

SUPPLEMENTARY MATERIAL

Phytochemical analysis, antioxidant activity and bioassay-guided isolation of acetylcholinesterase and butyrylcholinesterase inhibitors from *Horsfieldia polyspherula* stem bark (Myristicaceae)

^{1,2}Mohammed Idris, ¹Mohamad Nurul Azmi*, ³Thaigarajan Parmusivam, ⁴Unang Supratman, ⁵Marc Litaudon and ⁶Khalijah Awang

¹Natural Products and Synthesis Organic Research Laboratory (NPSO), School of Chemical Sciences, Universiti Sains Malaysia, 11800 Minden, Penang, Malaysia

²Department of Chemistry, Federal University, Gashua, Nigeria.

³School of Pharmacy, Universiti Sains Malaysia, 11800 Minden, Penang, Malaysia

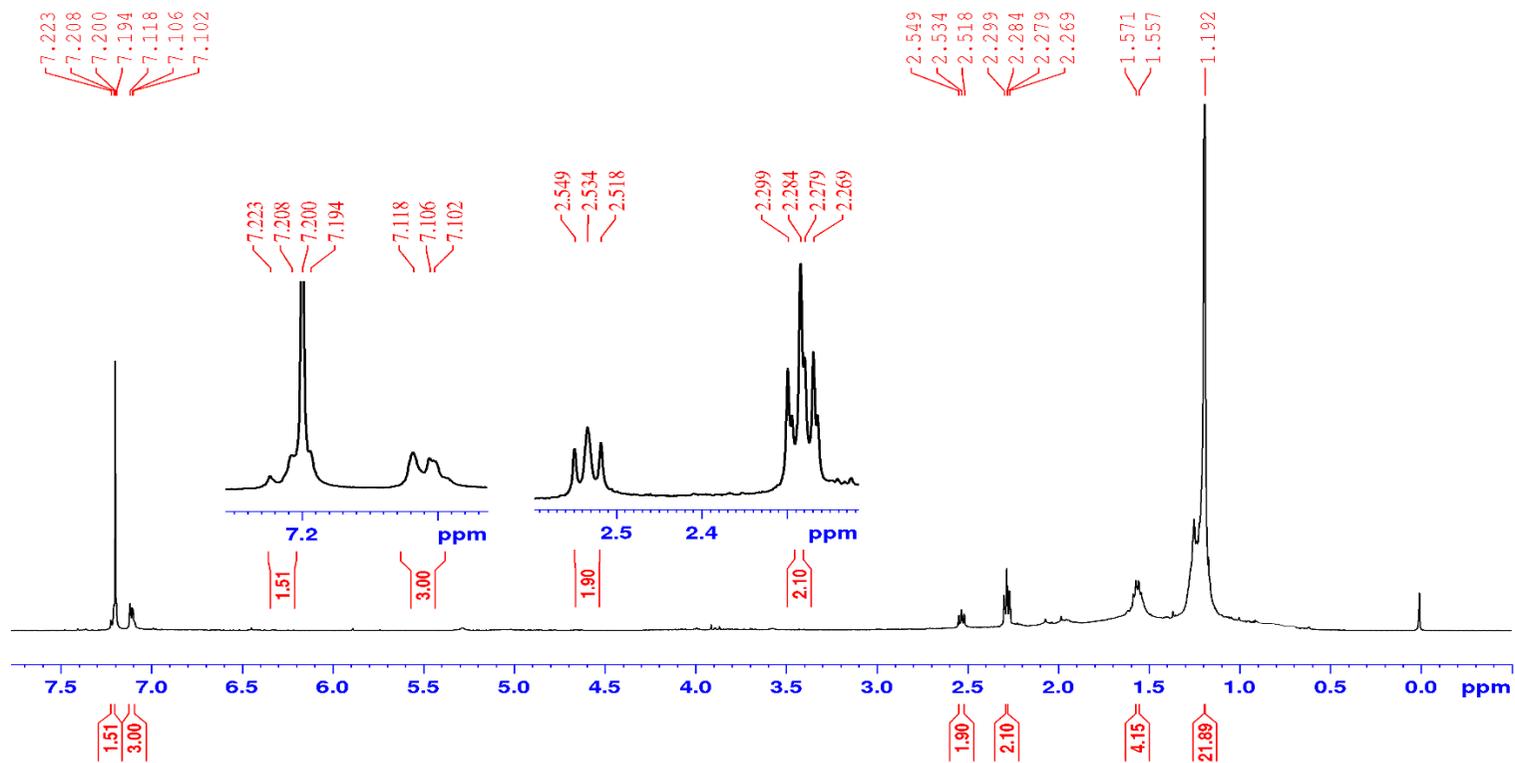
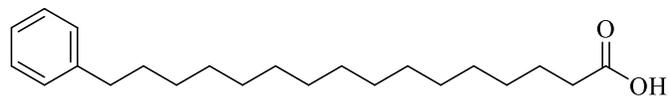
⁴Department of Chemistry, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, 45363 Jatinangor, Indonesia

⁵Institut de Chimie des Substances Naturelles, CNRS-ICSN UPR 01, Univ. Paris-Sud 11, Av. de la Terrasse, 91198 Gif-sur-Yvette, France

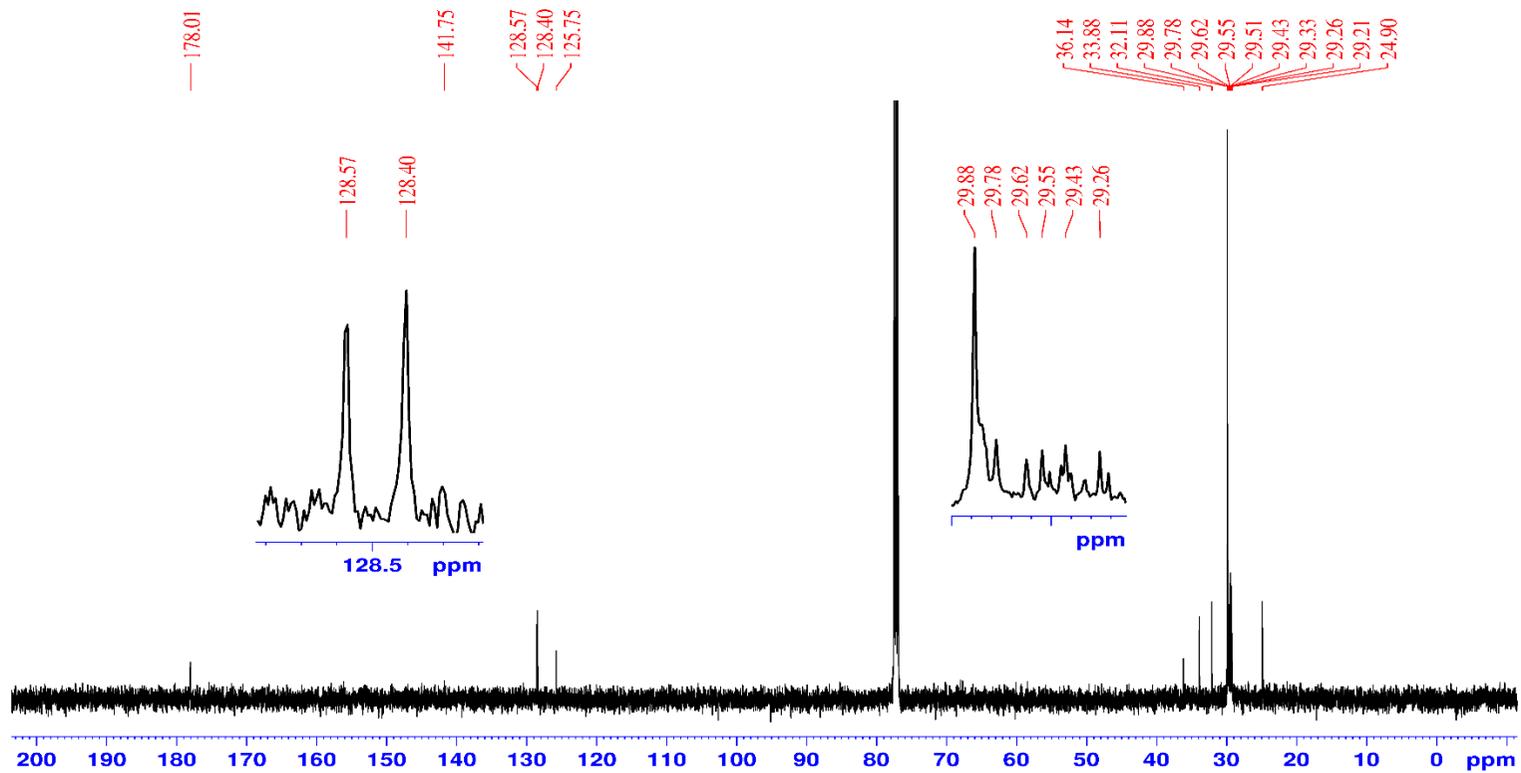
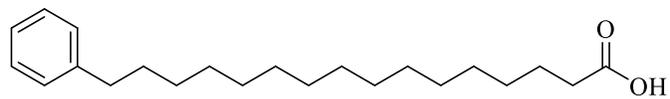
⁶Department of Chemistry, Faculty of Science, University of Malaya, 50603 Kuala Lumpur, Malaysia

