

Supporting Information

Design, Synthesis and in combo Antidiabetic Bioevaluation of Multitarget Phenylpropanoic Acids [†]

Blanca Colín-Lozano ¹, Samuel Estrada-Soto ¹, Fabiola Chávez-Silva ¹, Abraham Gutiérrez-Hernández ¹, Litzia Cerón-Romero ¹, Abraham Giacoman-Martínez ², Julio Cesar Almanza-Pérez ², Emanuel Hernández-Núñez ³, Zhilong Wang ⁴, Xin Xie ⁴, Mario Cappiello ⁵, Francesco Balestri ⁵, Umberto Mura ⁵ and Gabriel Navarrete-Vazquez ^{1,*}

¹ Facultad de Farmacia, Universidad Autónoma del Estado de Morelos, Cuernavaca, Morelos 62209, Mexico; cibi_ff@uaem.mx (B.C.-L.); enoch@uaem.mx (S.E.-S.); facasy@gmail.com (F.C.-S.); ghaa_ff@uaem.mx (A.G.-H.); crlc_ff@uaem.mx (L.C.-R.)

² Laboratorio de Farmacología, Departamento de Ciencias de la Salud, Universidad Autónoma Metropolitana Iztapalapa, Ciudad de México 09340, Mexico; agmfest@hotmail.com (A.G.-M.); j.almanza.perez@gmail.com (J.C.A.-P.)

³ Cátedra CONACYT, Departamento de Recursos del Mar, Centro de Investigación y de Estudios Avanzados del IPN, Unidad Mérida, Yucatán 97310, Mexico; emanuel.hernandez@cinvestav.mx

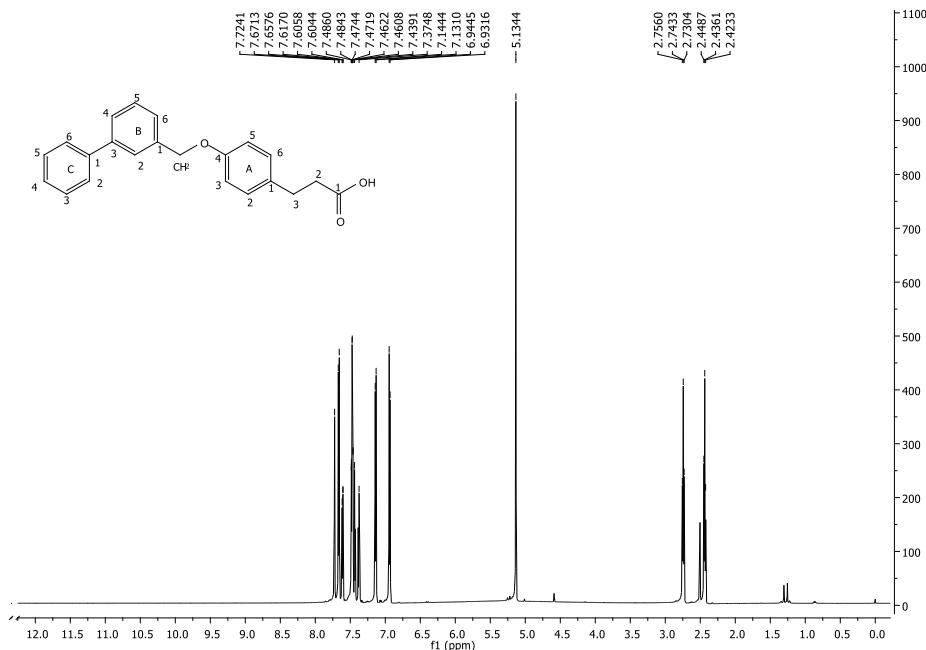
⁴ CAS Key Laboratory of Receptor Research, the National Center for Drug Screening, Shanghai Institute of Materia Medica, Chinese Academy of Sciences, Shanghai 201203, China, endlesslily@hotmail.com (Z.W.); xxie@simm.ac.cn (X.X.)

⁵ Dipartimento di Biologia, Unità di Biochimica, University of Pisa, 56126 Pisa, Italy; mcappiello@biologia.unipi.it (M.C.); francesco.balestri@unipi.it (F.B.); umberto.mura@unipi.it (U.M.)

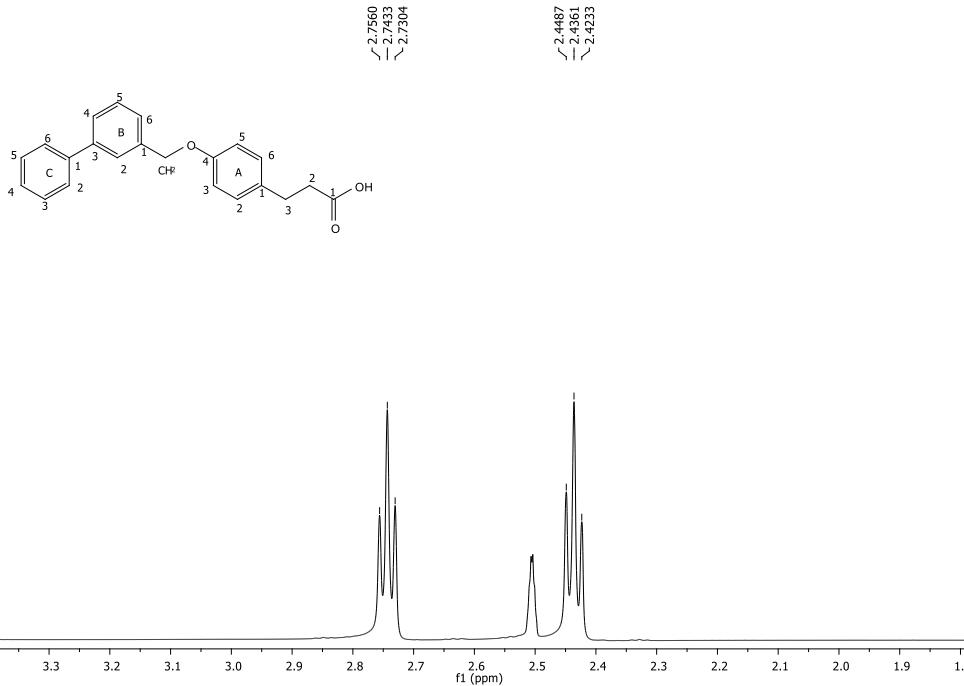
* Correspondence: gabriel.navarrete@uaem.mx; Tel.: +52-777-329-7089

† Taking in part of the Ph. D. thesis of Blanca Colín-Lozano.

