

Supplementary

Anti-Inflammatory Flavonolignans from *Triticum aestivum* Linn. Hull

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Table S1. Reported constituents of the aerial, hull, bran, and sprout part of *T. aestivum*.

Part	Compound name	Reference
	Phenolic acid	
	3- <i>O</i> -caffeoylquinic acid (1)	
	4- <i>O</i> -caffeoylquinic acid (2)	
	5- <i>O</i> -caffeoylquinic acid (3)	
	3- <i>O</i> -feruoylquinic acid (4)	
	4- <i>O</i> -feruoylquinic acid (5)	
	5- <i>O</i> -feruoylquinic acid (6)	
	<i>p</i> -coumaric acid (7)	
Aerial	Flavonoid	[10]
	isoorientin 6''- <i>O</i> - β -D-xylopyranoside (8)	
	isoorientin (9)	
	isoschaftoside (10)	
	isoscoparin 2''- <i>O</i> - α -L-rhamnopyranoside (11)	
	tricin 7- <i>O</i> -rutinoside (12)	
	luteolin 6-C-[6- glucopyranosyl - <i>O</i> - <i>E</i> -caffeoyl- β -D-glucopyranosyl(1'' \rightarrow 2)- β -glucopyranoside] (13)	
	luteolin 6-C-[5-ribofuranosyl- <i>O</i> - <i>E</i> -feruoyl- β -D-ribofuranosyl(1'' \rightarrow 2)- β -glucopyranoside] (14)	
	3',4',5'- <i>O</i> -trimethyltricetin 7- <i>O</i> -[β -D-glucopyranosyl(1'' \rightarrow 2)- β -D-glucopyranoside] (15)	
	Oxyphytosterol	
	stigmast-4-en-6 β -ol-7-one (16)	
	stigmast-4,22-dien-6 β -ol-3-one (17)	
	7-keto- β -sitosterol (18), 7-keto-stigmasterol (19)	
	7 β -hydroxysitosterol (20),	
Hull (Bran)	7 β -hydroxystigmasterol (21)	[8, 11-13]
	7-ketocholesterol (22),	
	7 β -hydroxycholesterol (23),	
	7-ketocampesterol (24),	
	7 β -hydroxycampesterol (25),	
	ergost-4-en-3,6-dione (26),	
	ergostane-3 β ,7 β -diol (27),	

	7-ketocholesterol ferulate (28), 7-ketocampesterol (29), campesterol ferulate (30), stigmasterol ferulate (31), sitosterol ferulate (32), 3- <i>O</i> -glucopyranosyl-7-ketocampesterol (33), 3- <i>O</i> -glucopyranosyl-7-ketostigmasterol (34), 3- <i>O</i> -glucopyranosyl-7-ketositosterol (35), stigmasterol (36)	
	Flavonoid	
	Tricin (37)	
	Aliphatic compound	
	5- <i>n</i> -heptadecylresorcinol (38) 5- <i>n</i> -14'-(<i>Z</i>)-heneicosylresorcinol (39) 5- <i>n</i> -nonadecylresorcinol (40) 5- <i>n</i> -heneicosylresorcinol (41) 5- <i>n</i> -tricosylresorcinol (42) 1- <i>O</i> -(9 <i>Z</i> ,12 <i>Z</i> ,15 <i>Z</i> -octadecatrienoate) glycerol (43) 2-linoleoylglycerol (44) 1- <i>O</i> -(9 <i>Z</i> ,12 <i>Z</i> -octadecatrienoate) glycerol (45) pinellic acid (46)	
	Phenolic glycoside	
	Tachioside (47)	
	Glycolipid	
Sprout	2- α -linolenoylglycerol 1- <i>O</i> - β -D-galactopyranoside (48), 3- α -linolenoylglycerol 1- <i>O</i> - β -D-galactopyranoside (49), 2,3-di- α -linolenoylglycerol 1- <i>O</i> - β -D-galactopyranoside (50), 2,3-di- α -linolenoylglycerol 1- <i>O</i> -(6- <i>O</i> -linolenoyl- β -D-galactopyranoside) (51), 2,3-di- α -linolenoylglycerol 1- <i>O</i> -[α -D-galactopyranoside-(1 \rightarrow 6) β -D-galactopyranoside] (52)	[14,15]
	Glyceride	
	trilinolenin (53),	

trilinolein (54)

Unsaturated fatty acid

α -linolenic (55),
 α -linolenic acid methyl ester (56),
oleic acid (57),
12(Z)-actadecenoic acid (58)

Sterol

β -sitosterol (59)
daucosterol (60)
6'-O-linolenyl-daucosterol (61)

Alkaloid

(2R)-2-O- β -D-glucopyranosyl-4,7-dimethoxy-2H-1,4-benzoxazin-3(4H)-one (62)
adenosine (63)

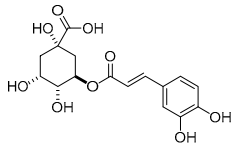
Flavonoid

isorientin (9)
triticumoside (64)
isoscoparin (65)
luteolin (66)

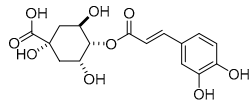
Tocopherol

α -tocopherol (67)

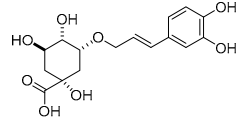
Phenolic acid



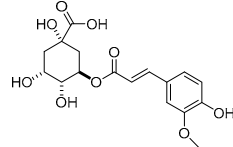
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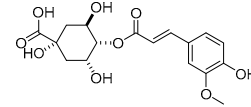
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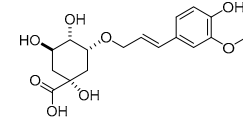
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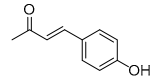
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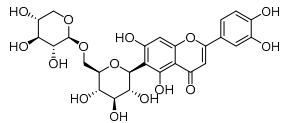


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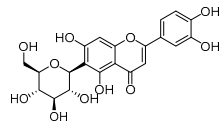


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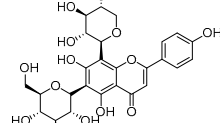
Flavonoid



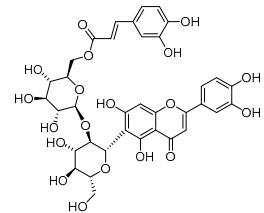
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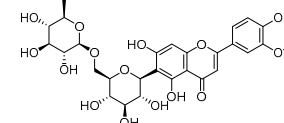
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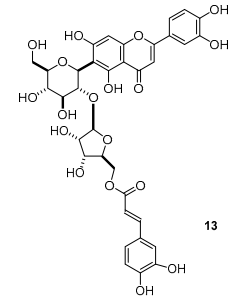
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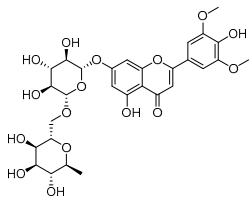
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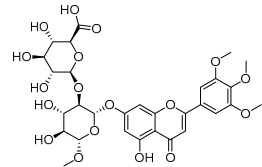
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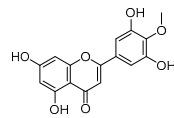
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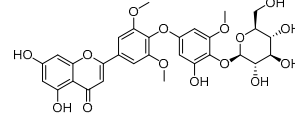
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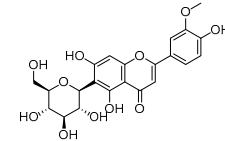
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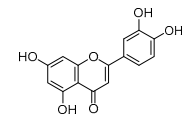
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64