*Corresponding author: mnazmi@usm.my

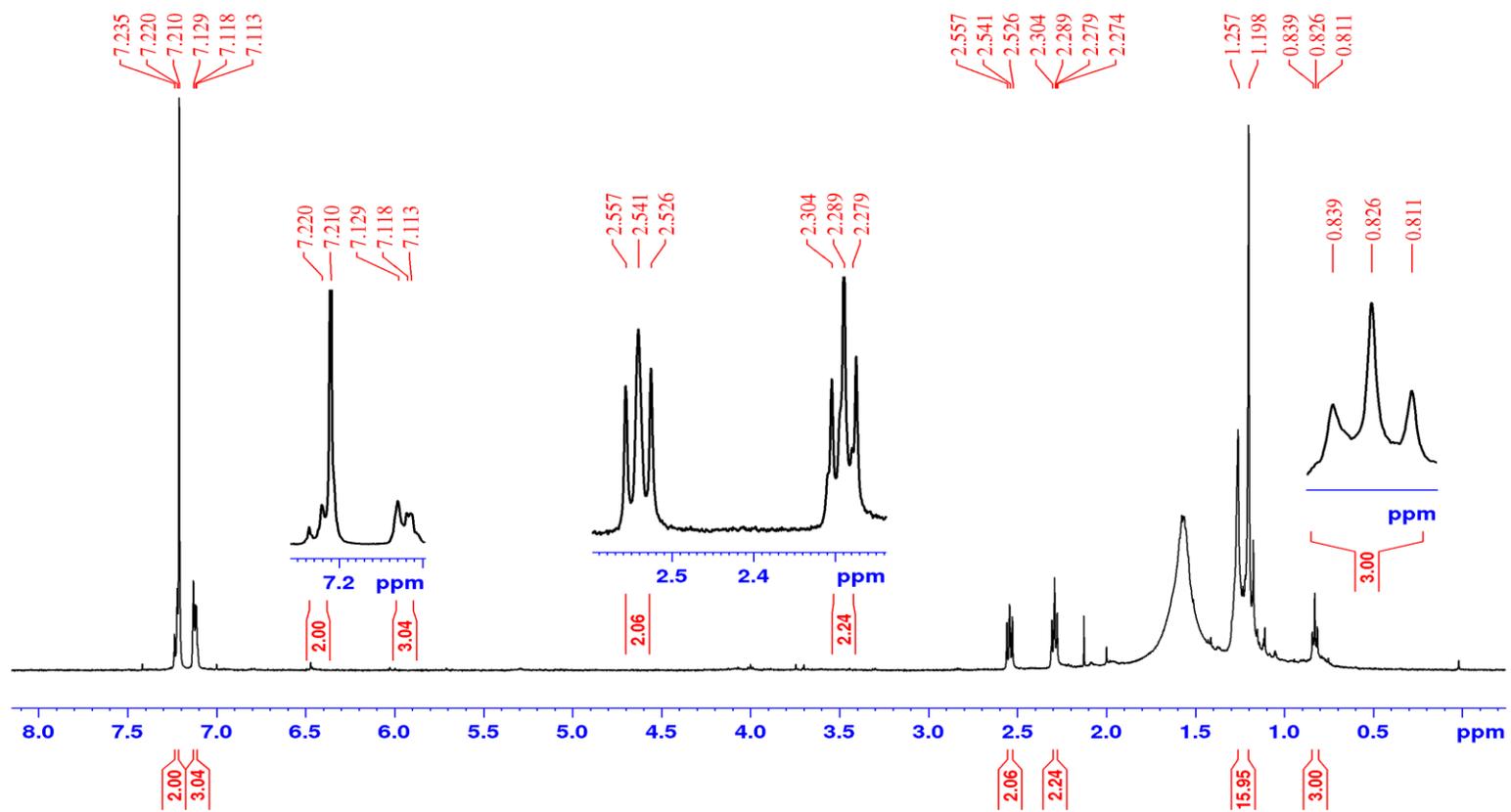
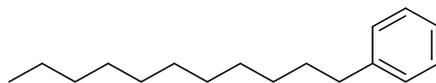
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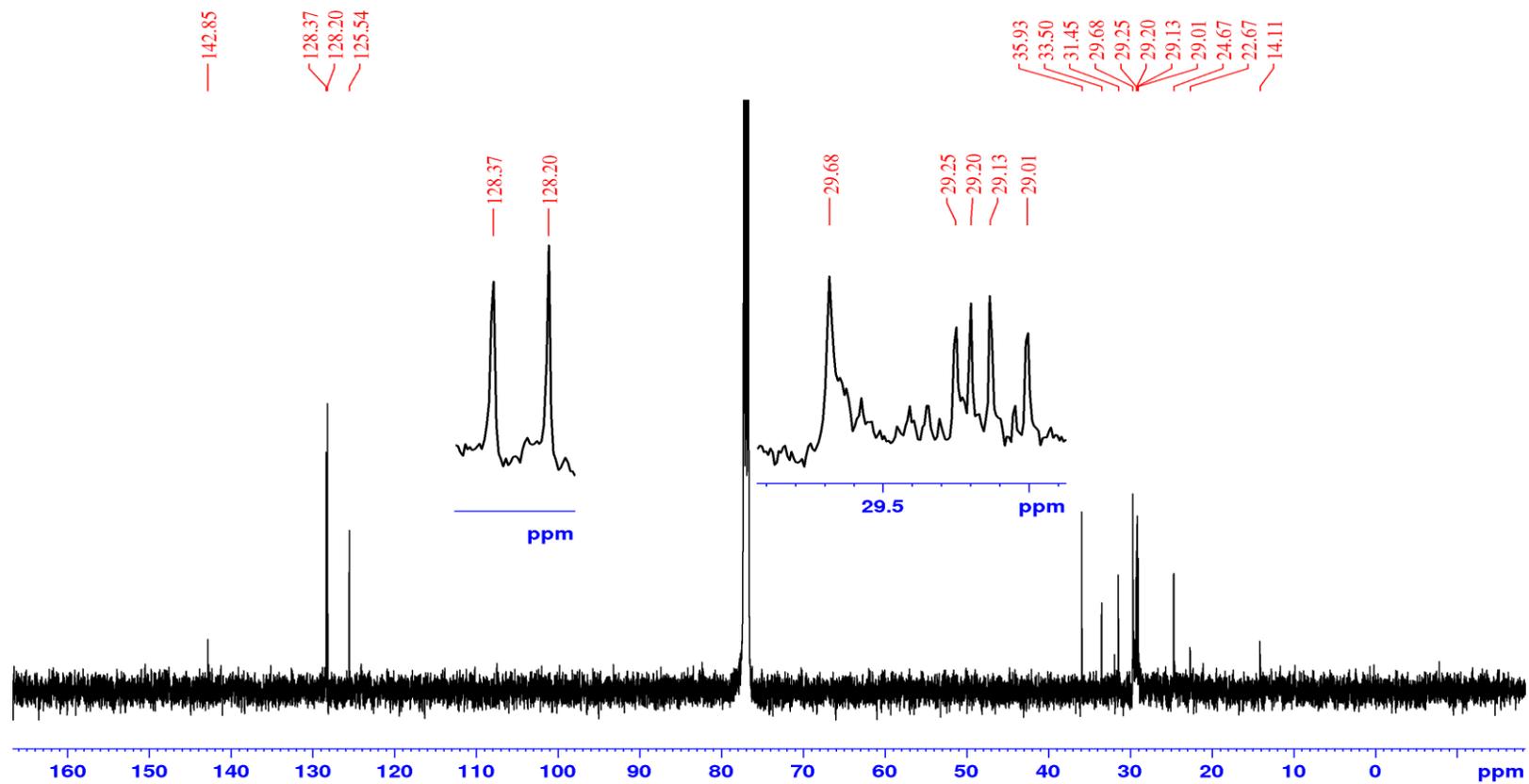
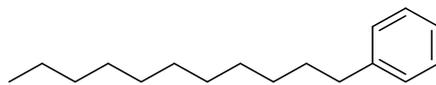
S1: ¹H NMR spectrum for compound 1 in CDCl₃ at 500 MHz



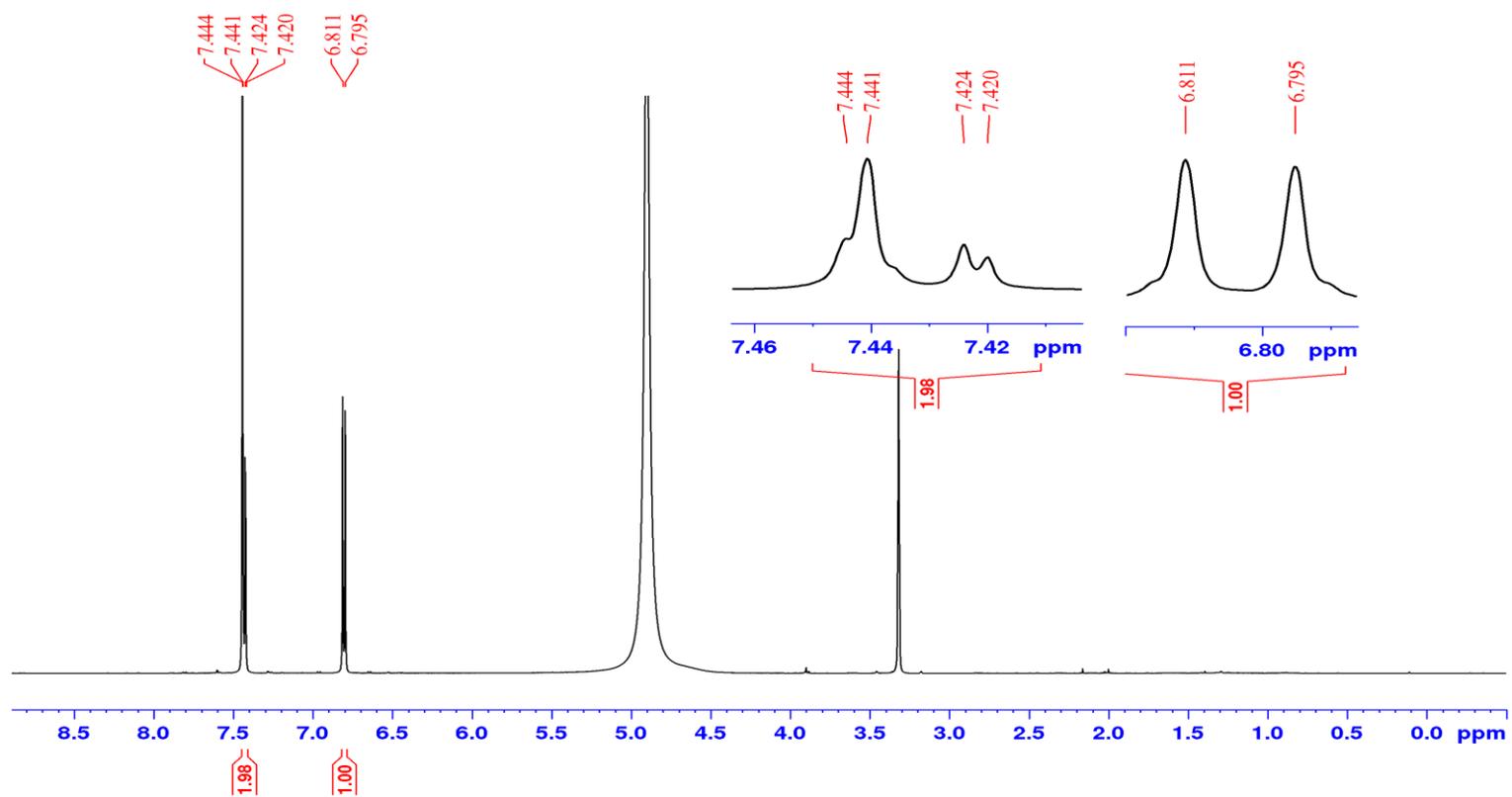
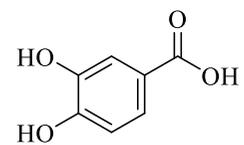
S2: ¹³C NMR spectrum for compound 1