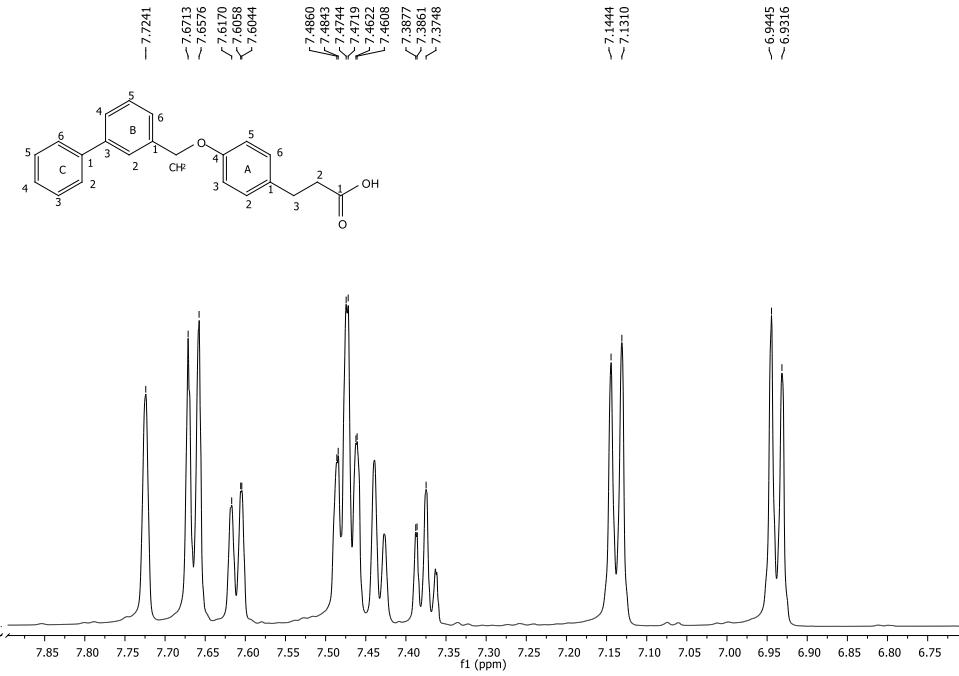
REPRESENTATIVE SPECTRA



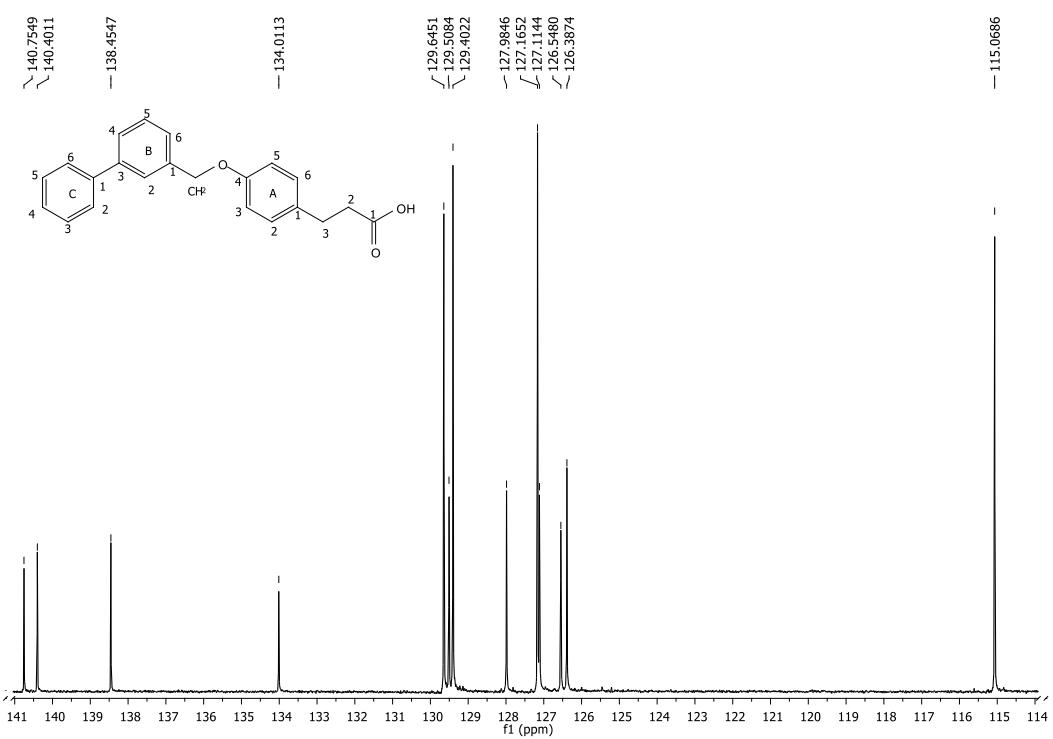
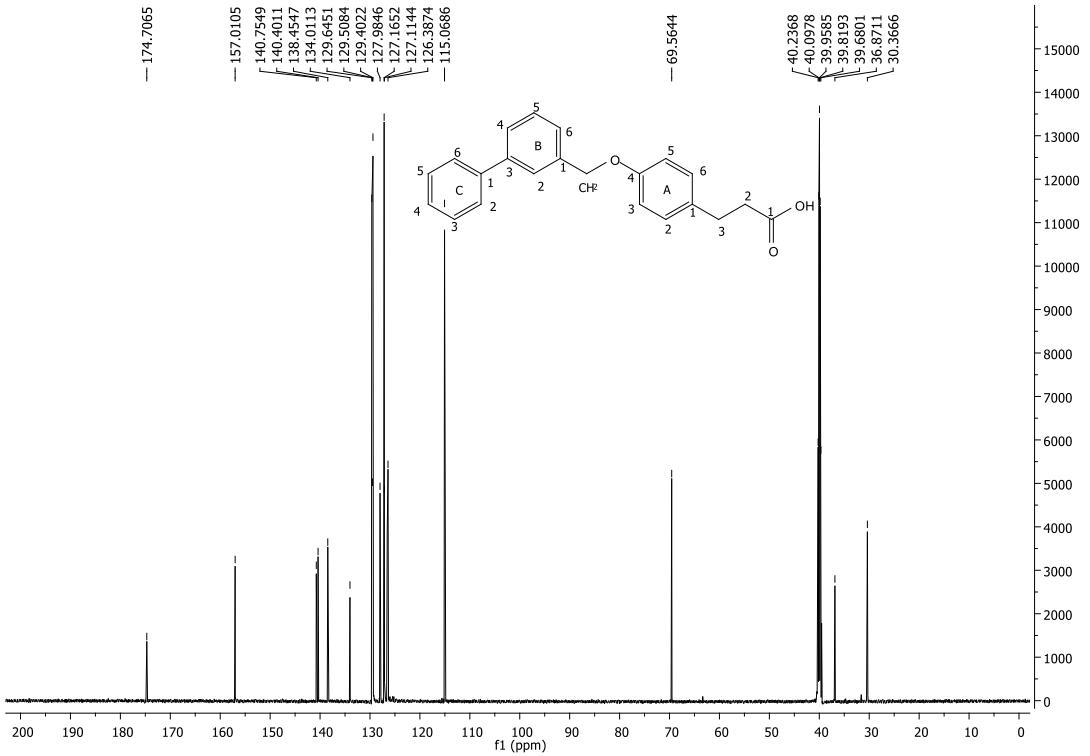
¹H-NMR of compound 1

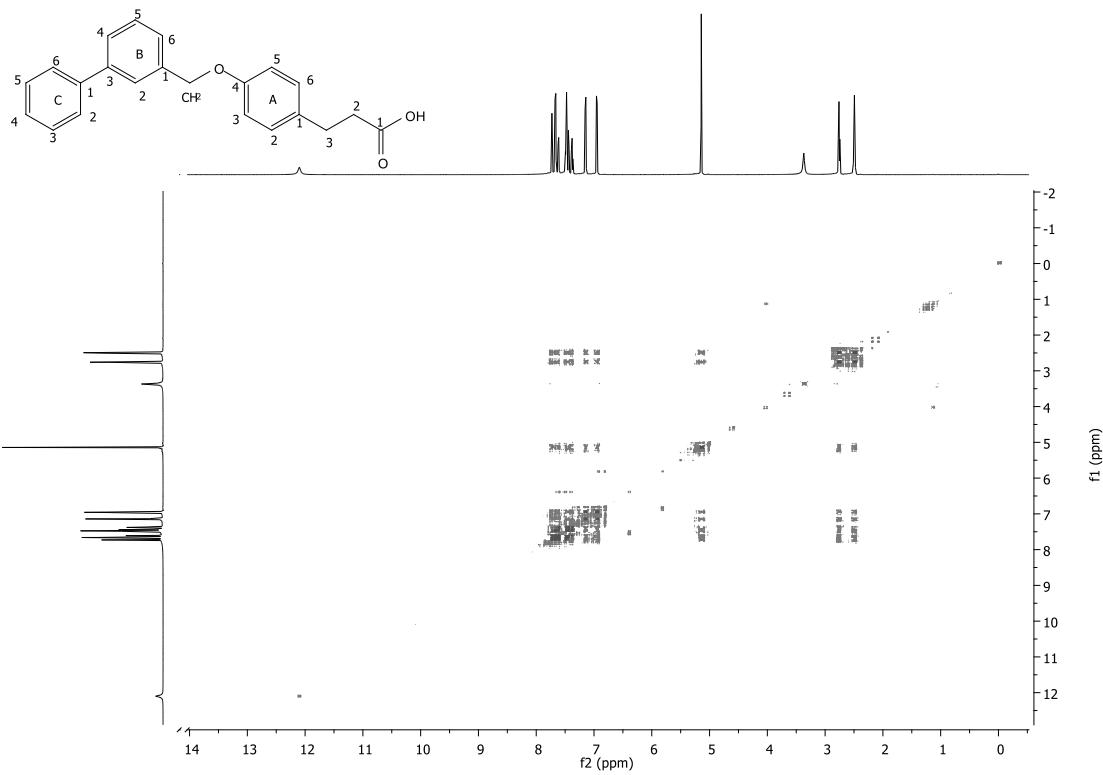


¹H-NMR of compound 1 (aliphatic zone expansion)