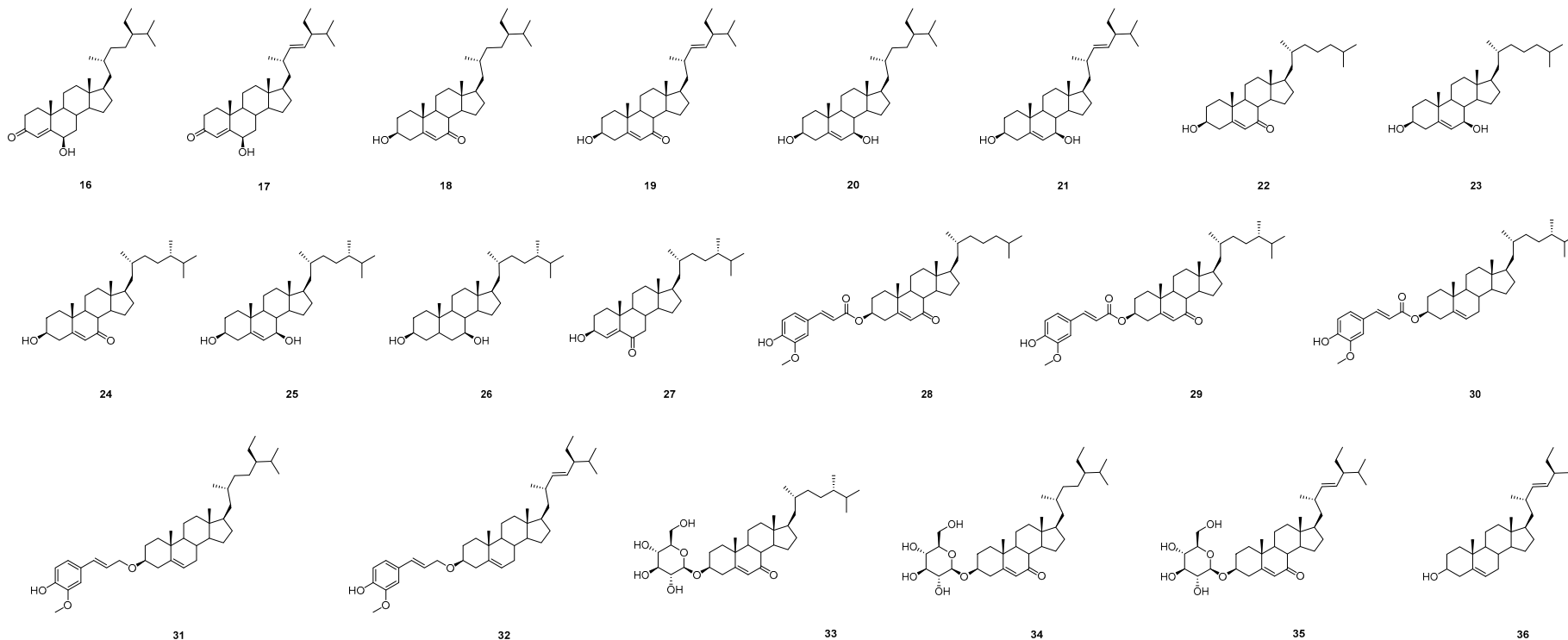


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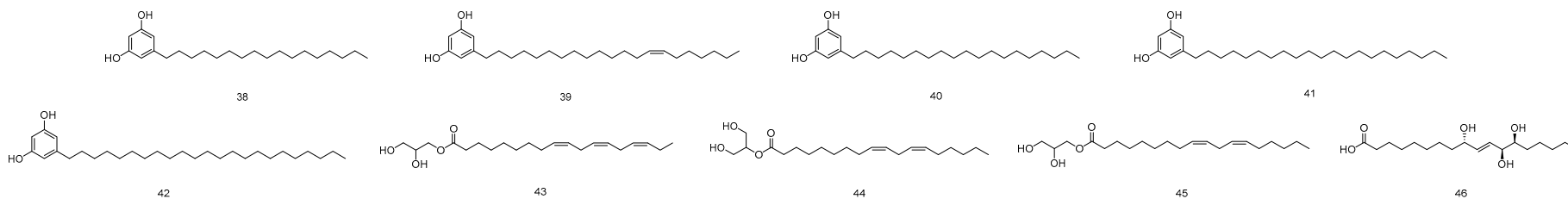


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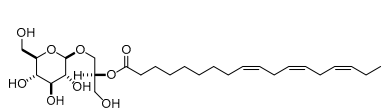
Oxyphytosterol



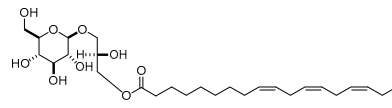
Aliphatic compound



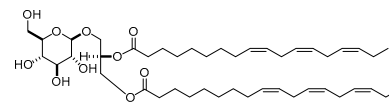
Glycolipid



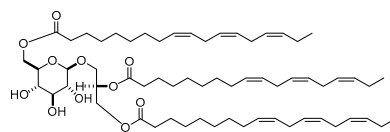
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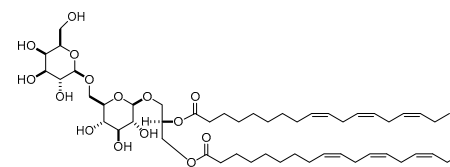
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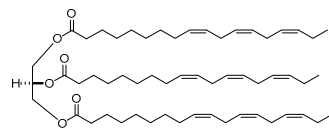


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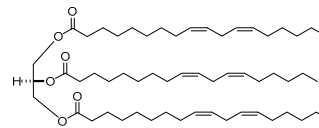


52

Glyceride

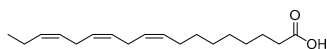


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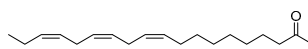


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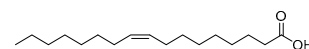
Unsaturated fatty acid



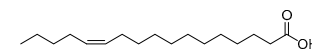
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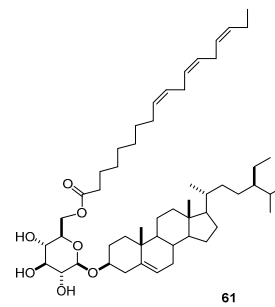
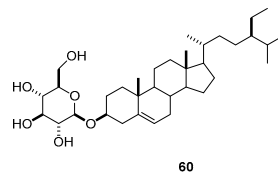
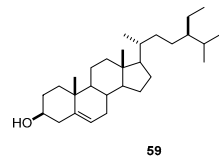


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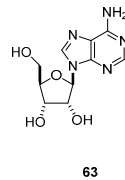
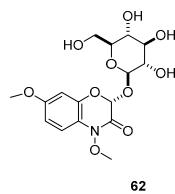


58

Sterol



Alkaloid



Tocopherol

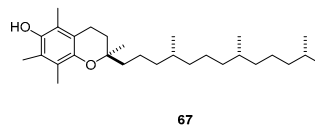


Figure S1. The chemical structures of reported constituents of the aerial, hull, bran, and sprout part of *T. aestivum*.

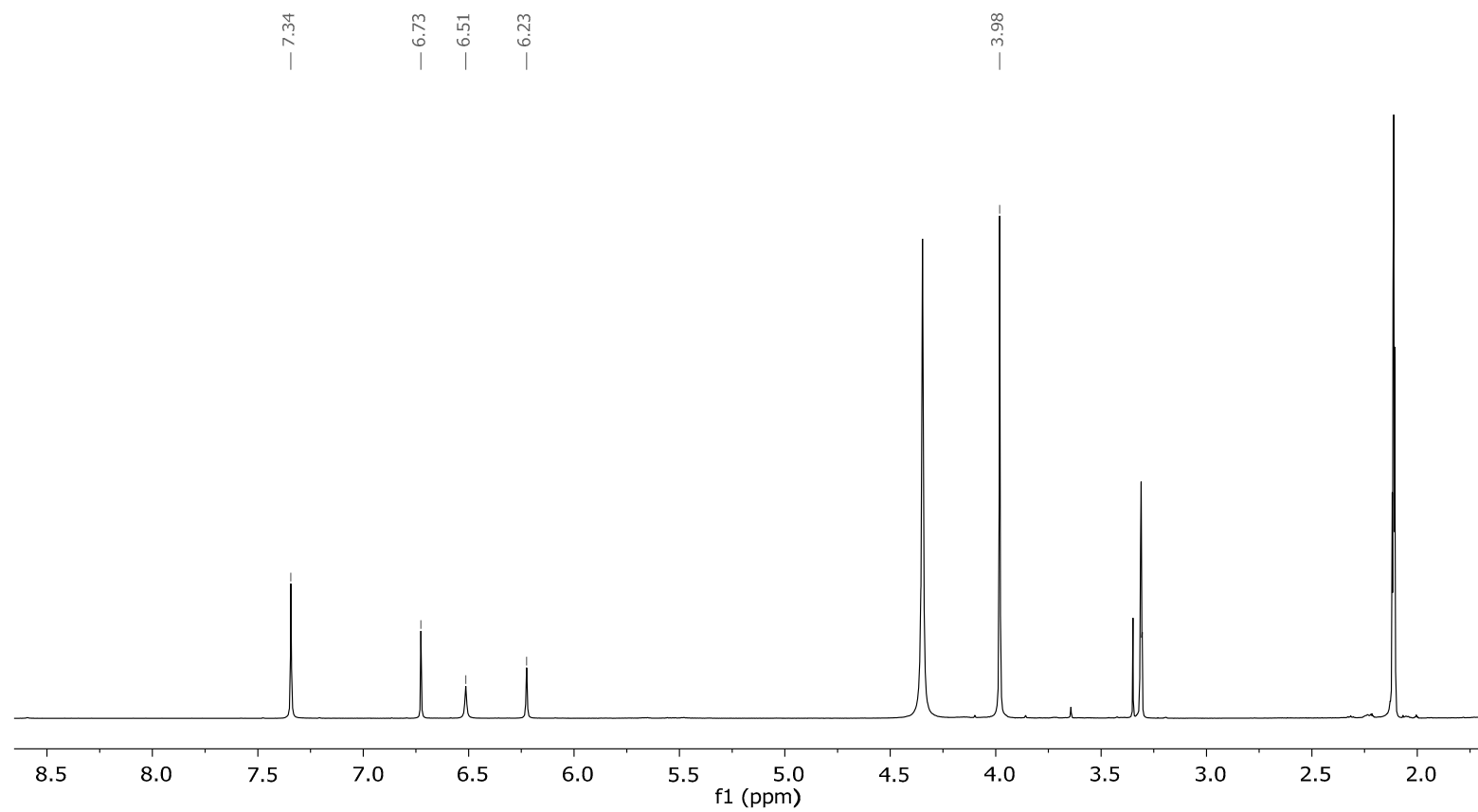


Figure S2. ^1H NMR (600 MHz) spectrum of compound **1** in methanol- d_4 /acetone- d_6 (1:1).