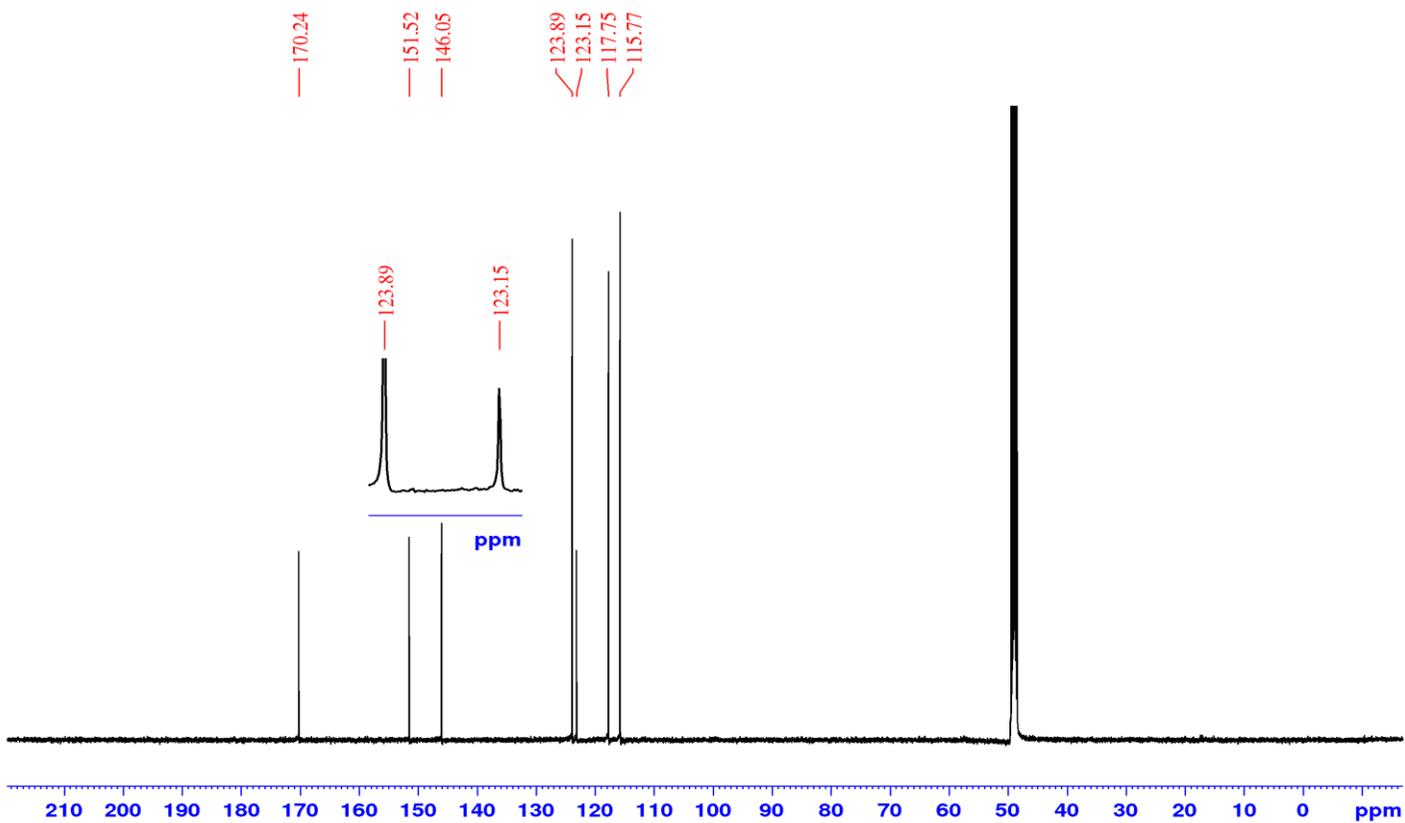
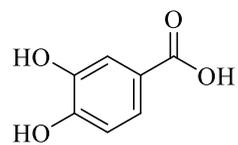
S3: ¹H NMR spectrum for compound 2 in CDCl₃ at 500 MHz



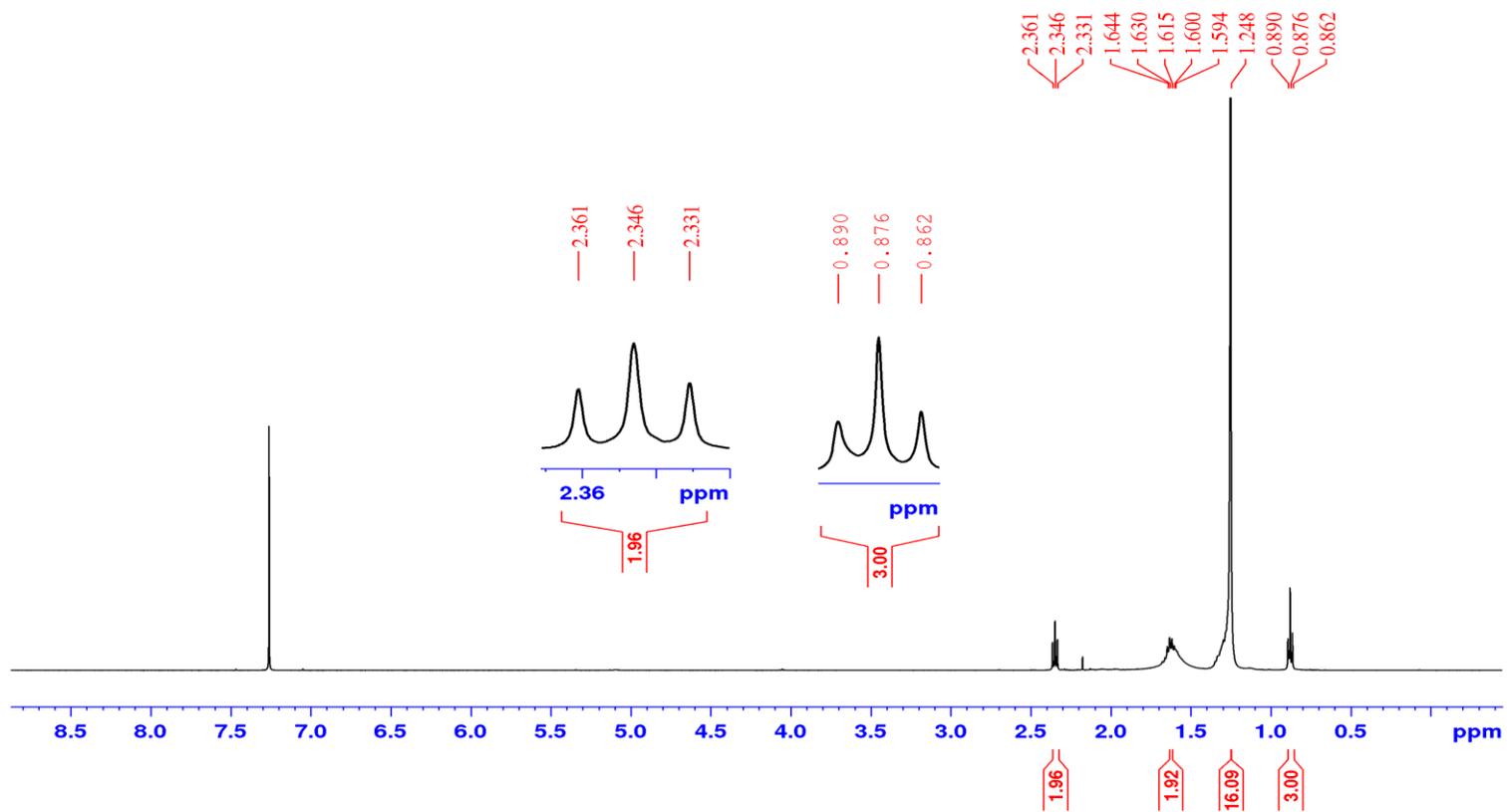
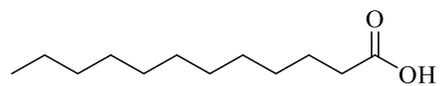
S4: ¹³C NMR spectrum for compound 2



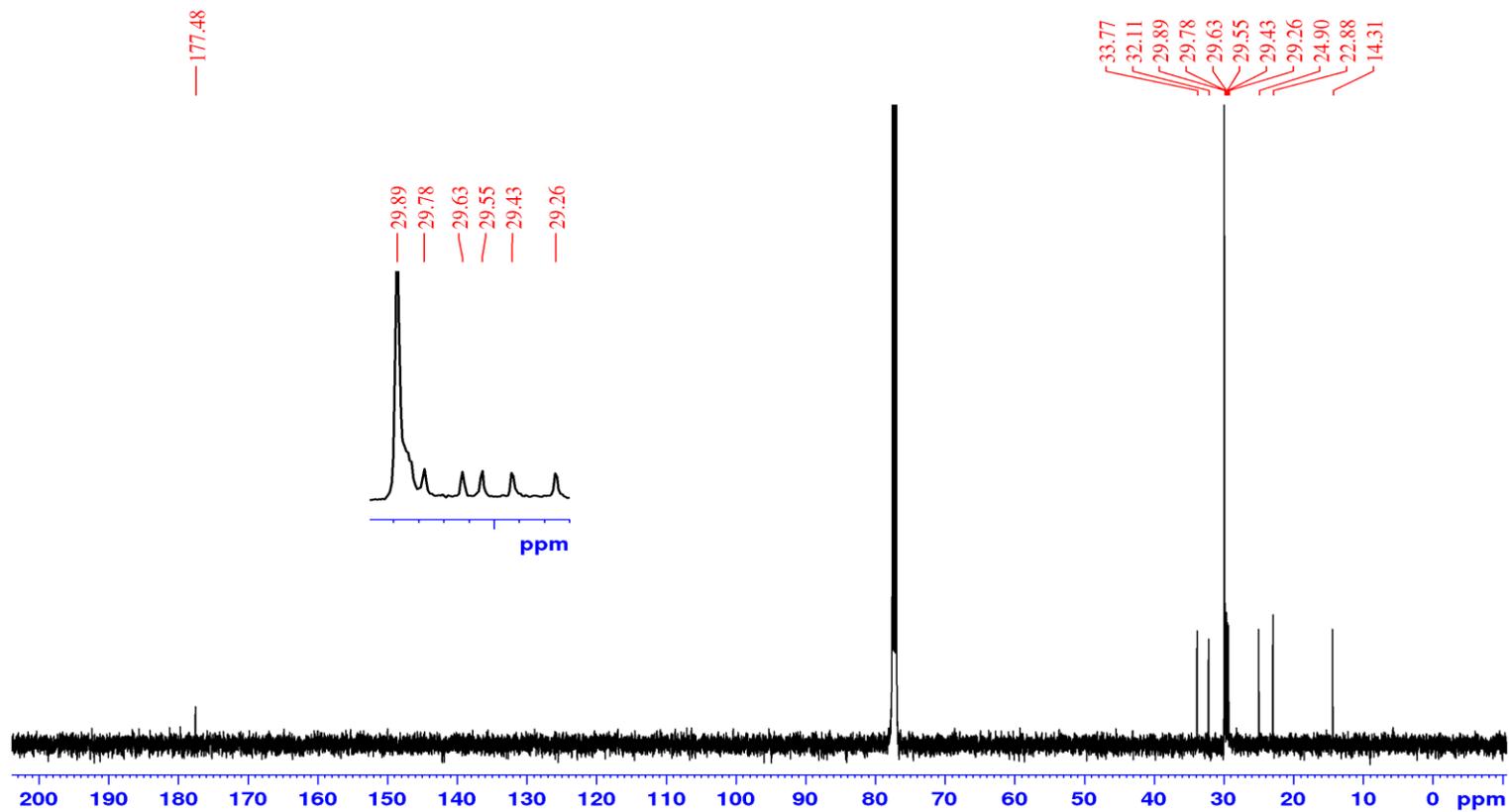
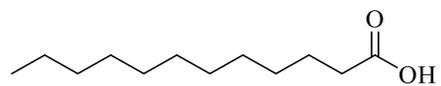
S5: ¹H NMR spectrum for compound **3** in CD₃OD at 500 MHz