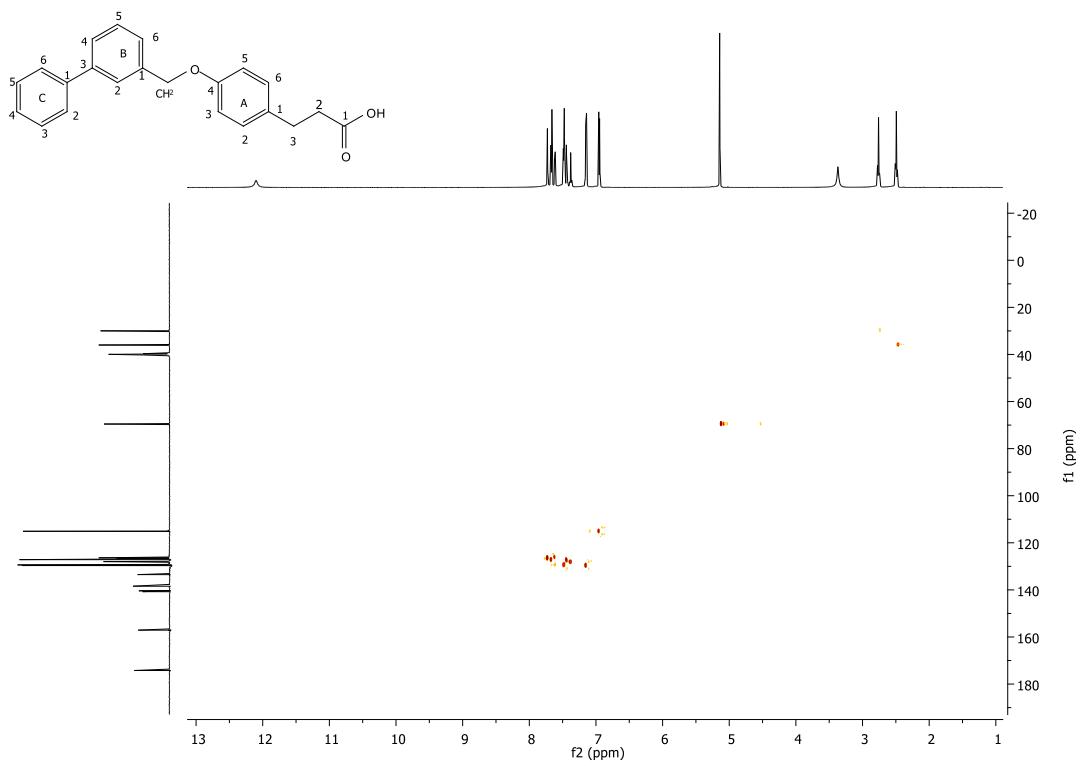


¹H-NMR of compound 1 (aromatic zone expansion)

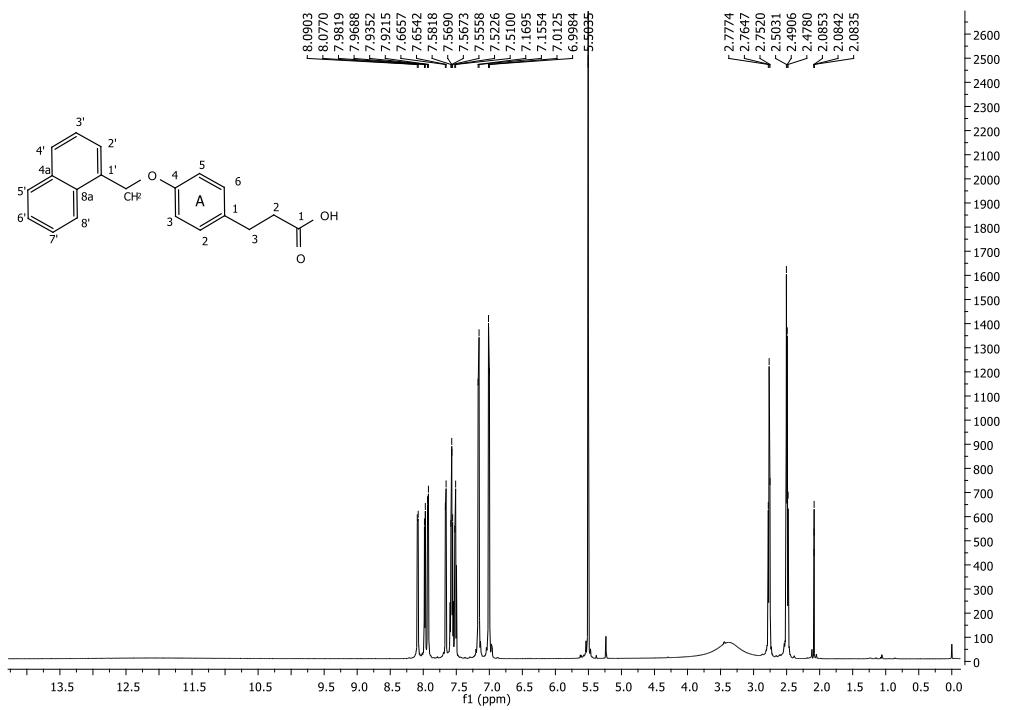




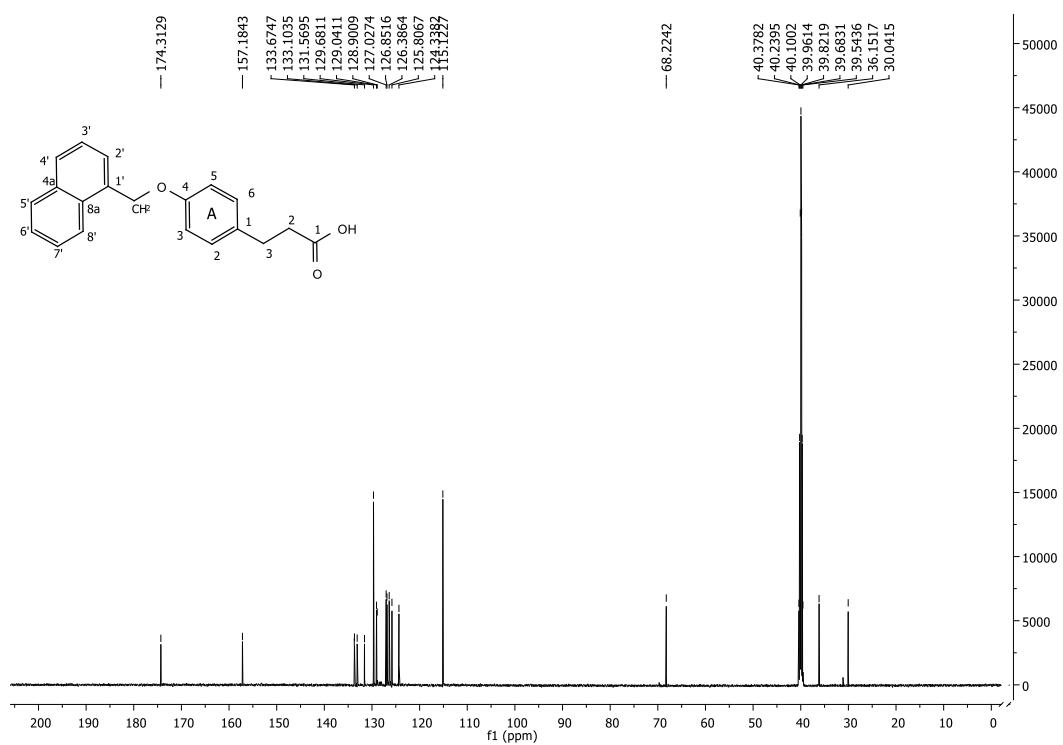
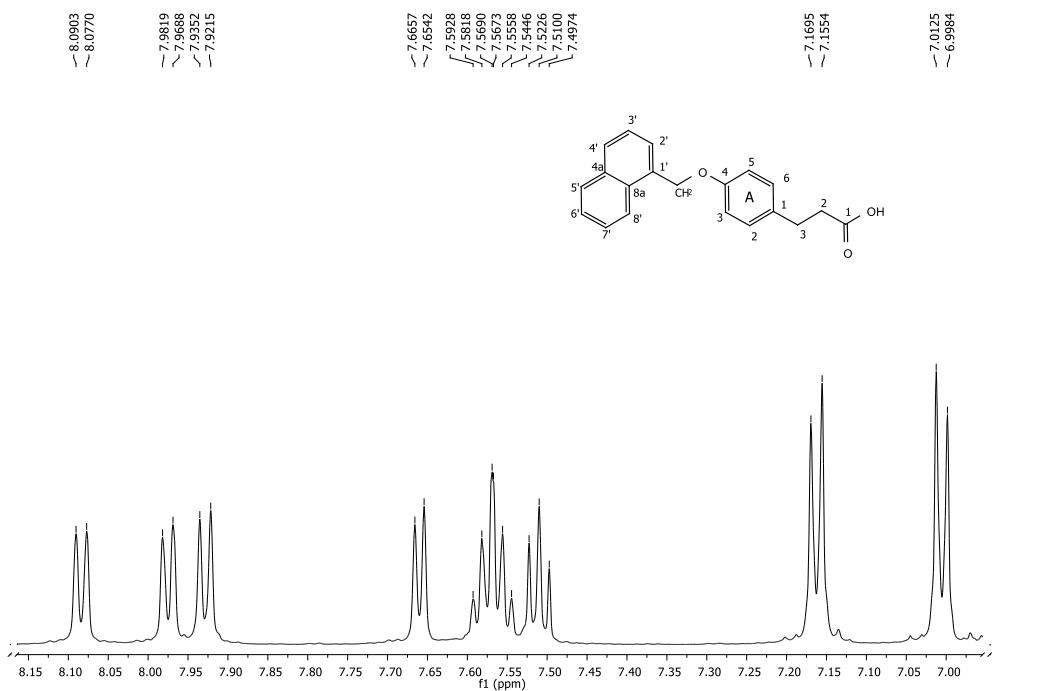
COSY of compound 1