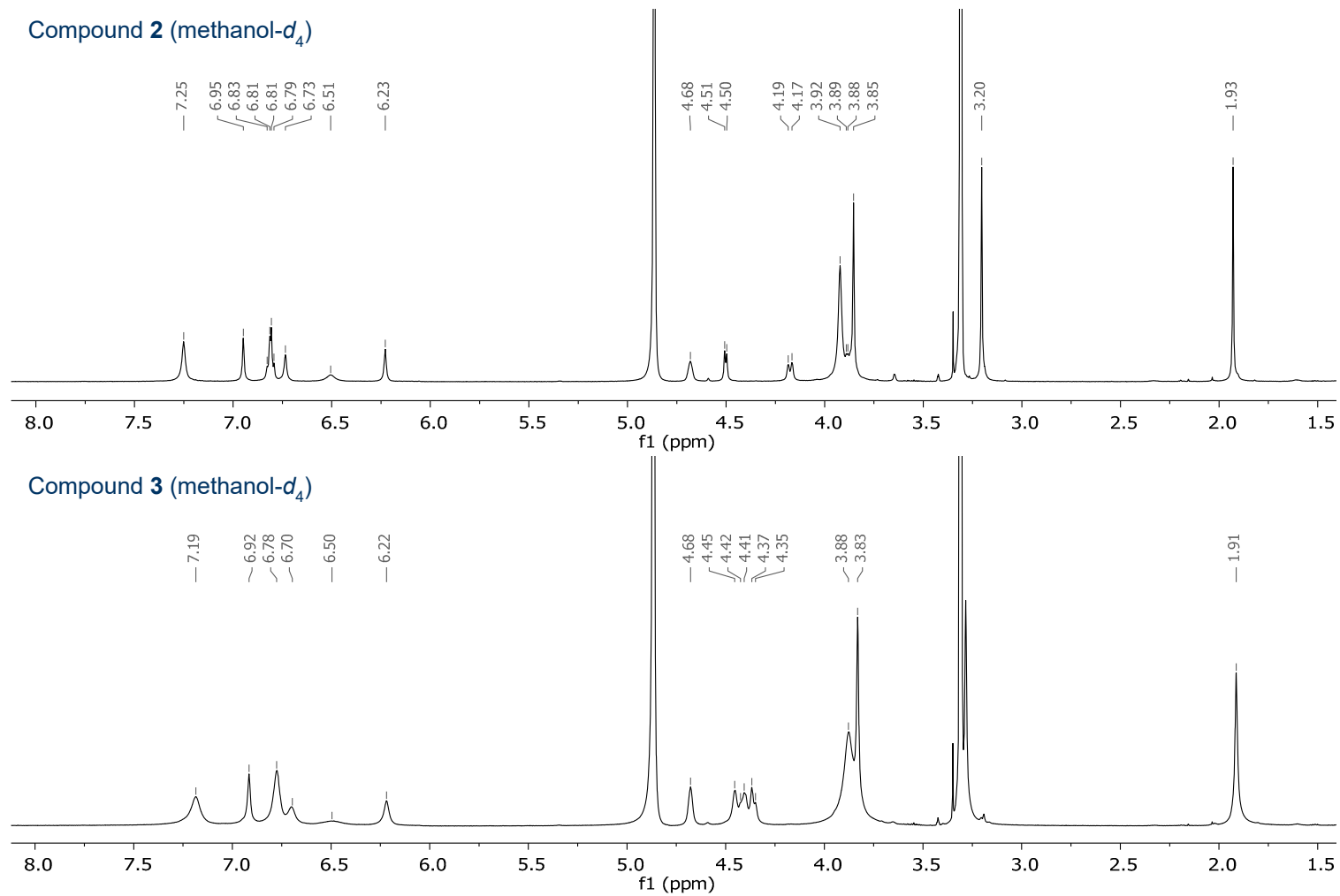


Figure S3. ^1H NMR (600 MHz) spectra of compounds 2 (top) and 3 (bottom) in methanol- d_4 .

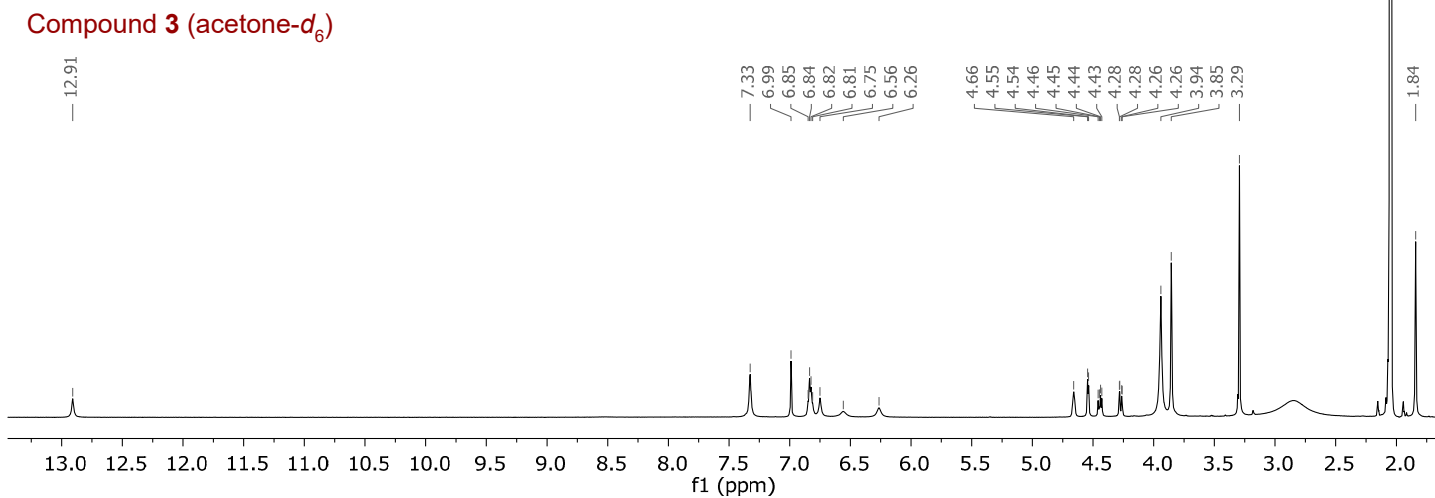
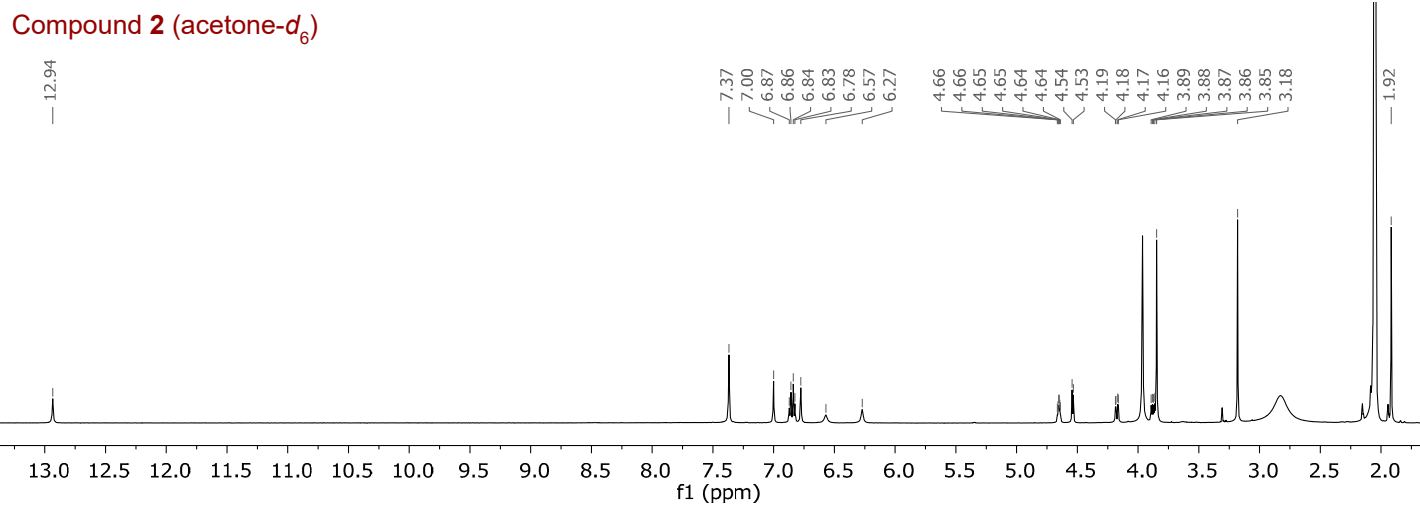


Figure S4. ^1H NMR (600 MHz) spectra of compounds **2** (top) and **3** (bottom) in acetone- d_6 .