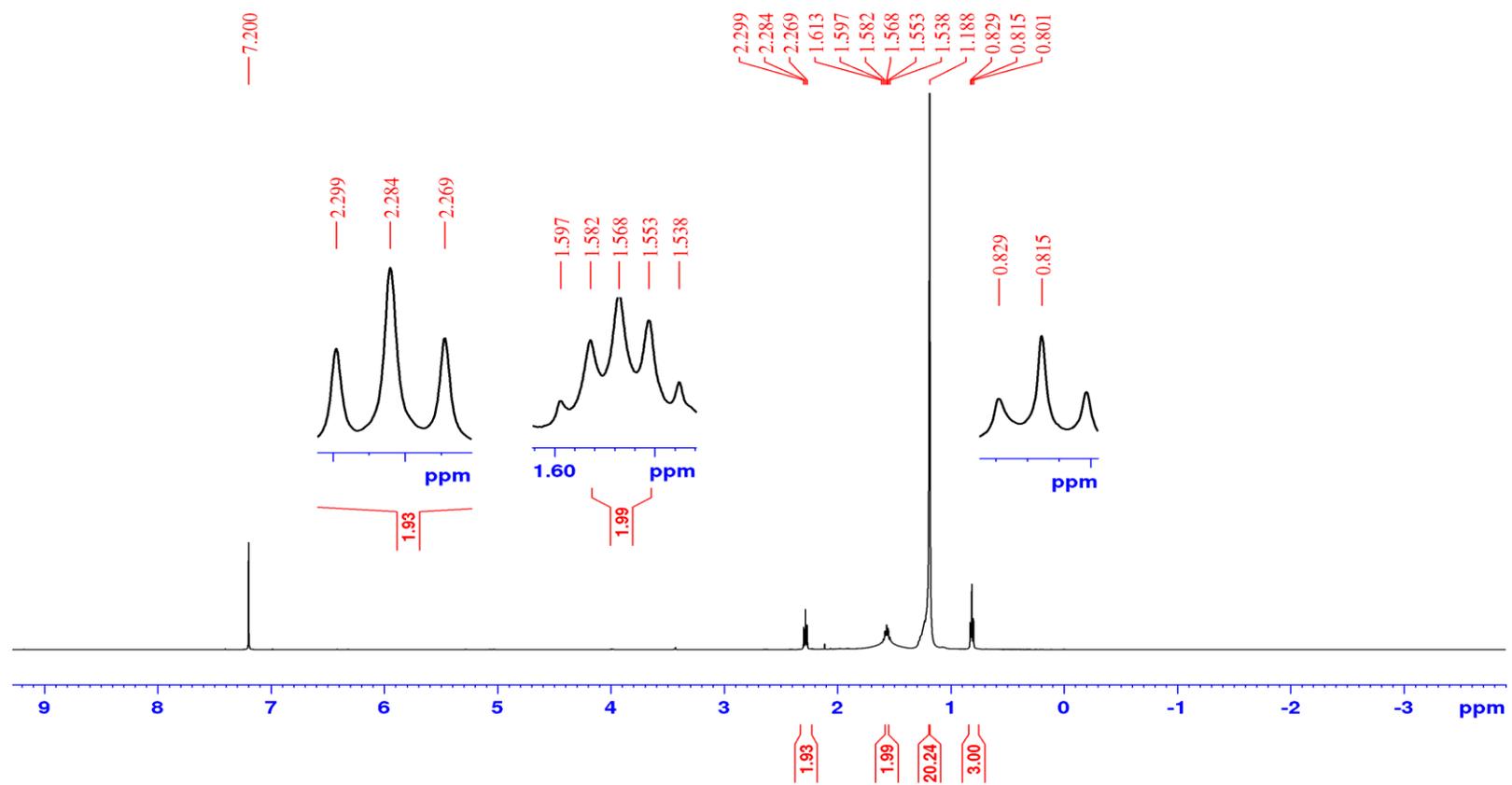
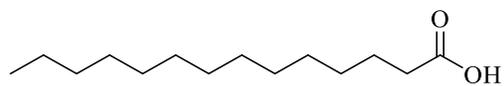
S6: ¹³C NMR spectrum for compound 3



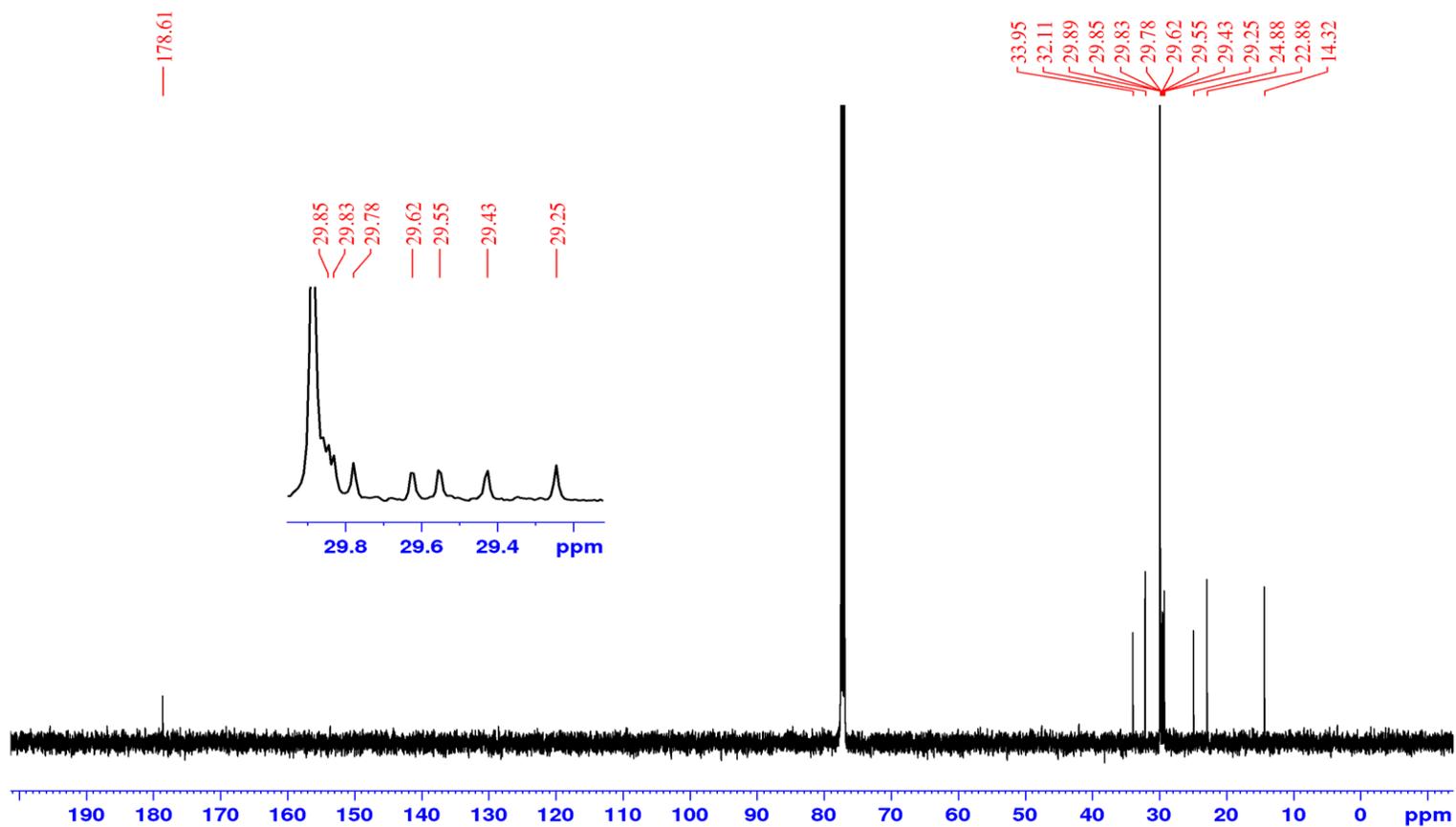
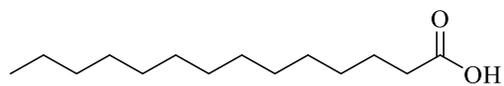
S7: ^1H NMR spectrum for compound **4** in CDCl_3 at 500 MHz



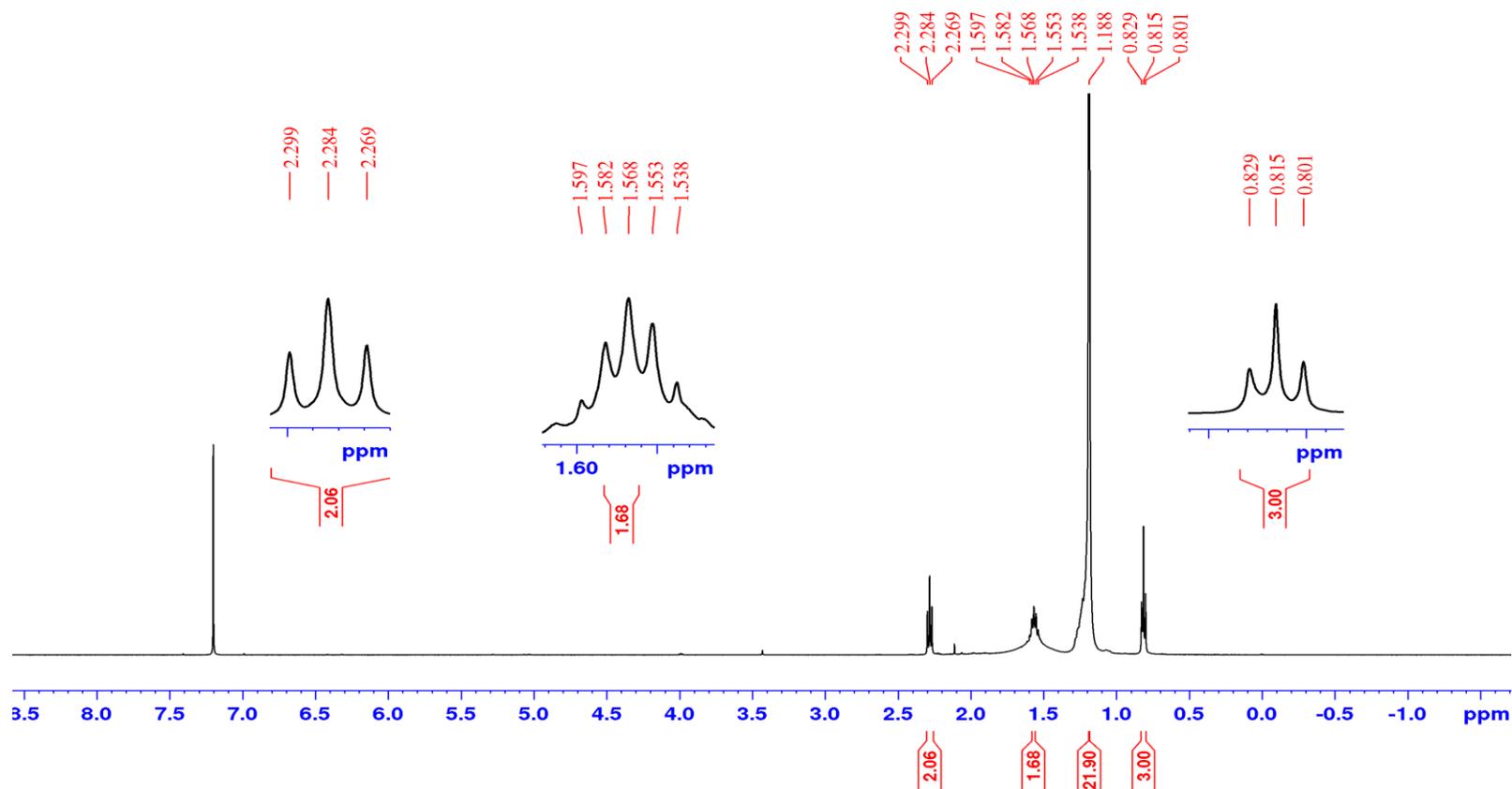
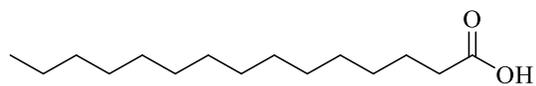
S8: ^{13}C NMR spectrum for compound 4