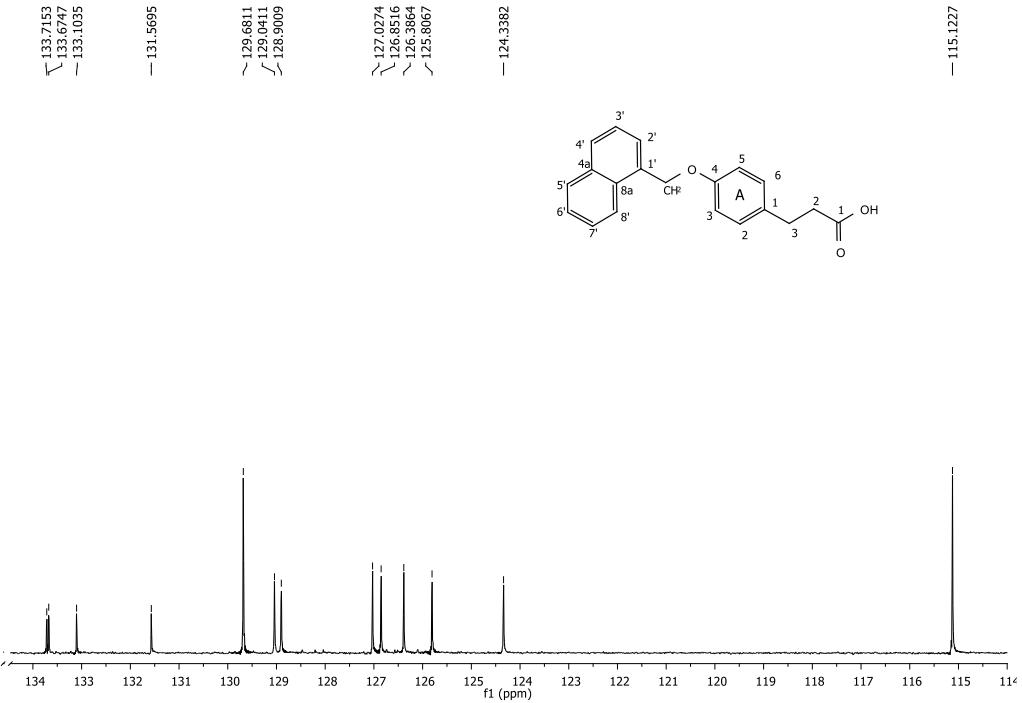


HSQC of compound 1

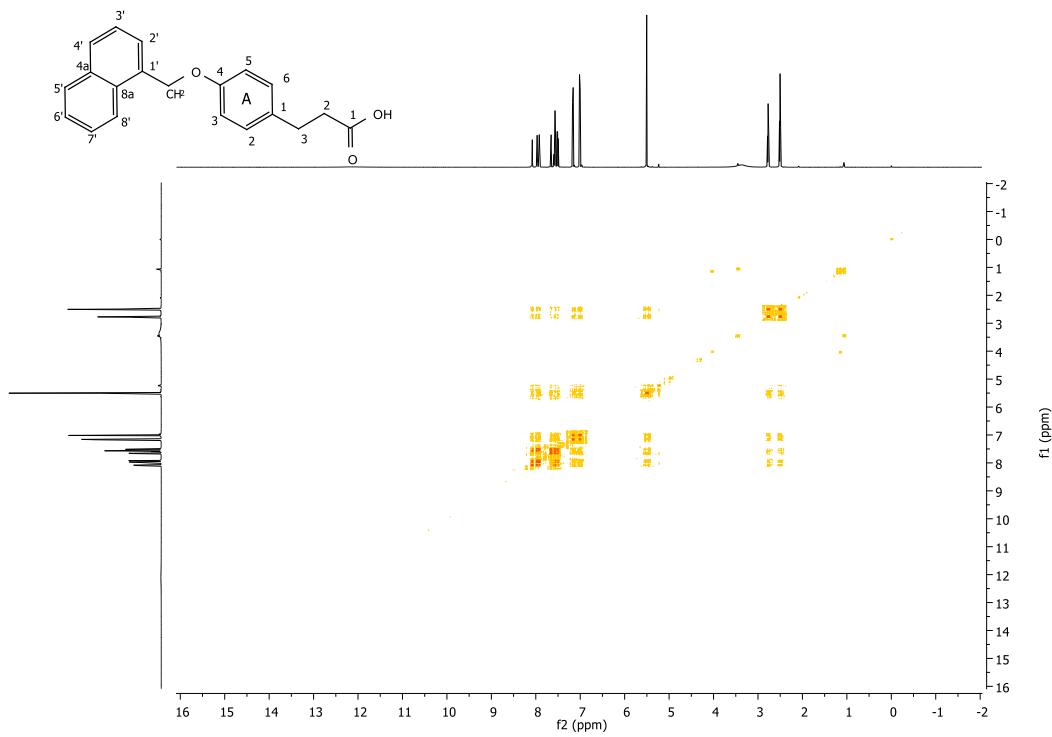


¹H-NMR of compound 2

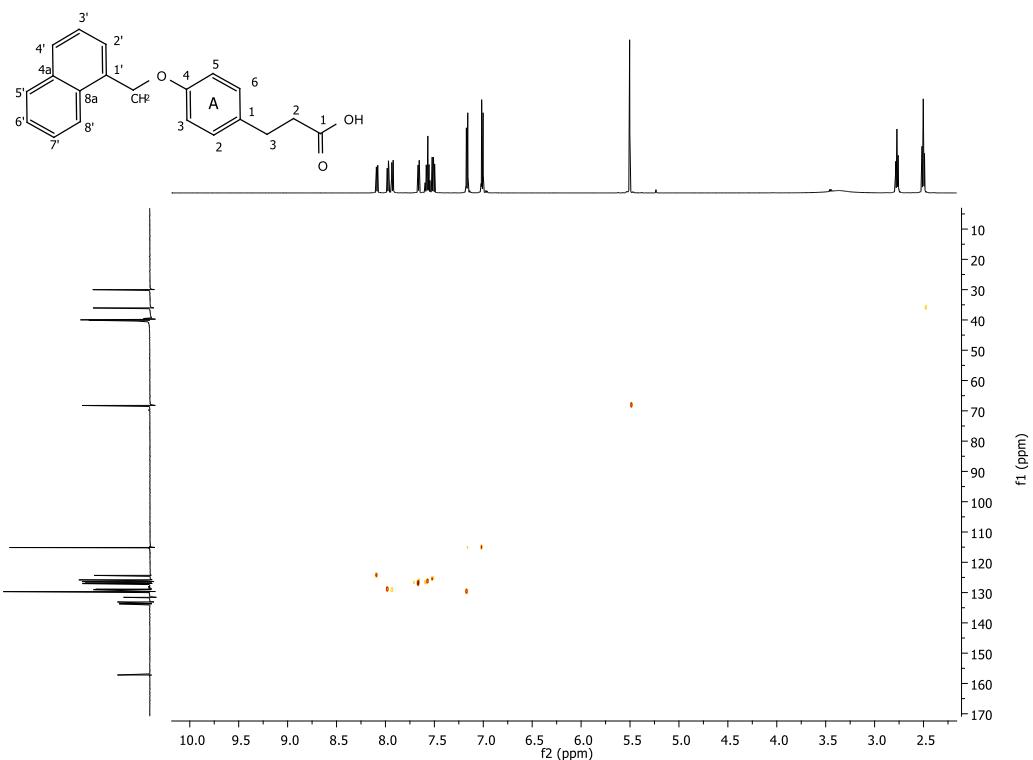




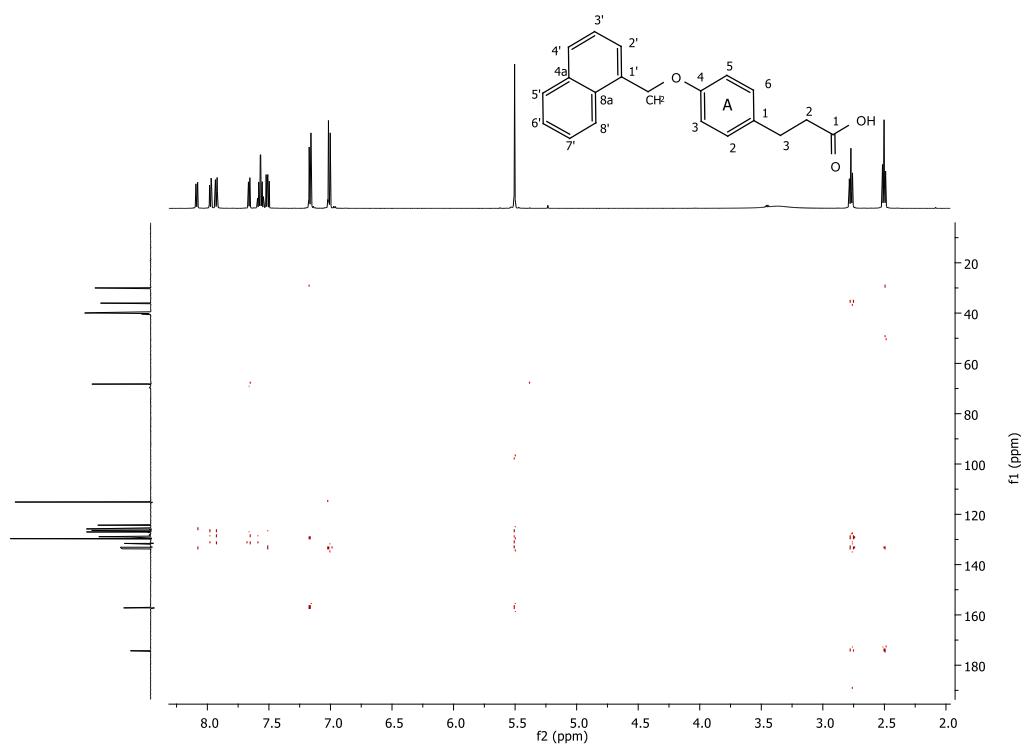
^{13}C -NMR of compound 2 (aromatic zone expansion)