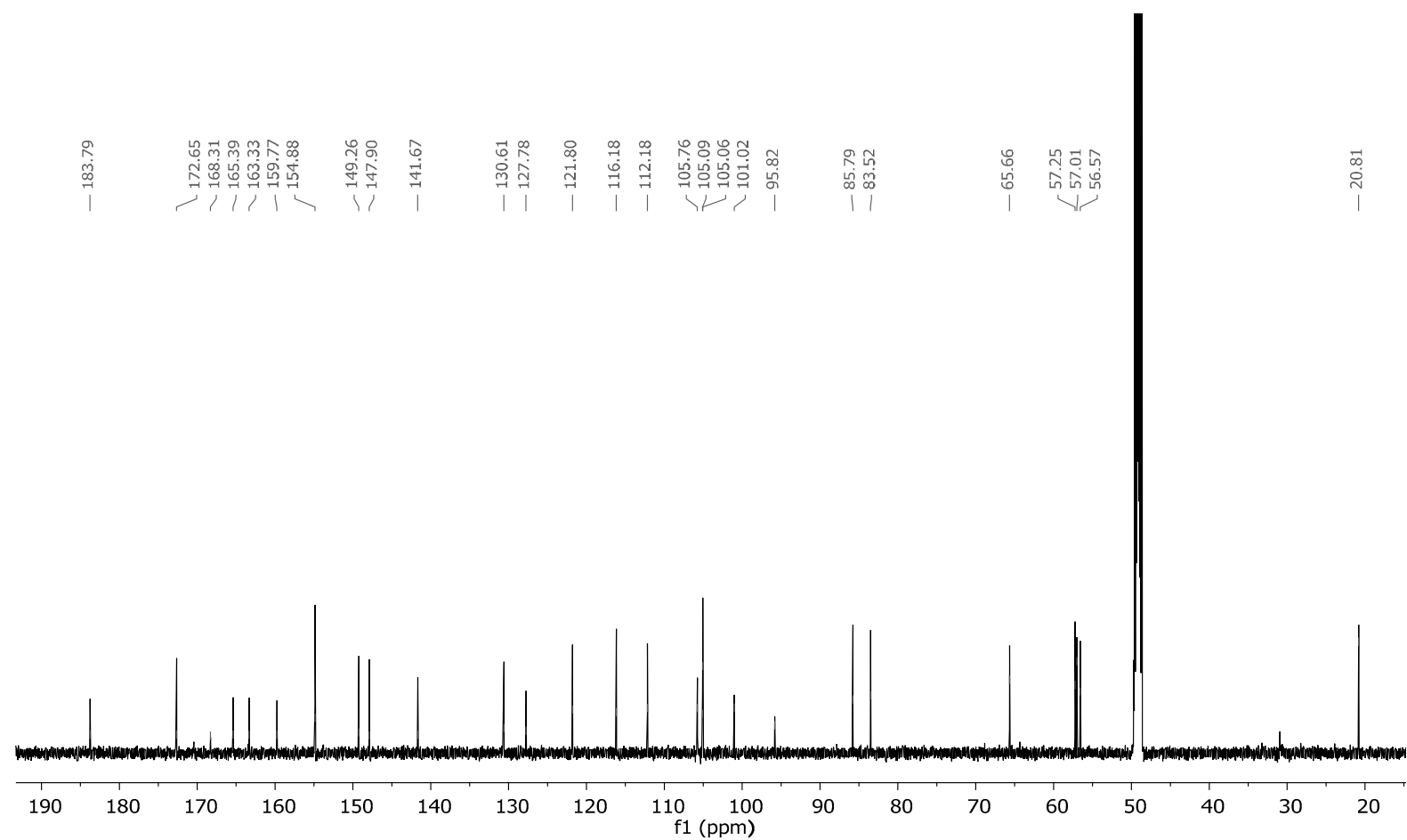


Figure S5. ^{13}C NMR (150 MHz) spectrum of compound **2** in methanol- d_4 .

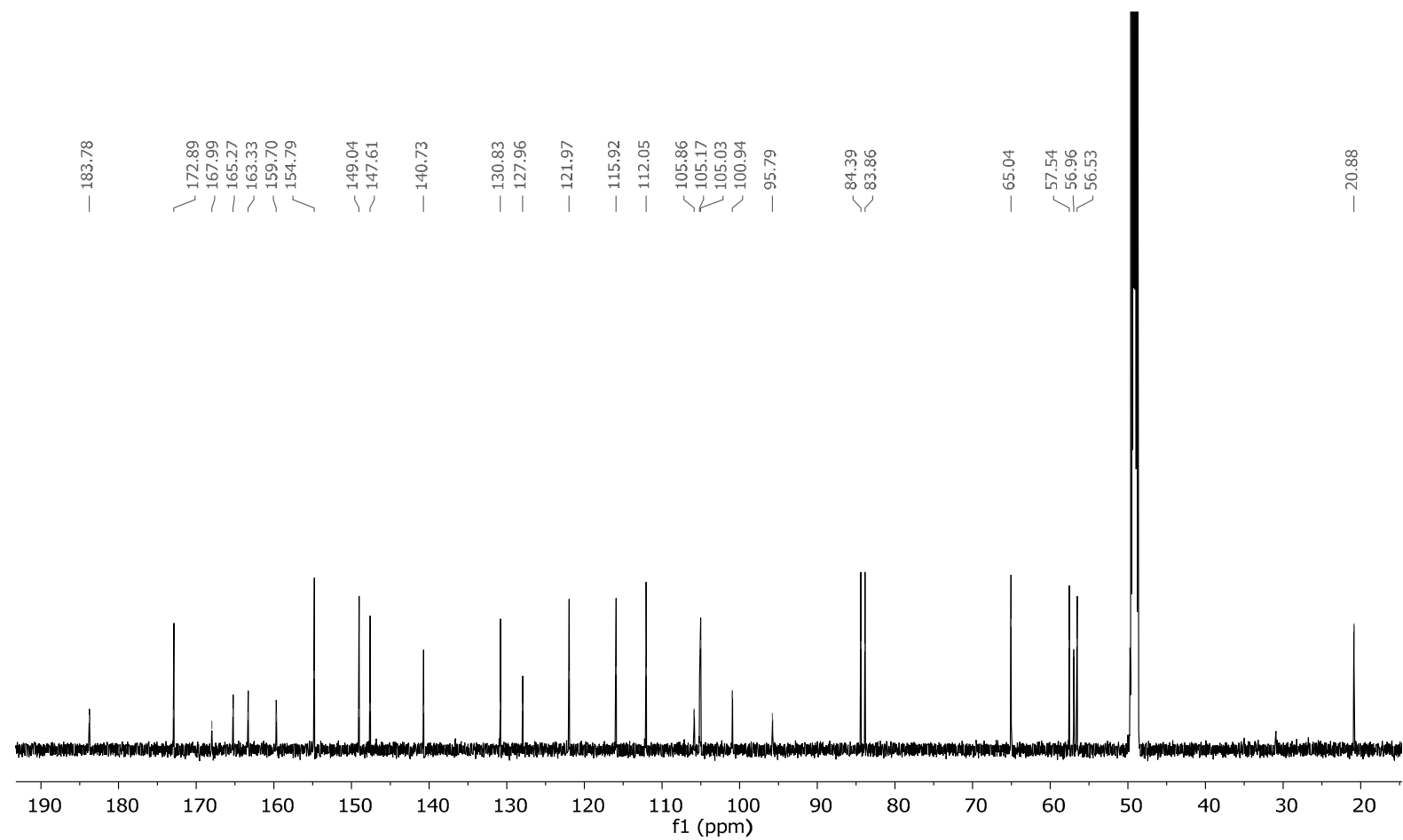


Figure S6. ^{13}C NMR (150 MHz) spectrum of compound 3 in methanol- d_4 .