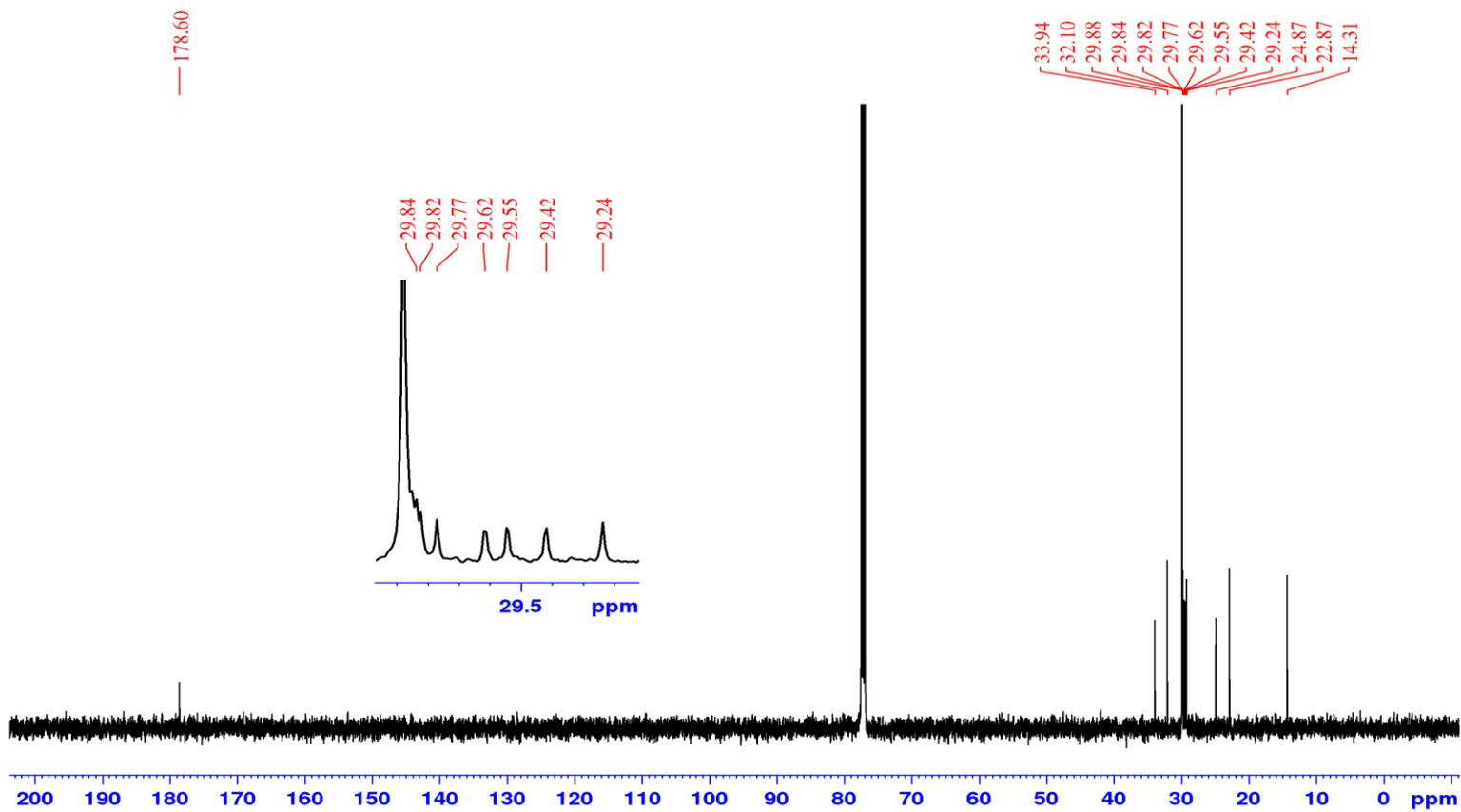
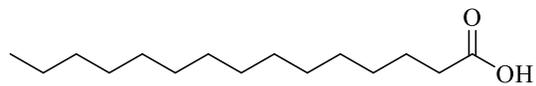
S9: ^1H NMR spectrum for compound **5** in CDCl_3 at 500 MHz



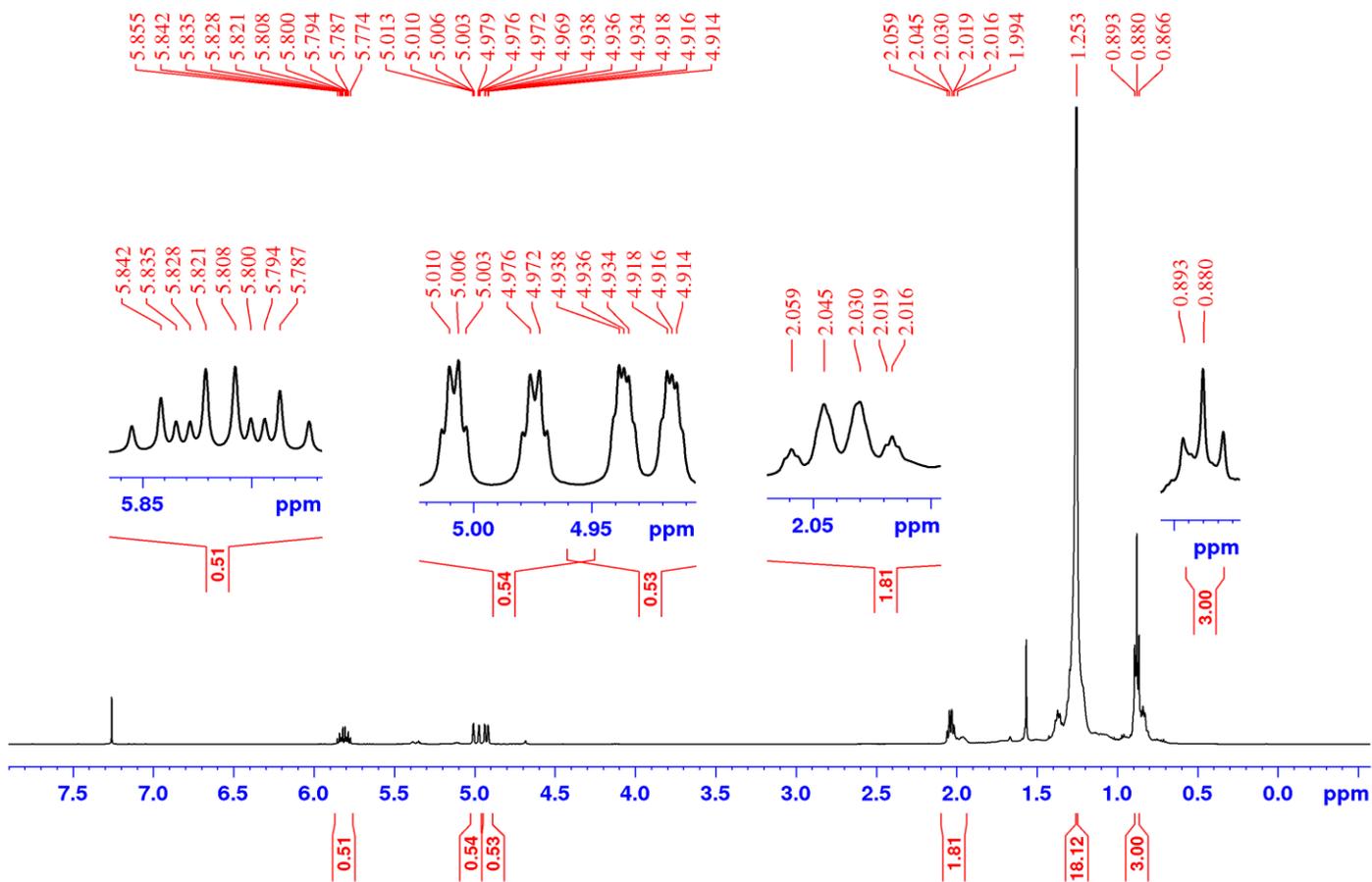
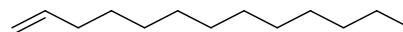
S10: ^{13}C NMR spectrum for compound 5