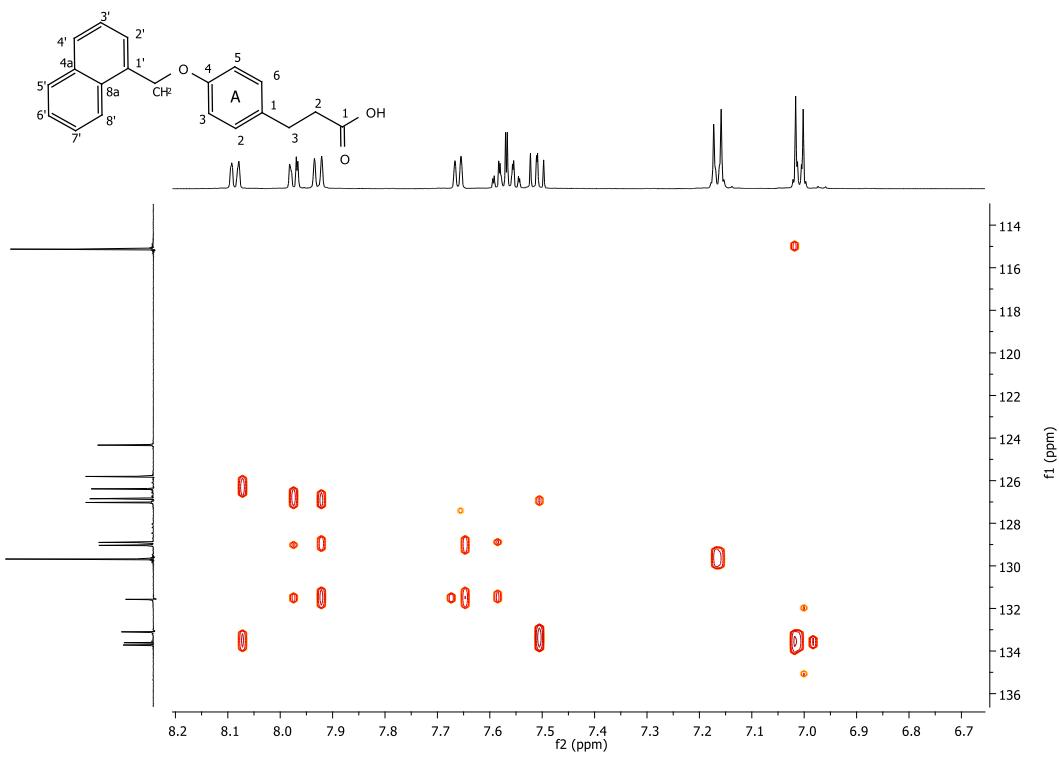
COSY of compound 2



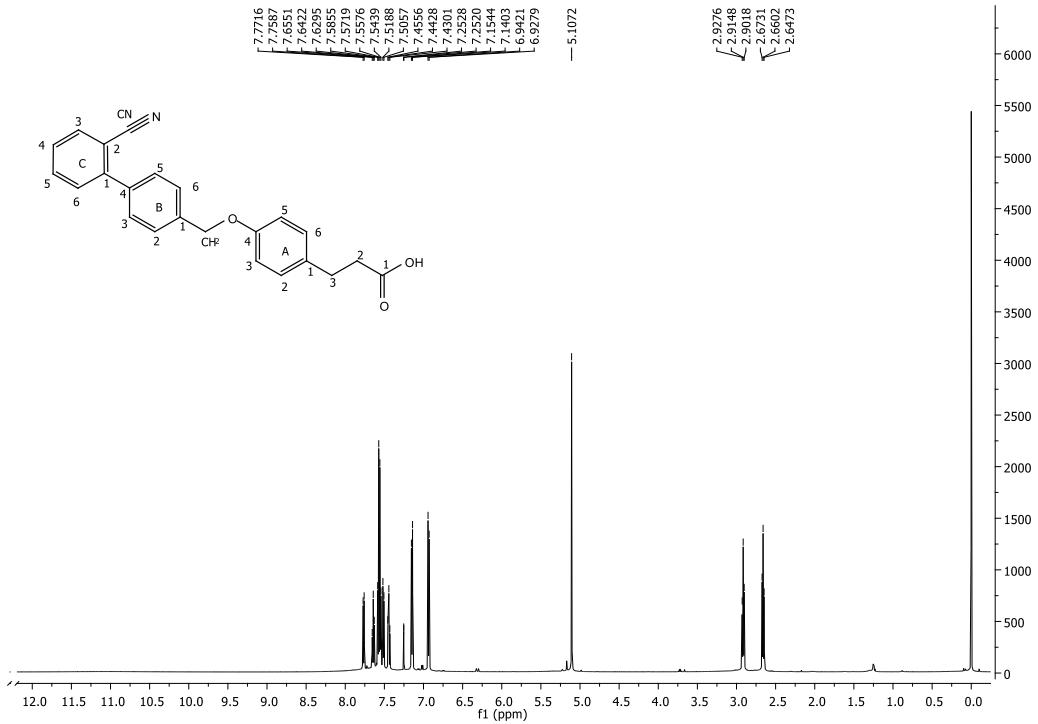
HSQC of compound 2



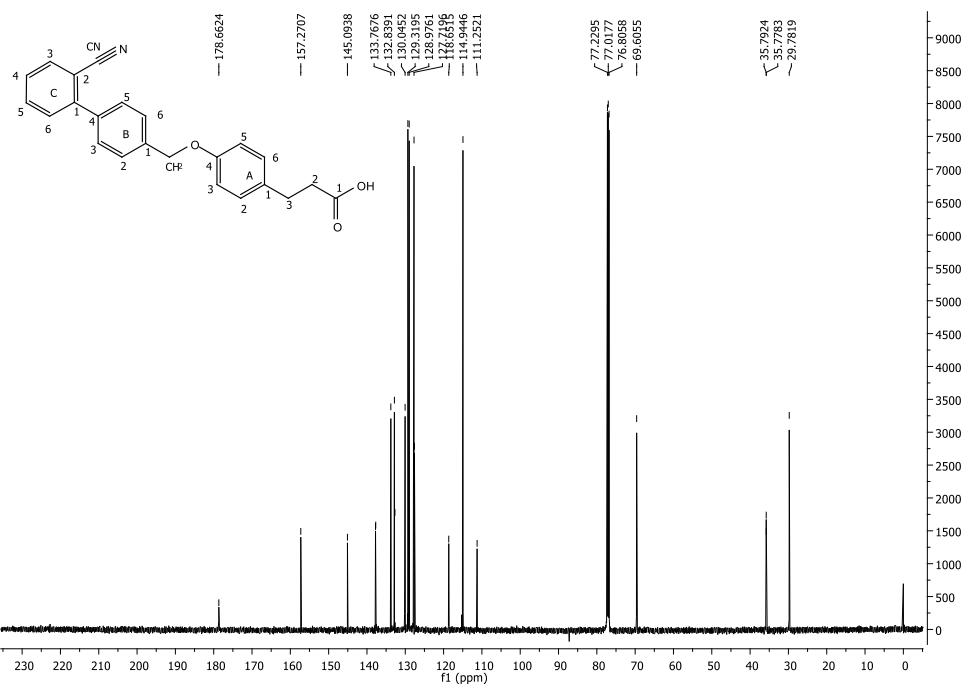
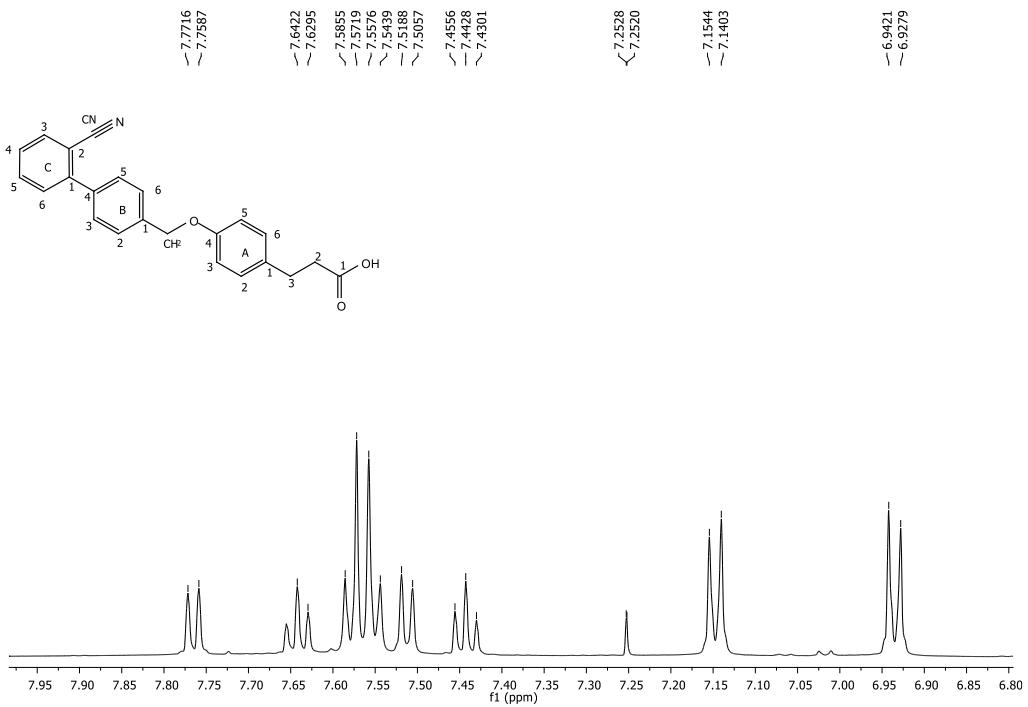
HMBC of compound 2