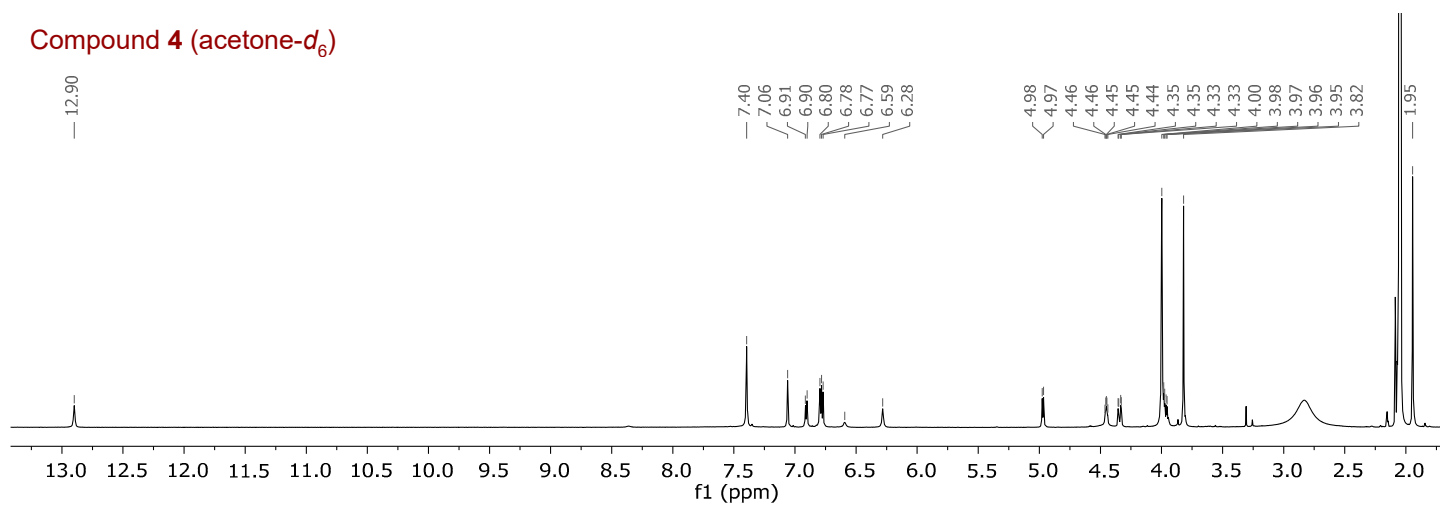
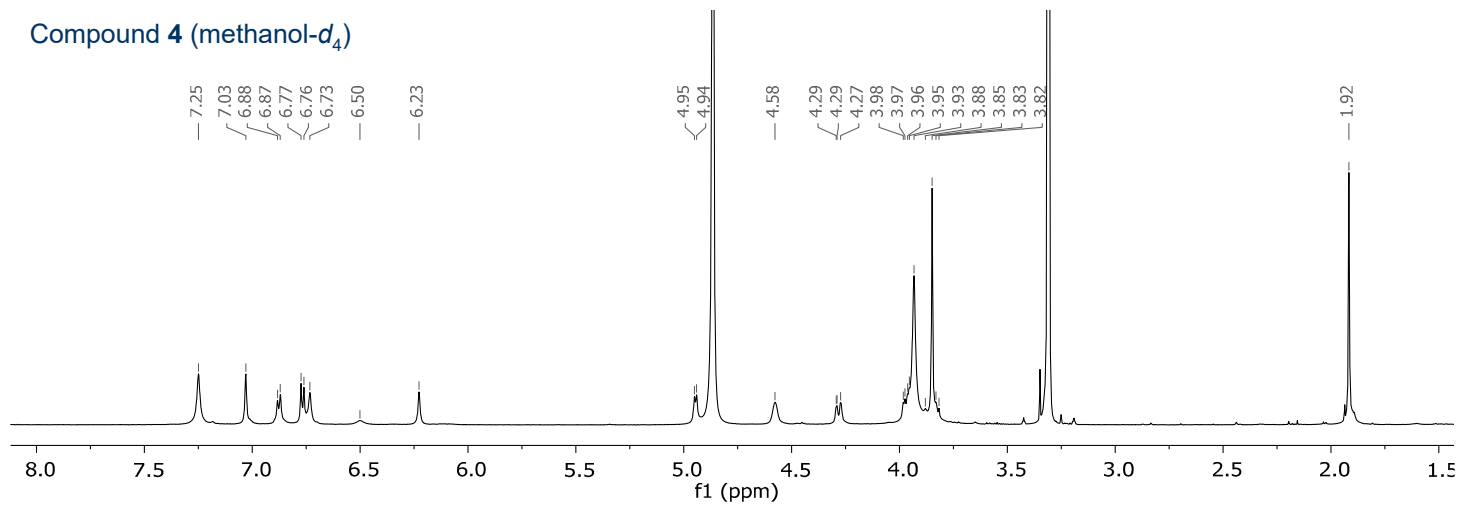


Figure S7. ^1H NMR (600 MHz) spectra of compound **4** in methanol- d_4 (top) and acetone- d_6 (bottom).

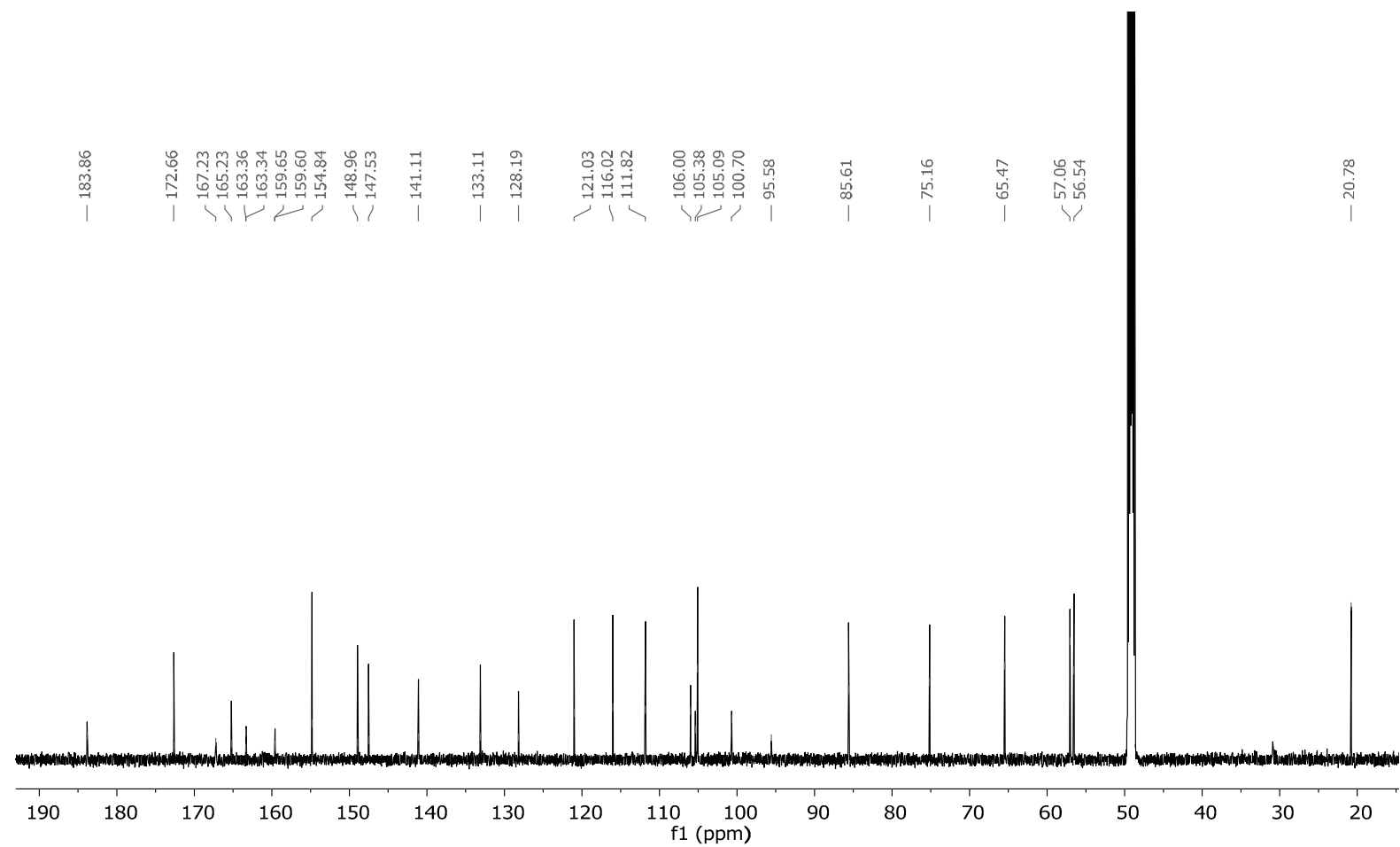
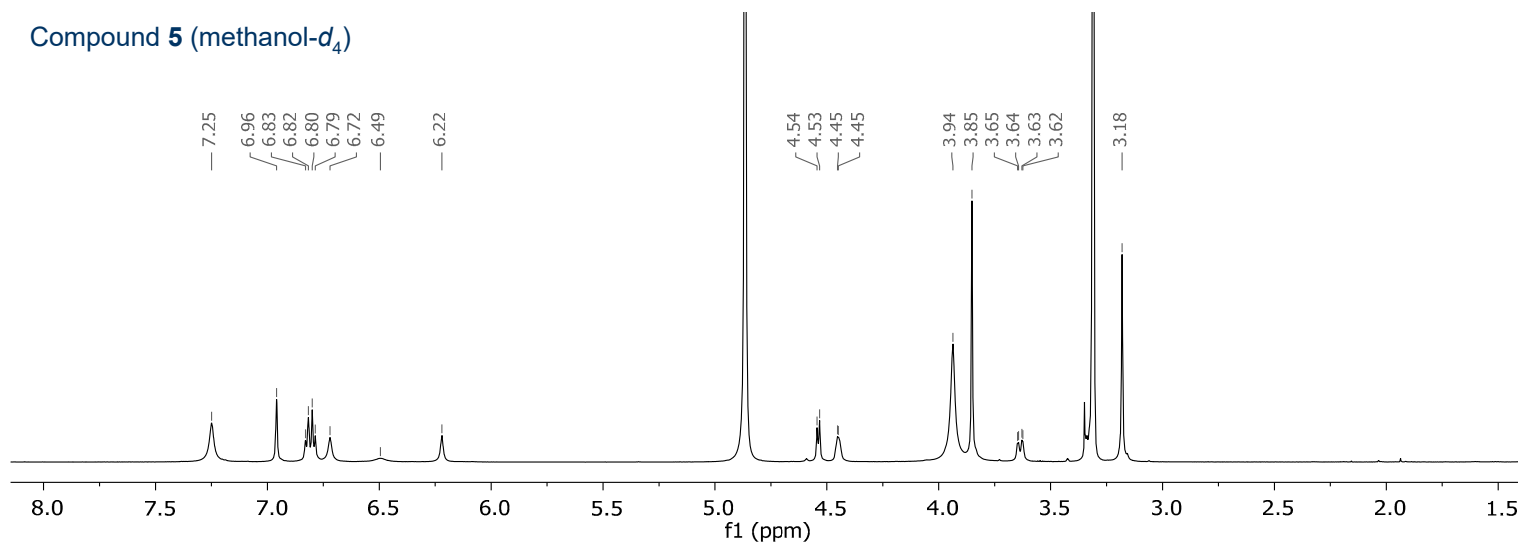


