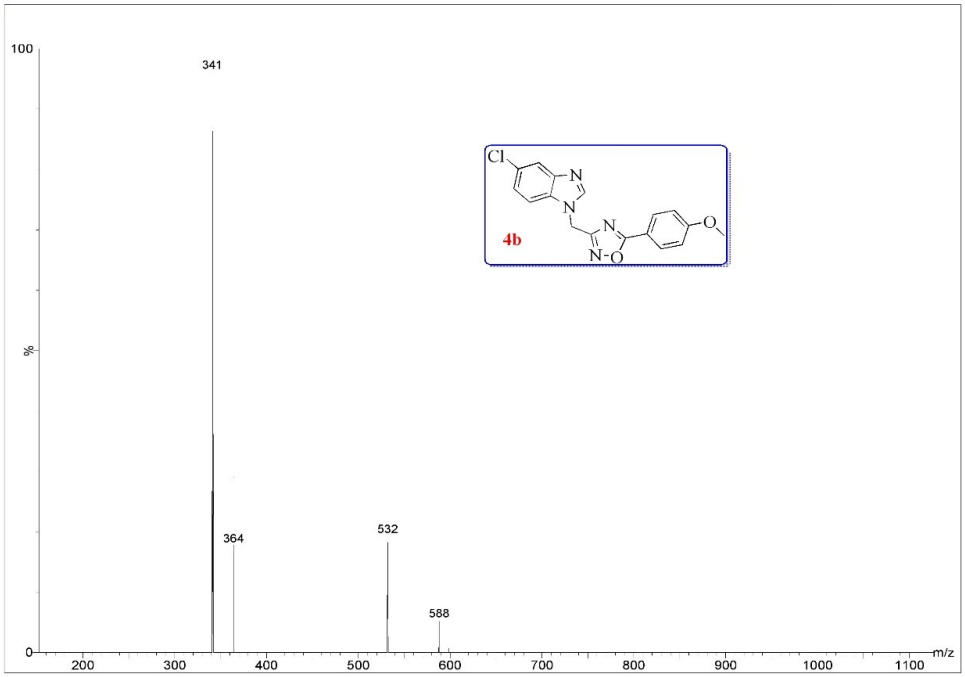
Received 16 October 2024; accepted (revised) 5 March 2026

Experimental Section

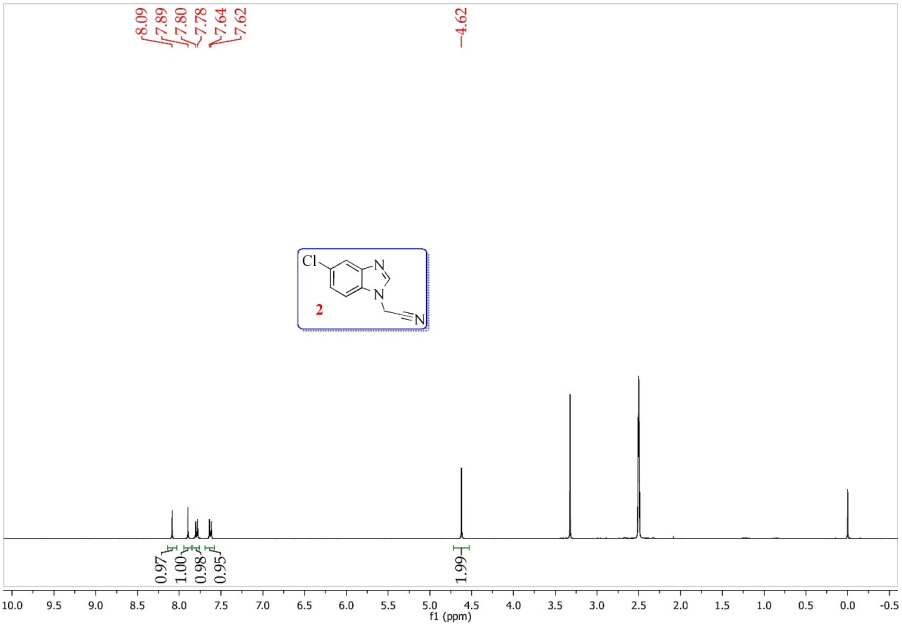
All solvents and starting materials were purchased commercially and used without additional purification. The NMR spectra for ^{1}H and ^{13}C were acquired using a Bruker (400 MHz for ^{1}H and 100 MHz for ^{13}C). Mass spectra were collected using a Jeol JMC-300 spectrometer (ESI, 70 eV). The Carlo Erba 106 and PerkinElmer model 240 analyzers were used to analyse the elements. A Cintex equipment was used to determine uncorrected melting points. TLC was carried out on Merck silica gel 60 F254 precoated plates (0.25 mm), while column chromatography was carried out on silica gel (100-200 mesh). TLC with EtOAc-hexane as an eluent was employed to monitor the progress of the reactions as well as the purity of the compounds.



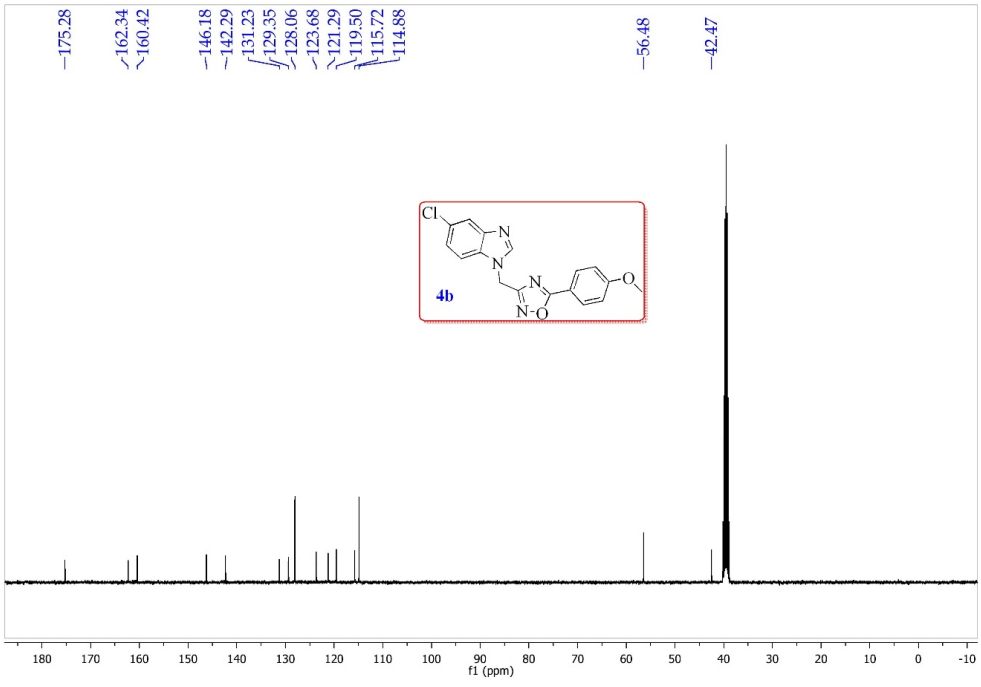
^{1}HNMR (400 MHz, DMSO-d_6) Spectrum of compound **4b**



ESI-Mass Spectrum of **4b**



^{1}HNMR (400 MHz, DMSO-d_6) Spectrum of compound **2**



^{13}CNMR (100 MHz, DMSO-d_6) Spectrum of compound **4b**