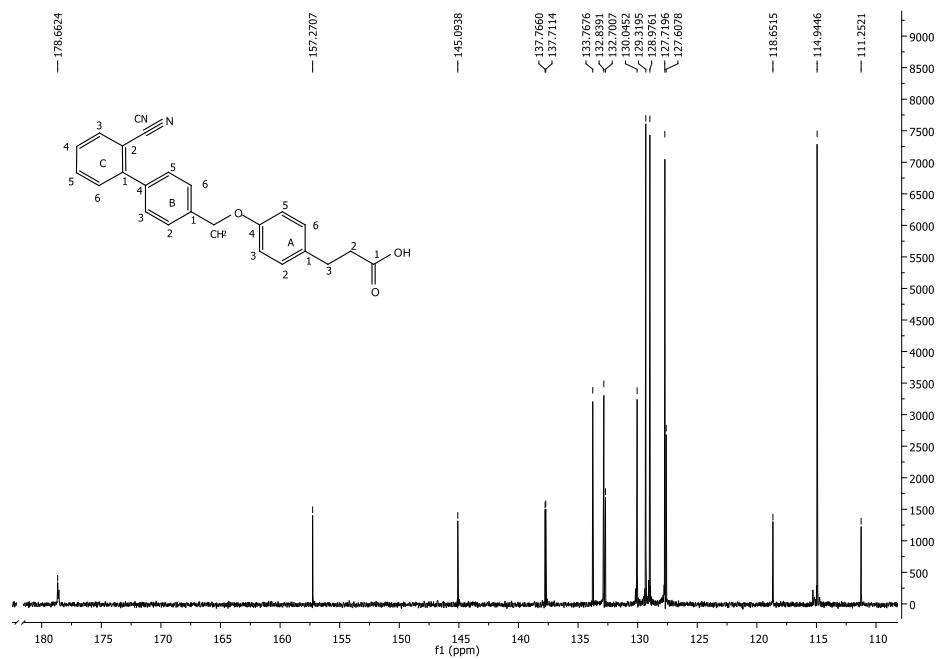


HMBC of compound 2 (expansion)