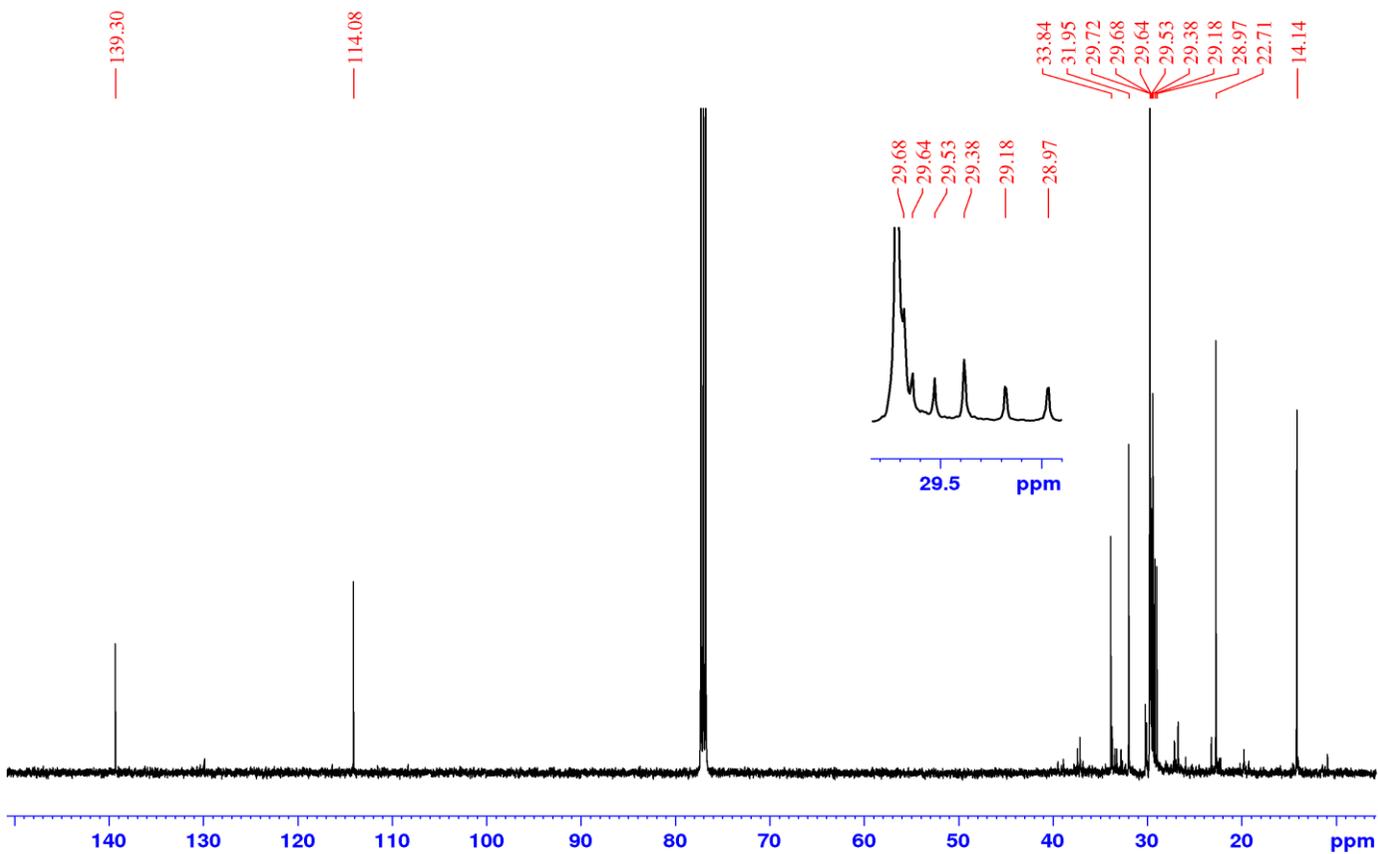
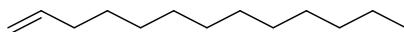
S11: ^1H NMR spectrum for Compound **6** in CDCl_3 at 500 MHz



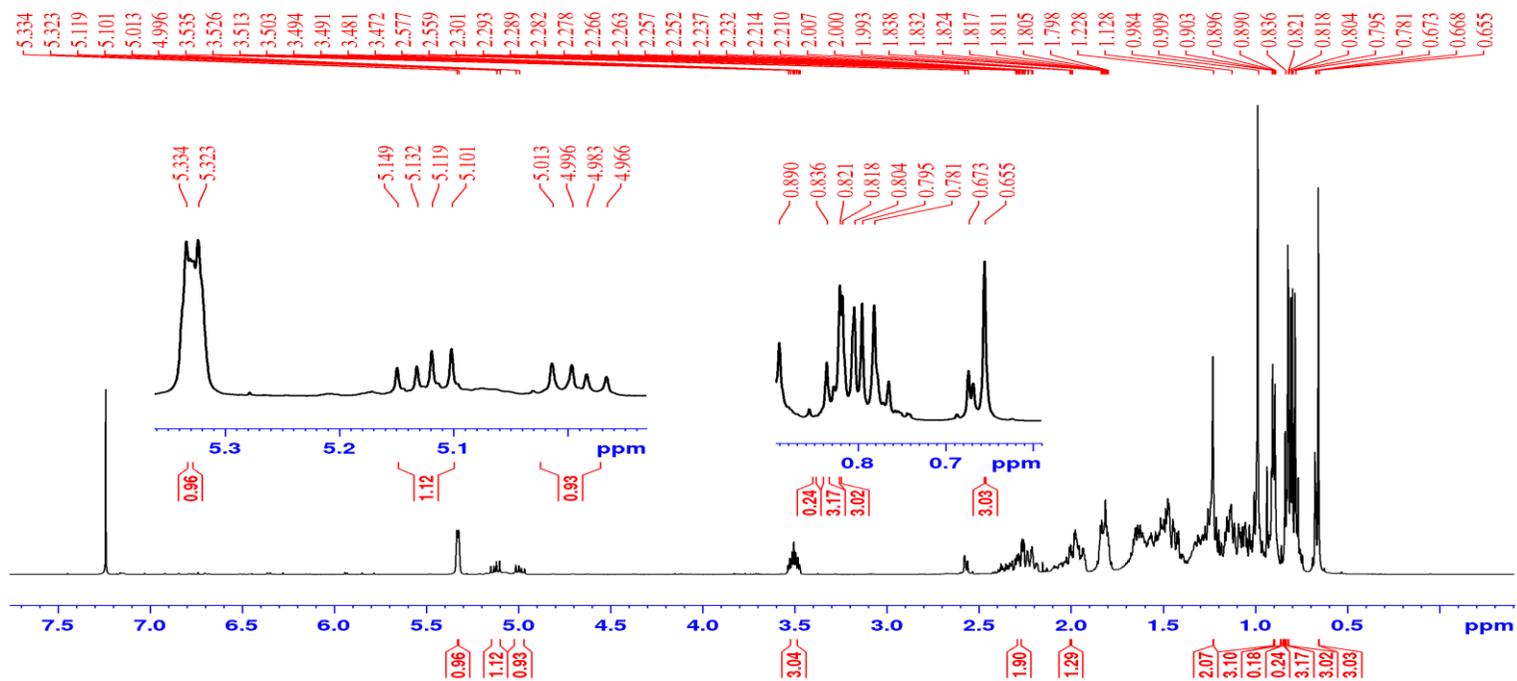
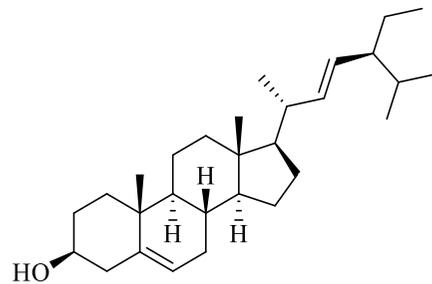
S12: ^{13}C NMR spectrum for **6**



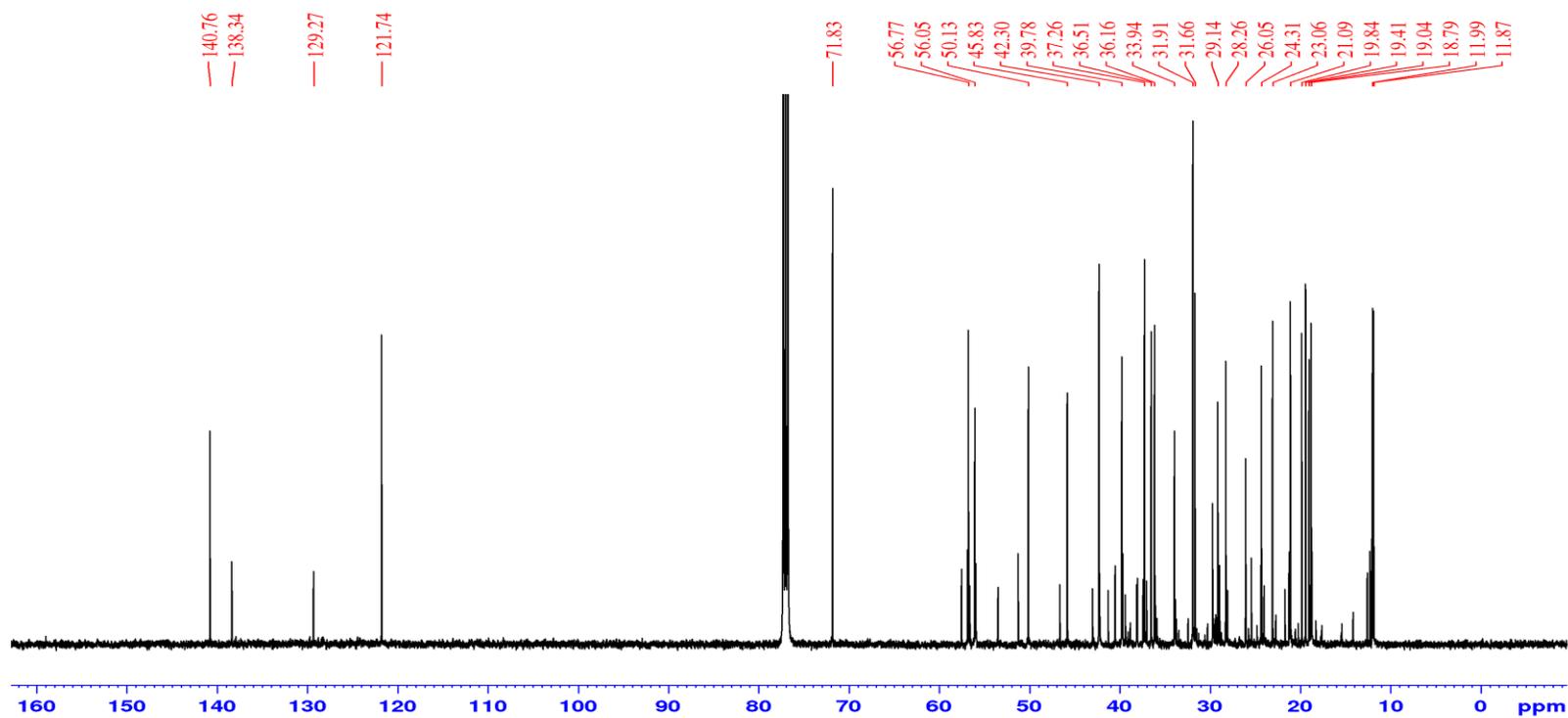
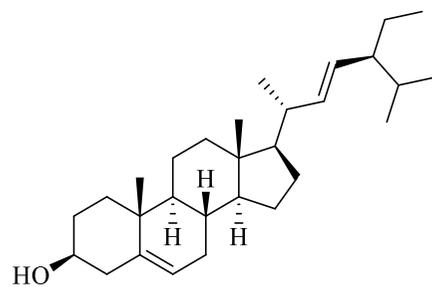
S13: ^1H NMR spectrum for compound 7 in CDCl_3 at 500 MHz