Figure S8. ^{13}C NMR (150 MHz) spectrum of compound 4 in methanol- d_4 .

Compound 5 (methanol-d₄)



Compound 6 (methanol-d₄)

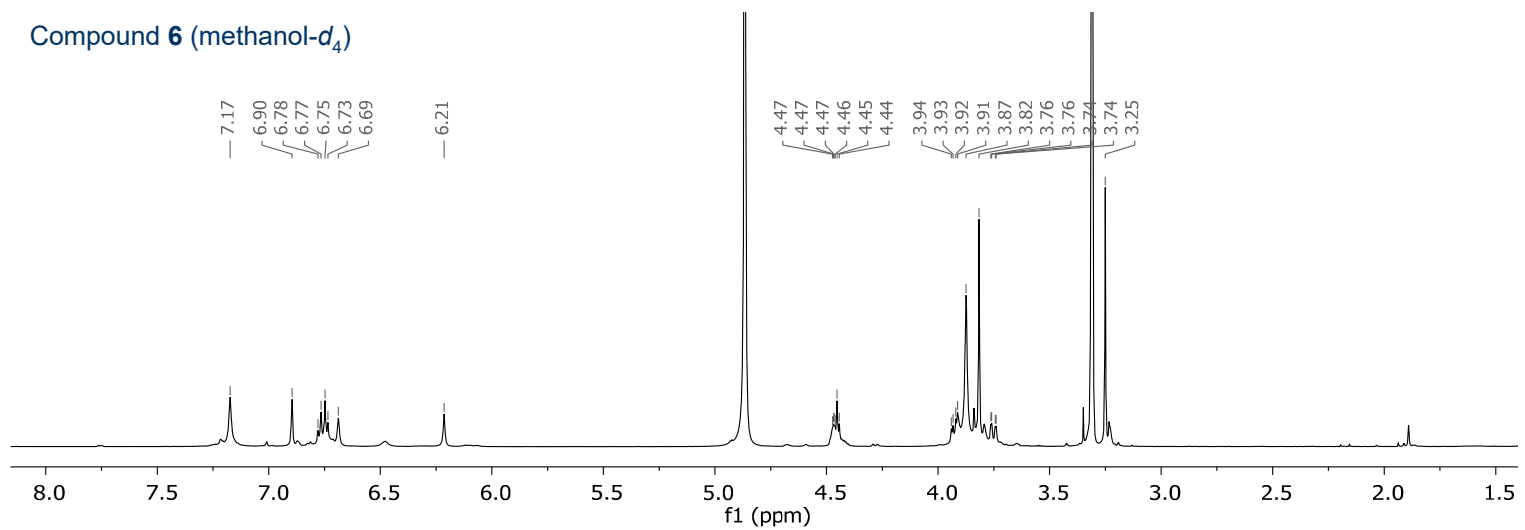


Figure S9. ¹H NMR (600 MHz) spectra of compounds 5 (top) and 6 (bottom) in methanol-d₄.

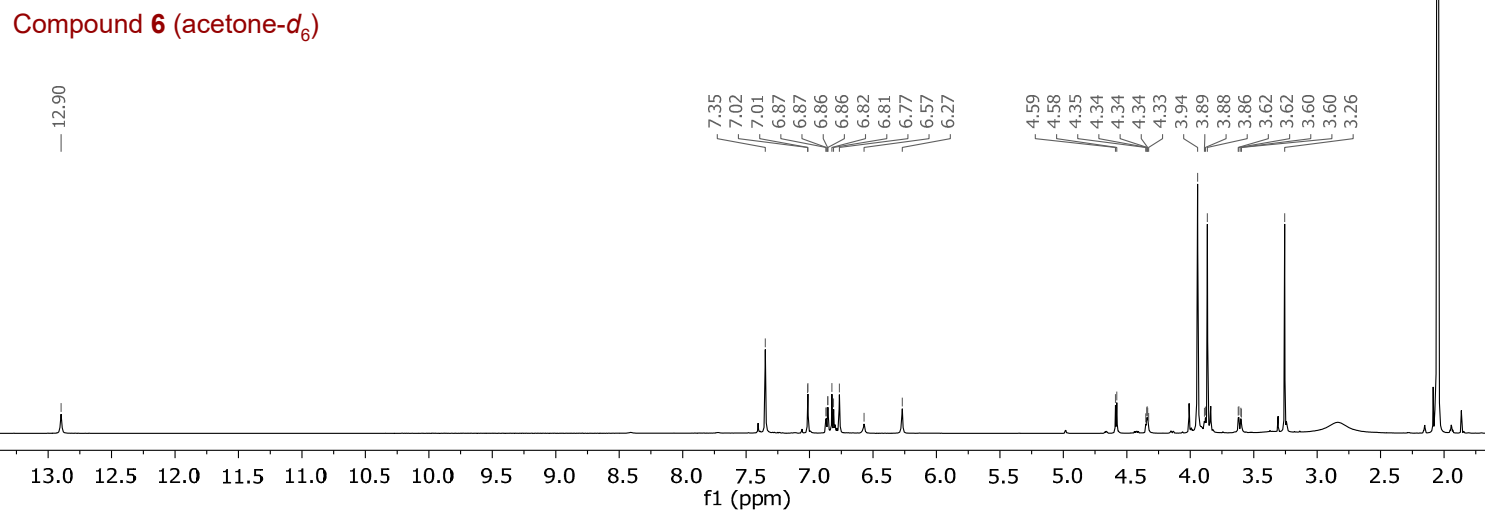
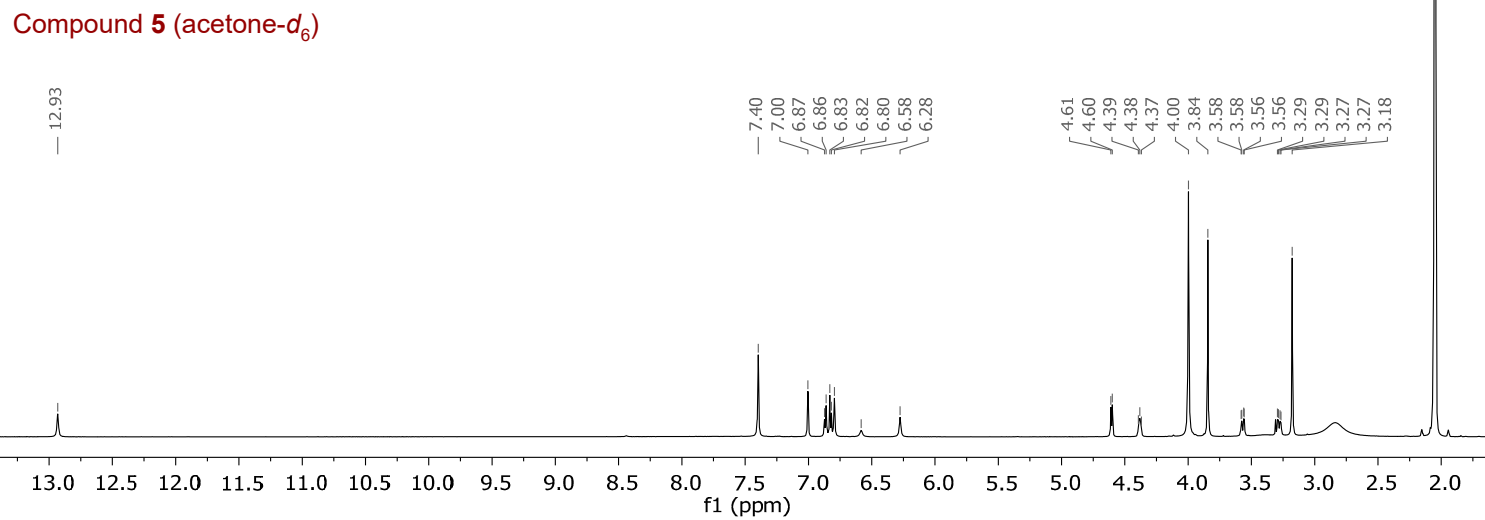


Figure S10. ^1H NMR (600 MHz) spectra of compounds **5** (top) and **6** (bottom) in acetone- d_6 .