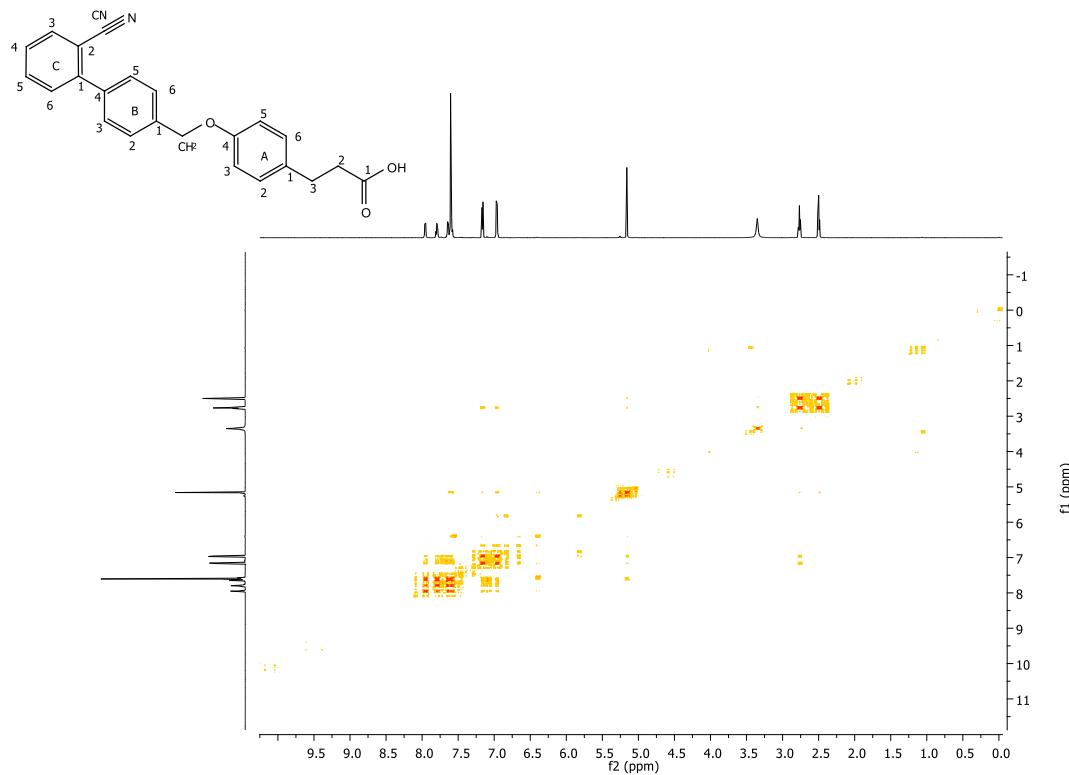


^1H -NMR of compound 3

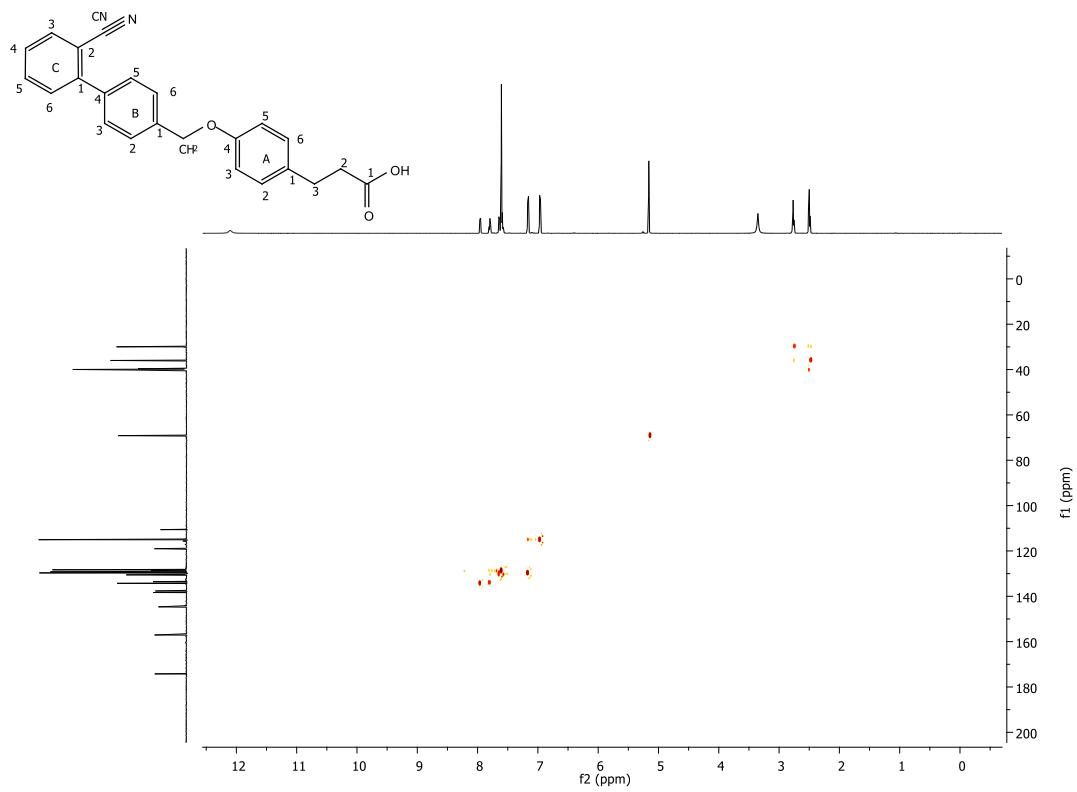




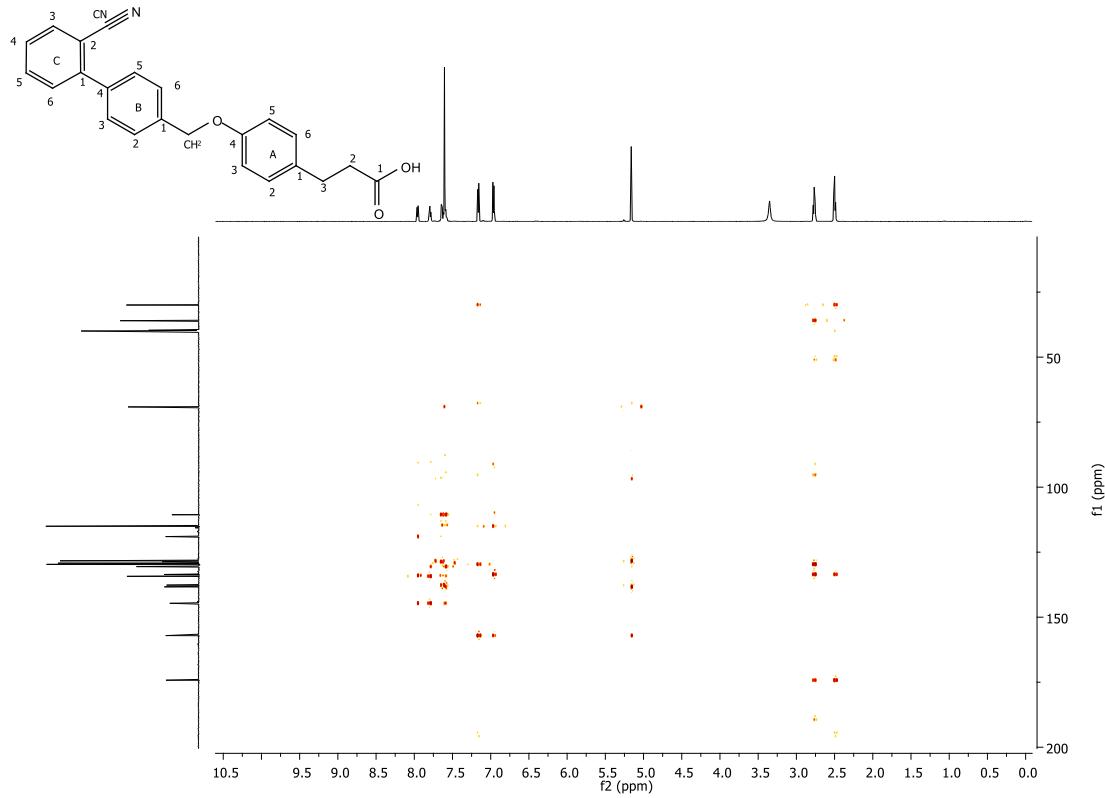
¹³C-NMR of compound 3 (aromatic zone expansion)



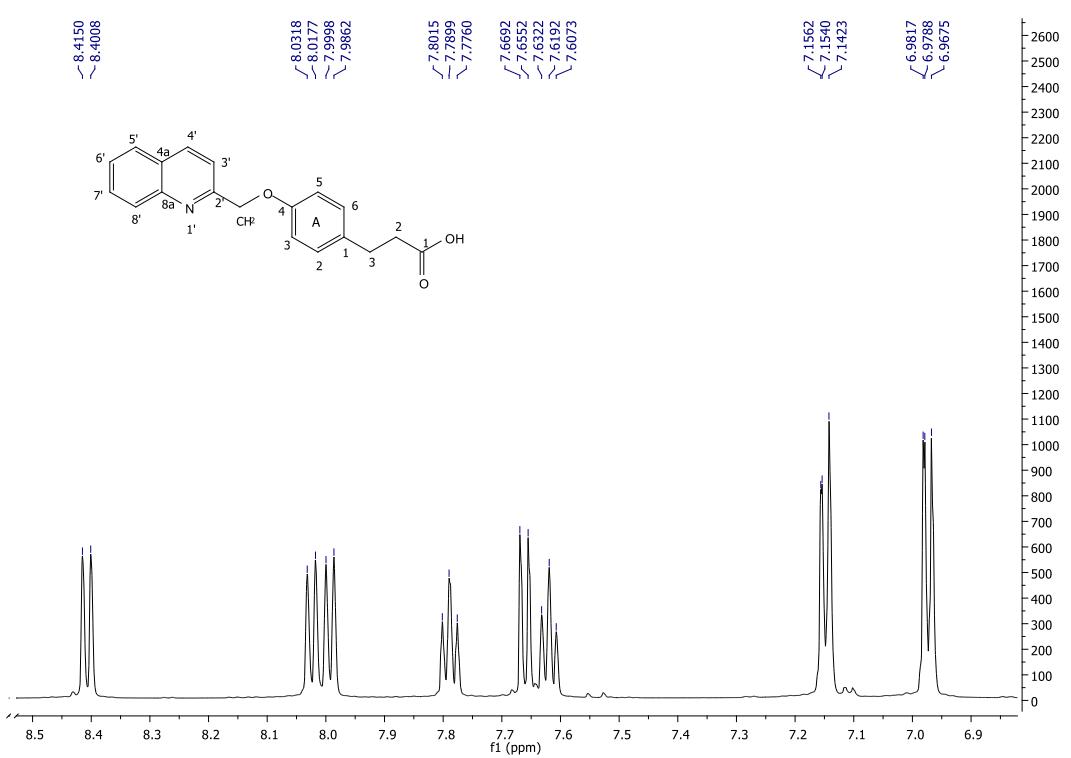
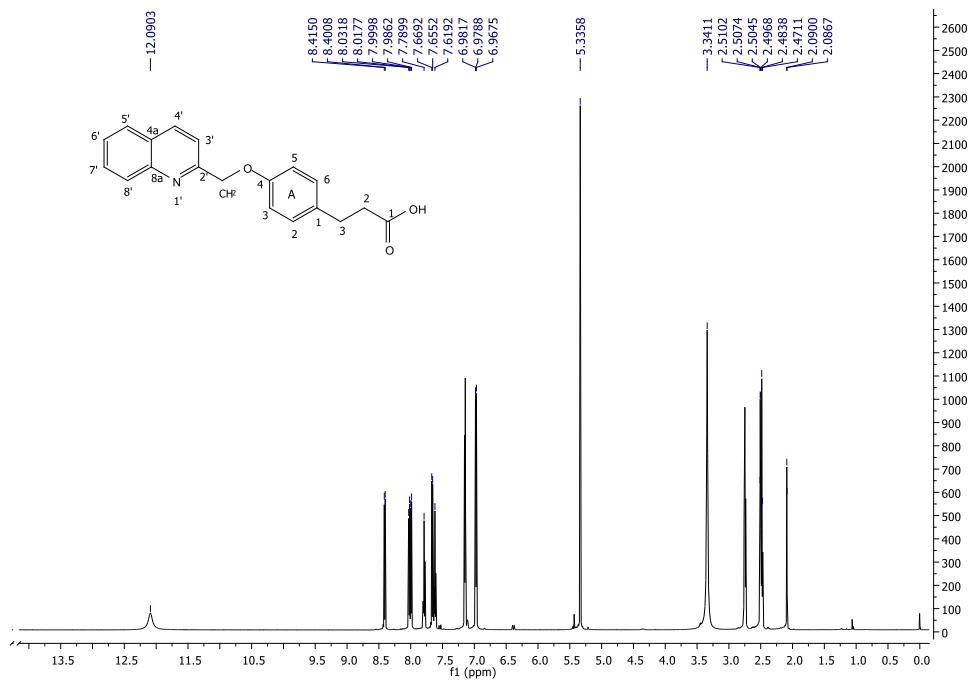
COSY of compound 3