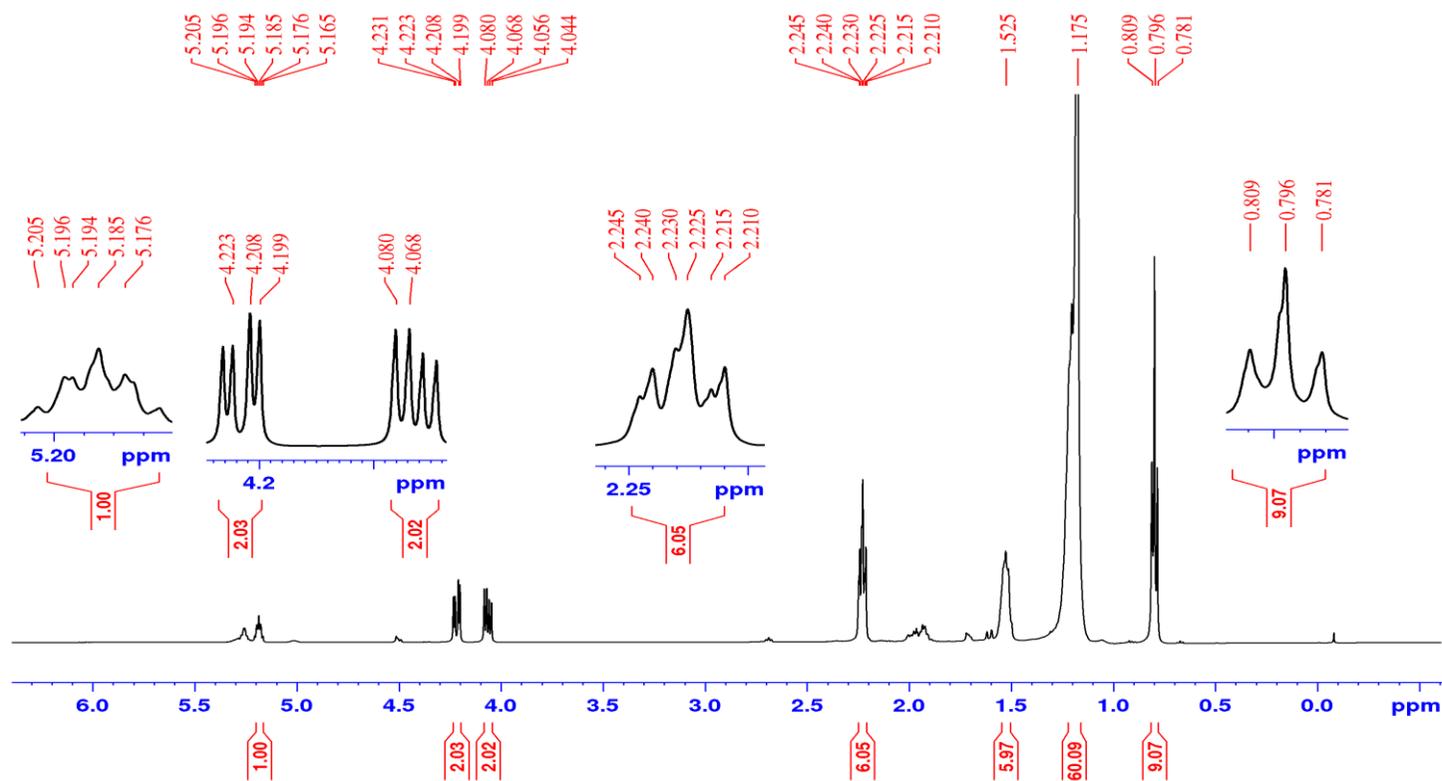
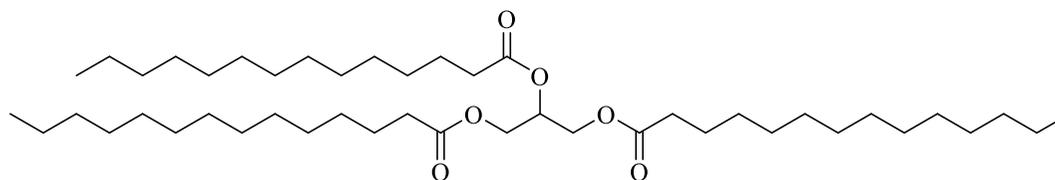
S14: ¹³C NMR spectrum for compound 7



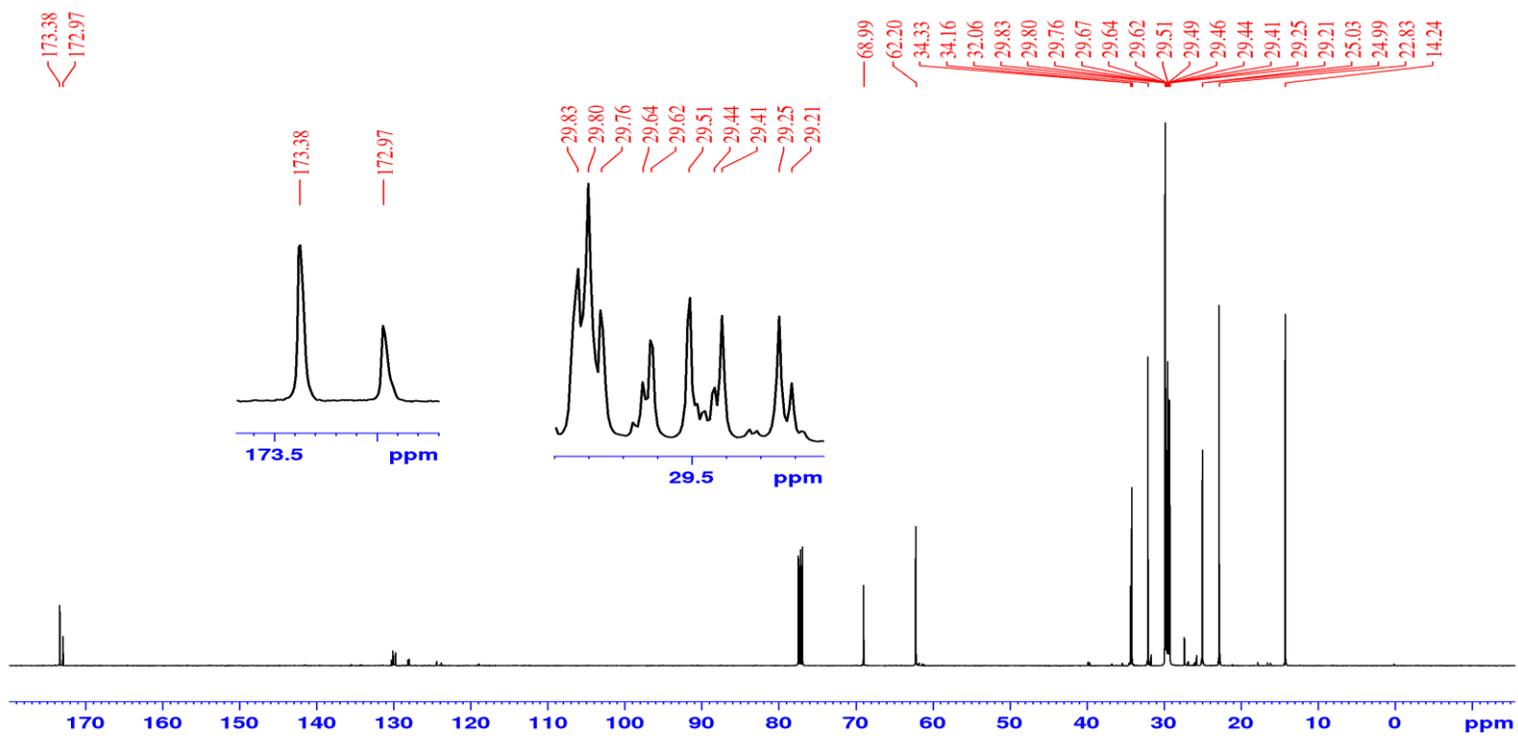
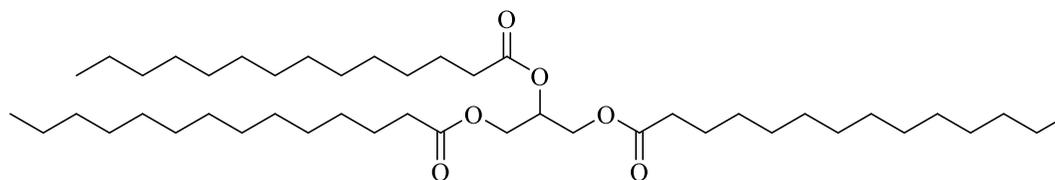
S15: ¹H NMR spectrum for compound 8 in CDCl₃ at 500 MHz