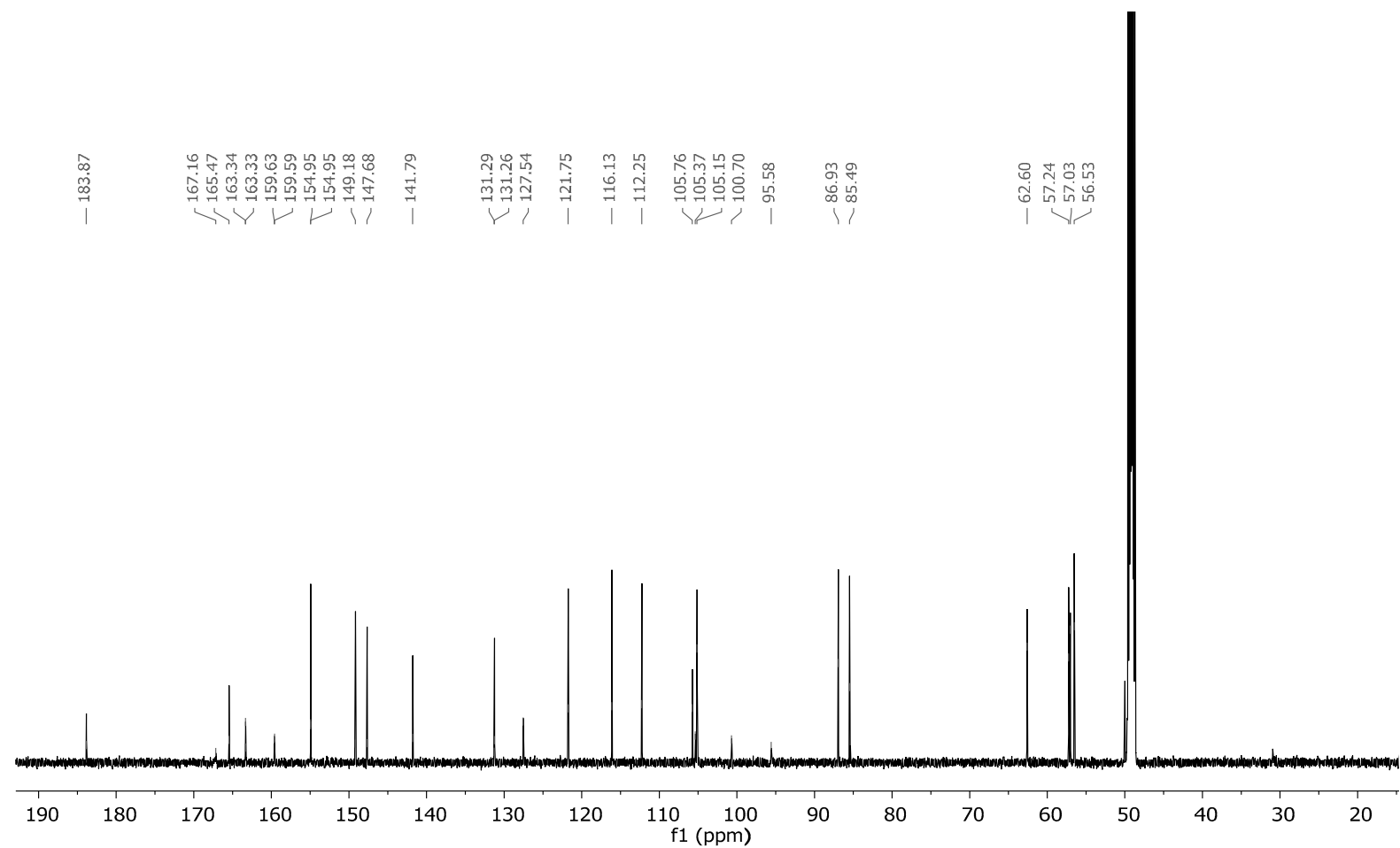


Figure S11. ^{13}C NMR (150 MHz) spectrum of compound **5** in methanol- d_4 .

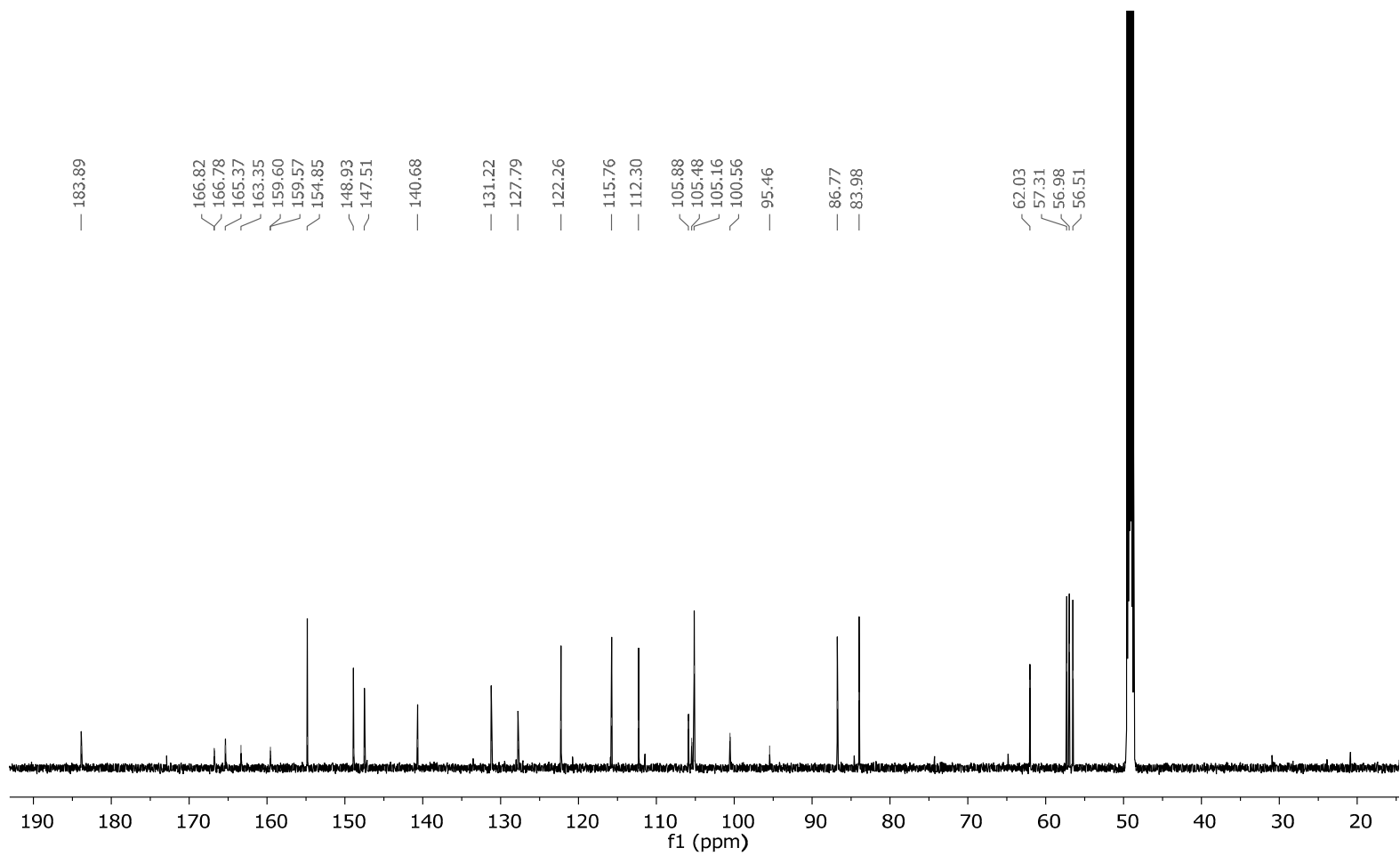


Figure S12. ^{13}C NMR (150 MHz) spectrum of compound **6** in methanol- d_4 .