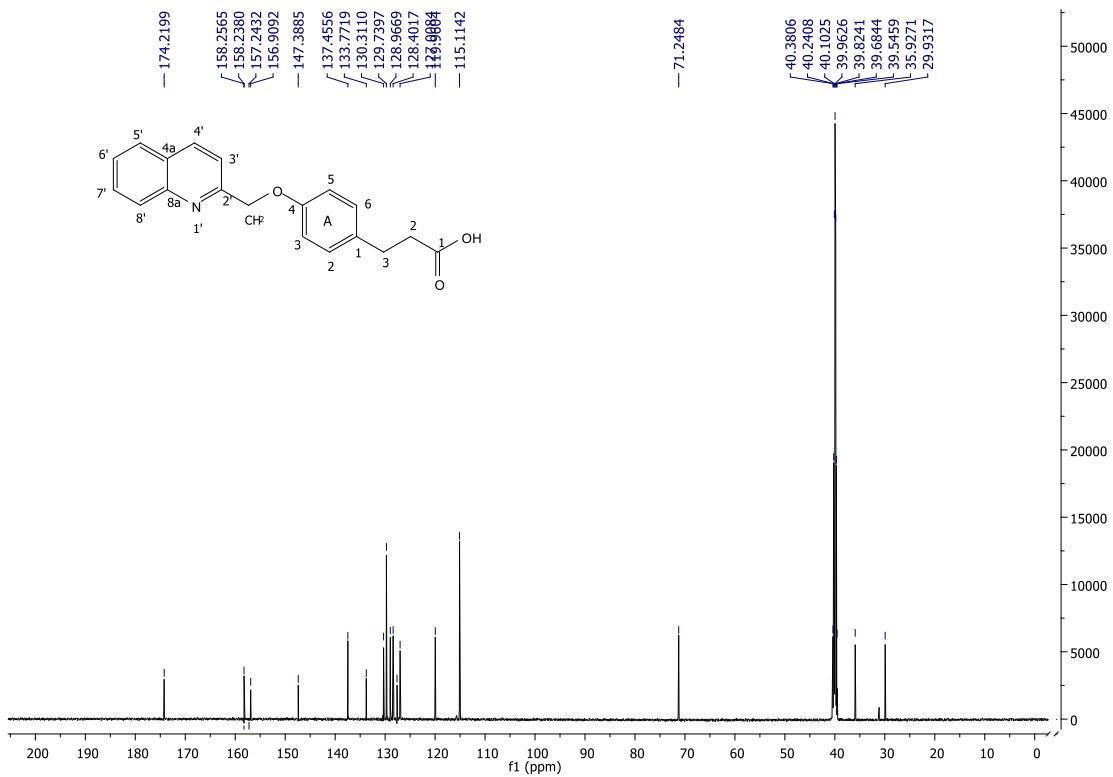


HSQC of compound 3

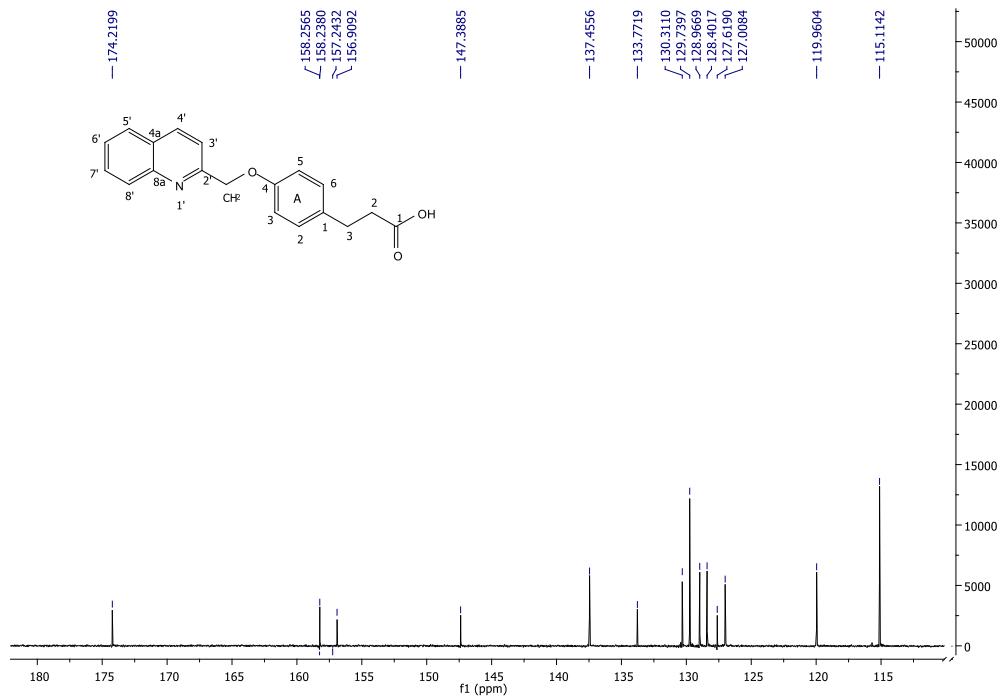


HMBC of compound 3

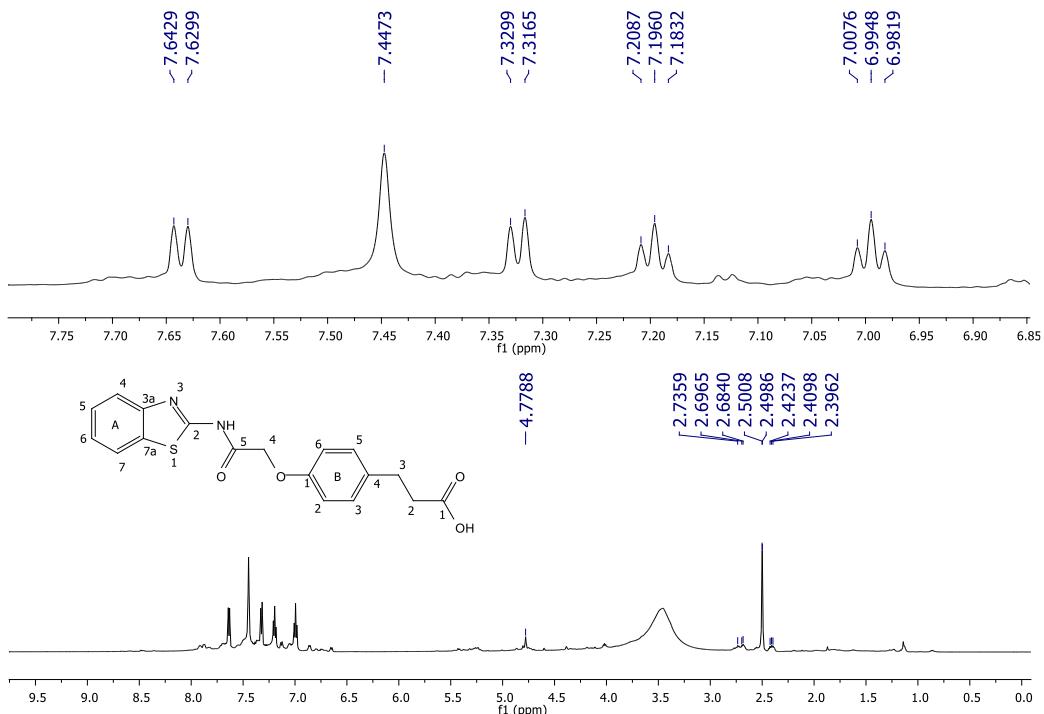




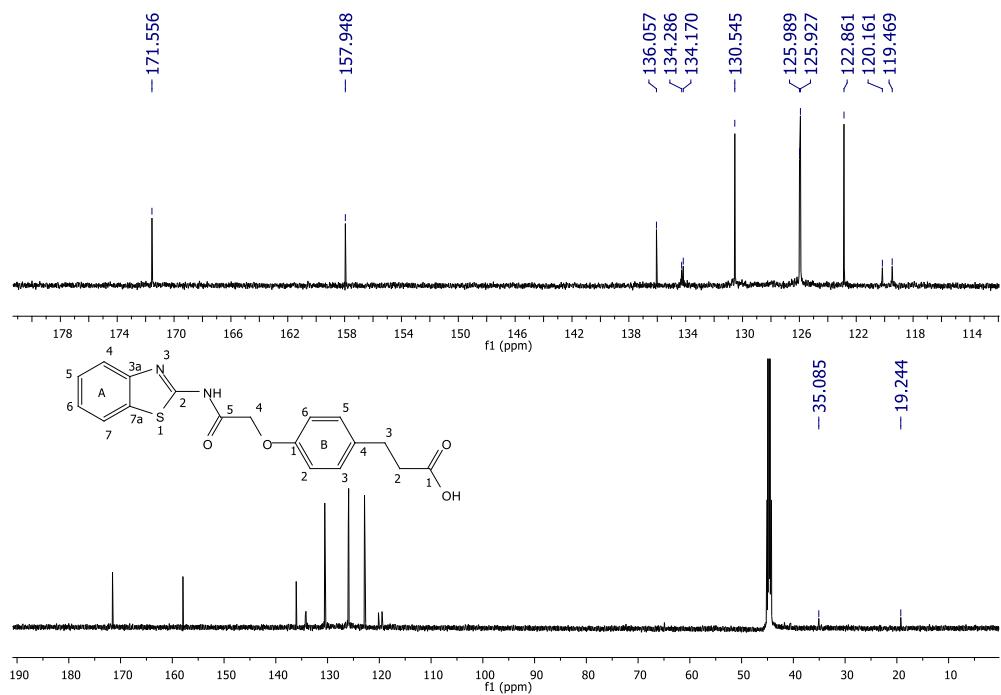
¹³C-NMR of compound 4



¹³C-NMR of compound 4 (aromatic zone expansion)



¹H-NMR of compound 5 (aromatic zone expansion)



¹³C-NMR compound 5 (aromatic zone expansion)