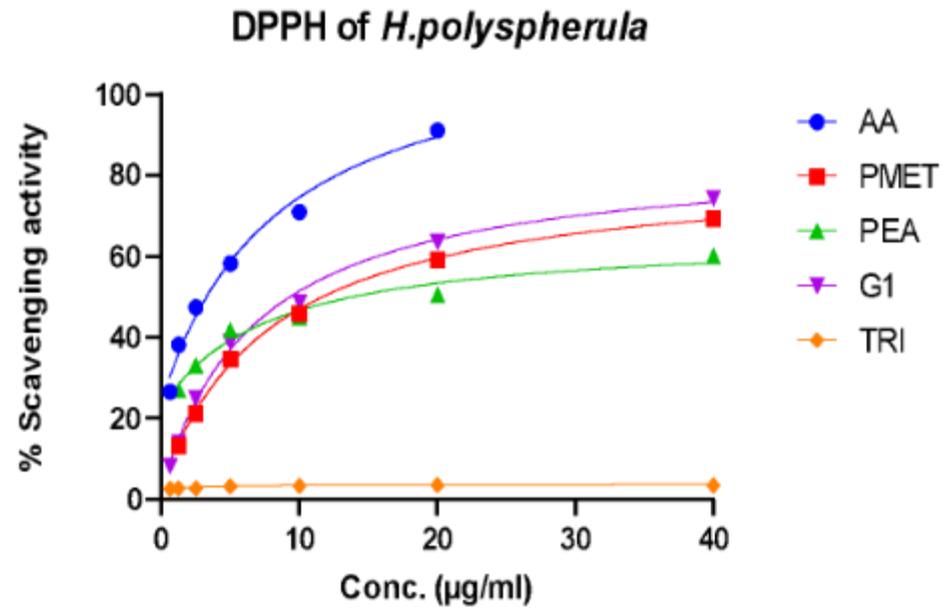
S16: ¹³C NMR spectrum for compound 8



S17: ¹H NMR spectrum for compound **9** in CDCl₃ at 500 MHz

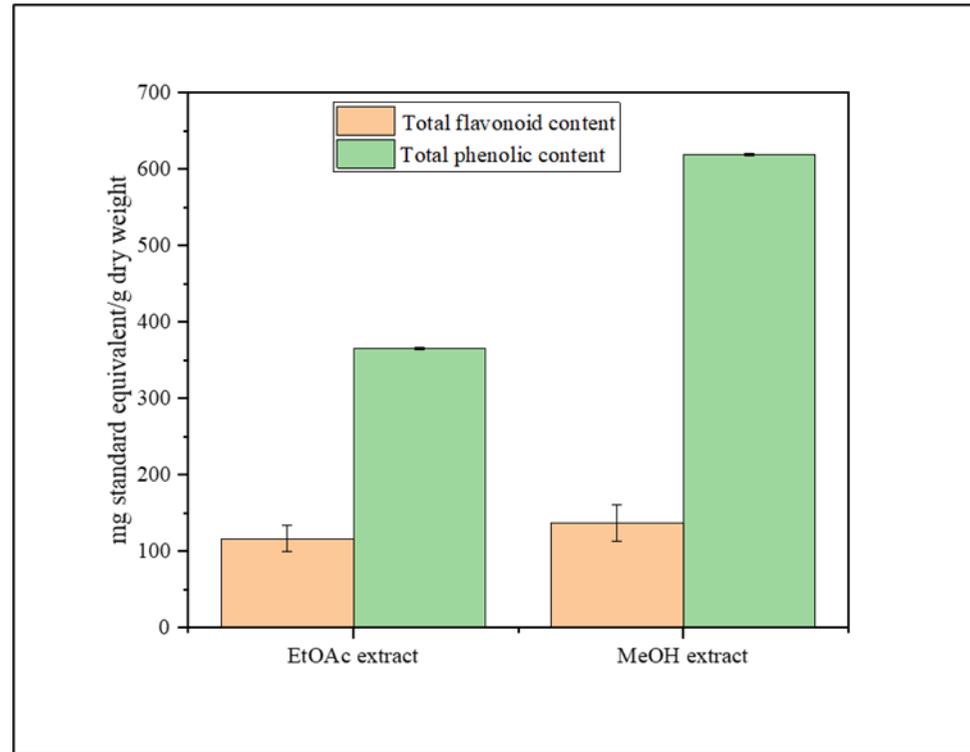


S18: ^{13}C NMR spectrum for compound 9



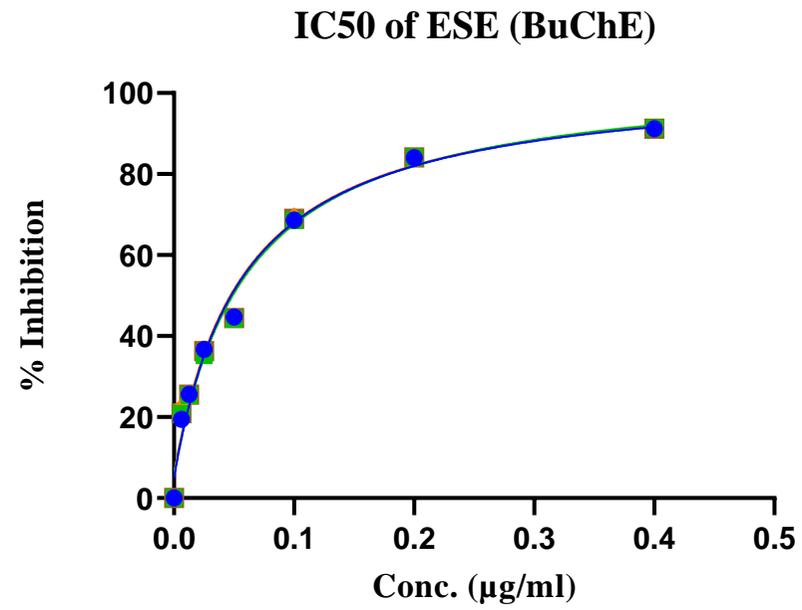
S19: Graphical resemblance of percentage scavenging activity between tested samples.

Legend: AA (ascorbic acid), PMET (methanol extract), PEA (ethyl acetate extract), G1 (3,4-dihydroxybenzoic acid), TRI (trimyrustin)

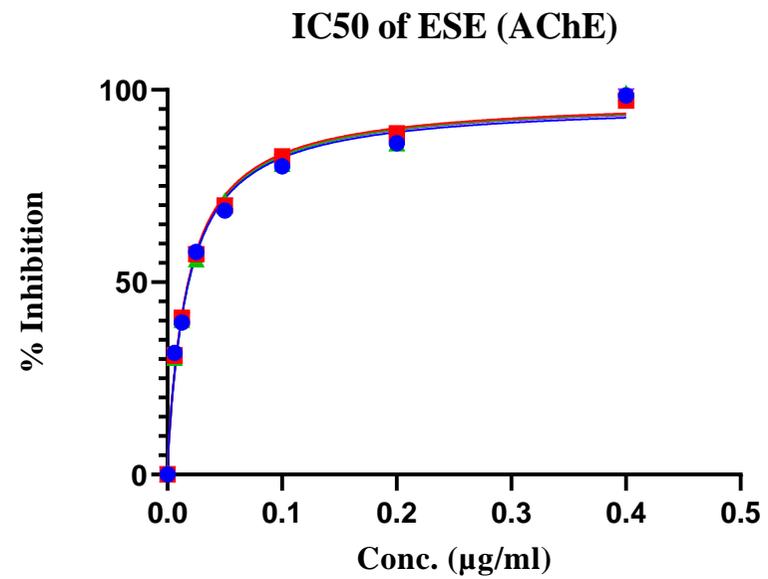


S20: Graphical presentation of total phenolic and total flavonoid contents of the extracts of *H. polyspherula* bark.

Values are expressed as mean \pm standard deviation (n = 3).

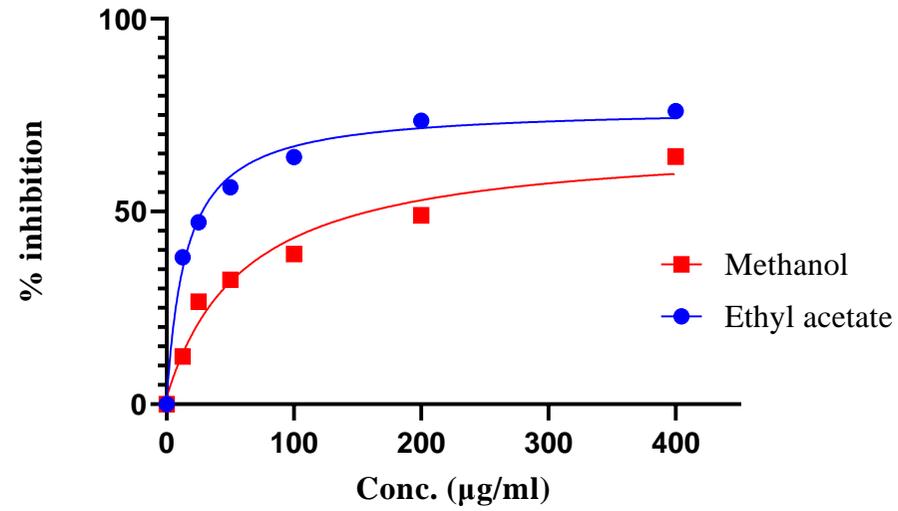


S21: Graphical presentation of IC₅₀ *eserine* (positive control) against butyrylcholinesterase



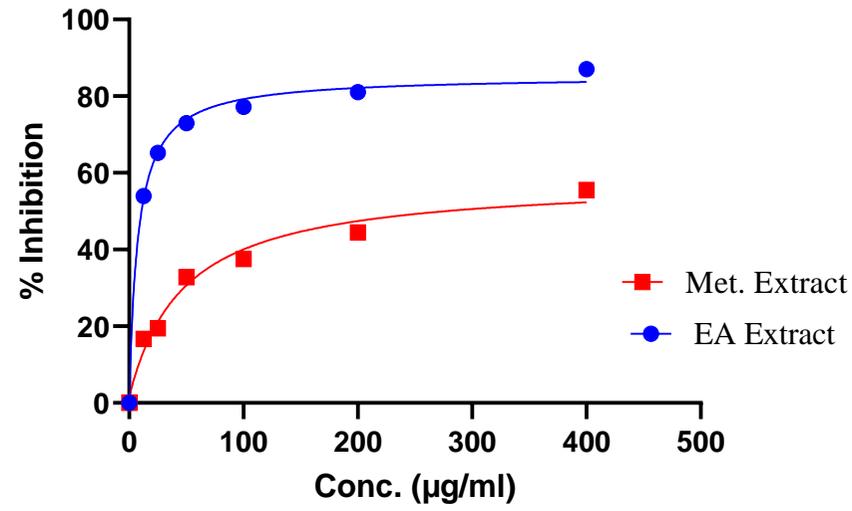
S22: Graphical presentation of IC₅₀ *eserine* (positive control) against acetylcholinesterase

IC₅₀ of *H. polyspherula*



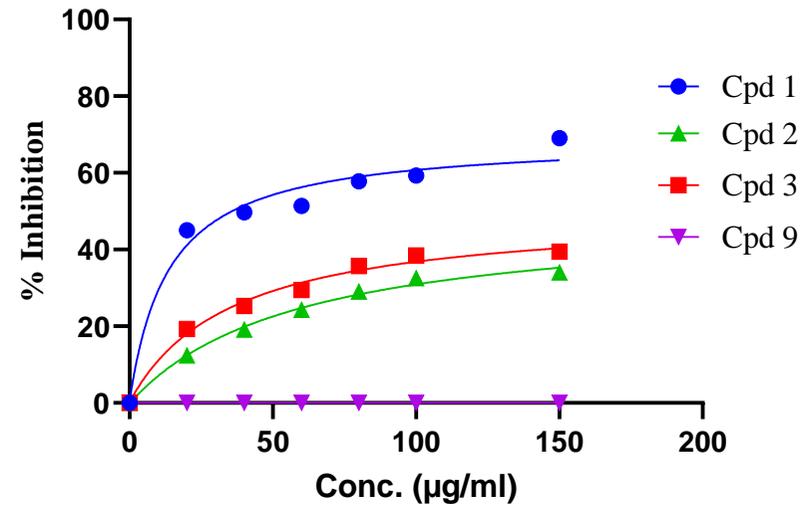
S23: Graphical relationship of IC₅₀ of *H. polyspherula* extracts against butyrylcholinesterase.

IC₅₀ of *H. polyspherula* (AChE)



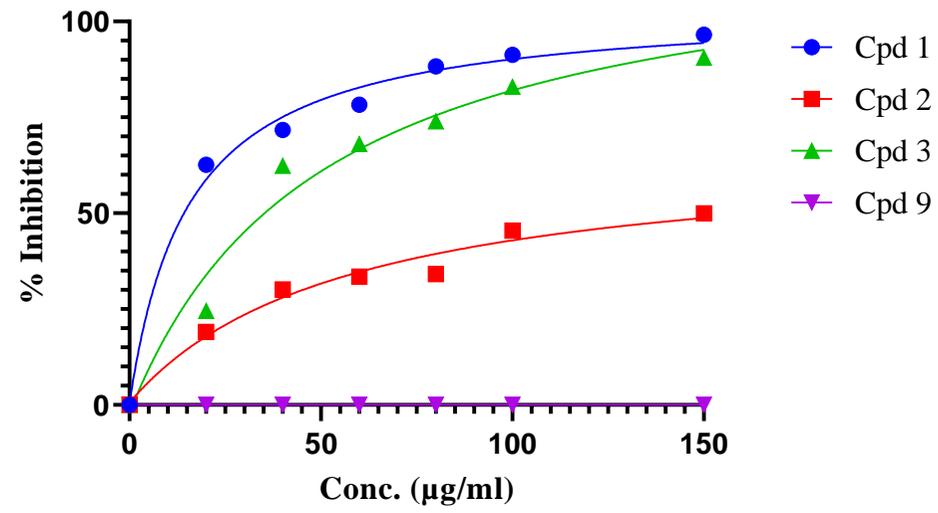
S24: Graphical relationship of IC₅₀ of *H. polyspherula* extracts against Acetylcholinesterase.

IC₅₀ of Compounds from *H. polyspherula* (BuChE)



S25: Graphical relationship of IC₅₀ of *H. polyspherula* compounds against Butyrylcholinesterase

IC₅₀ of Compounds from *H. polyspherula* (AChE)



S26: Graphical relationship of IC₅₀ of *H. polyspherula* compounds against Acetylcholinesterase