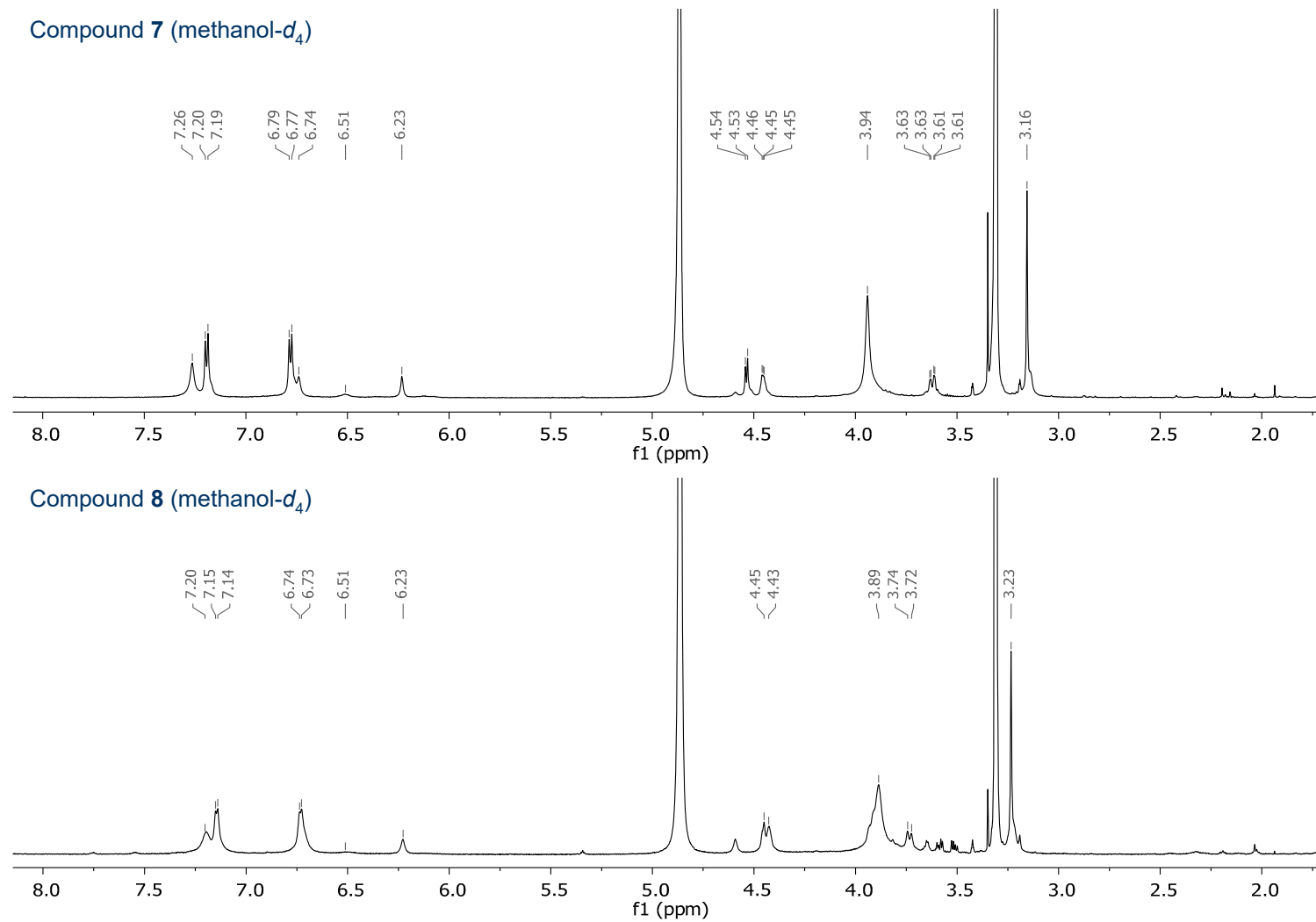
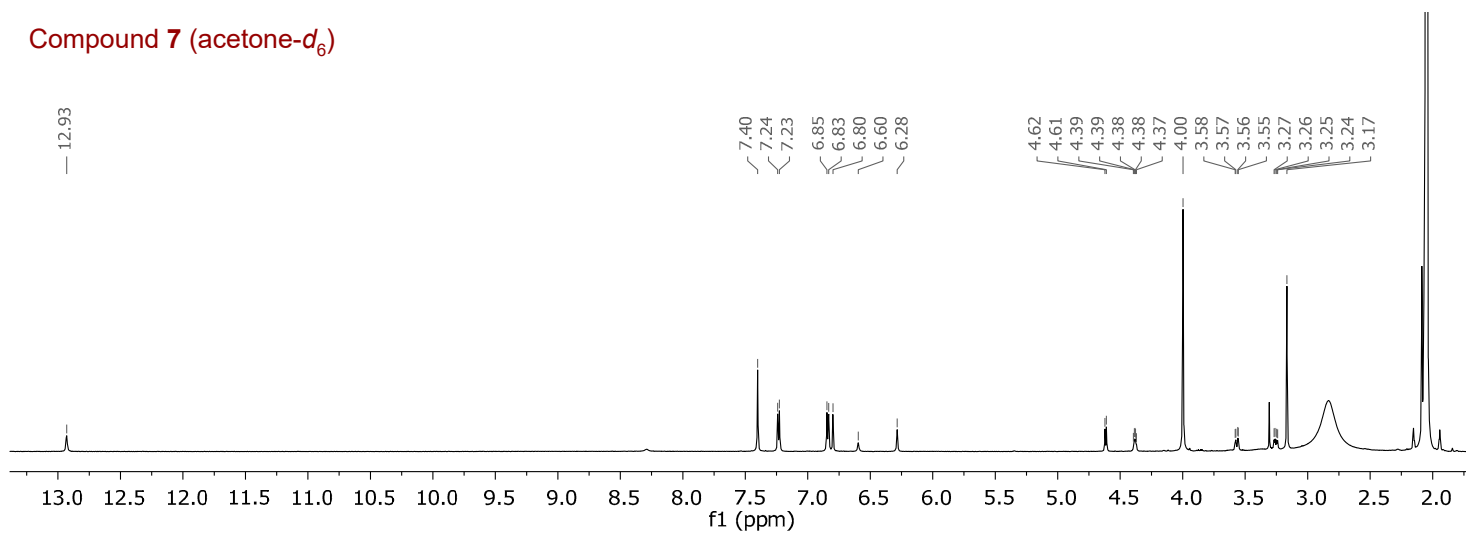


Figure S13. ^1H NMR (600 MHz) spectra of compounds 7 (top) and 8 (bottom) in methanol- d_4 .

Compound 7 (acetone- d_6)



Compound 8 (acetone- d_6)

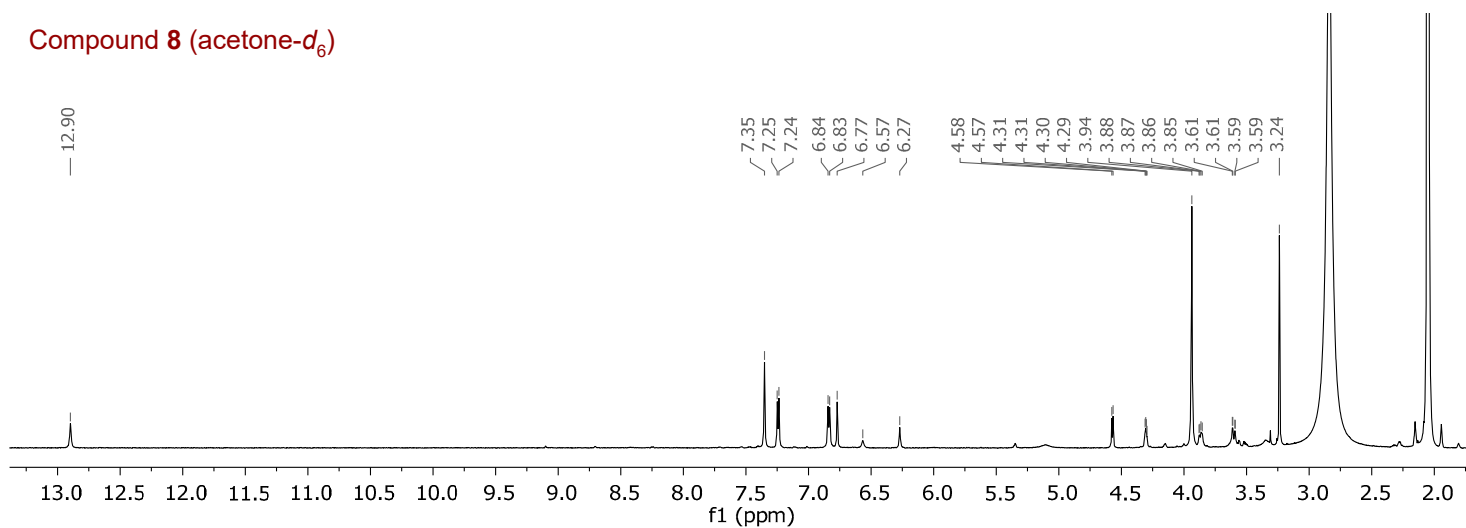


Figure S14. ^1H NMR (600 MHz) spectra of compounds 7 (top) and 8 (bottom) in acetone- d_6 .

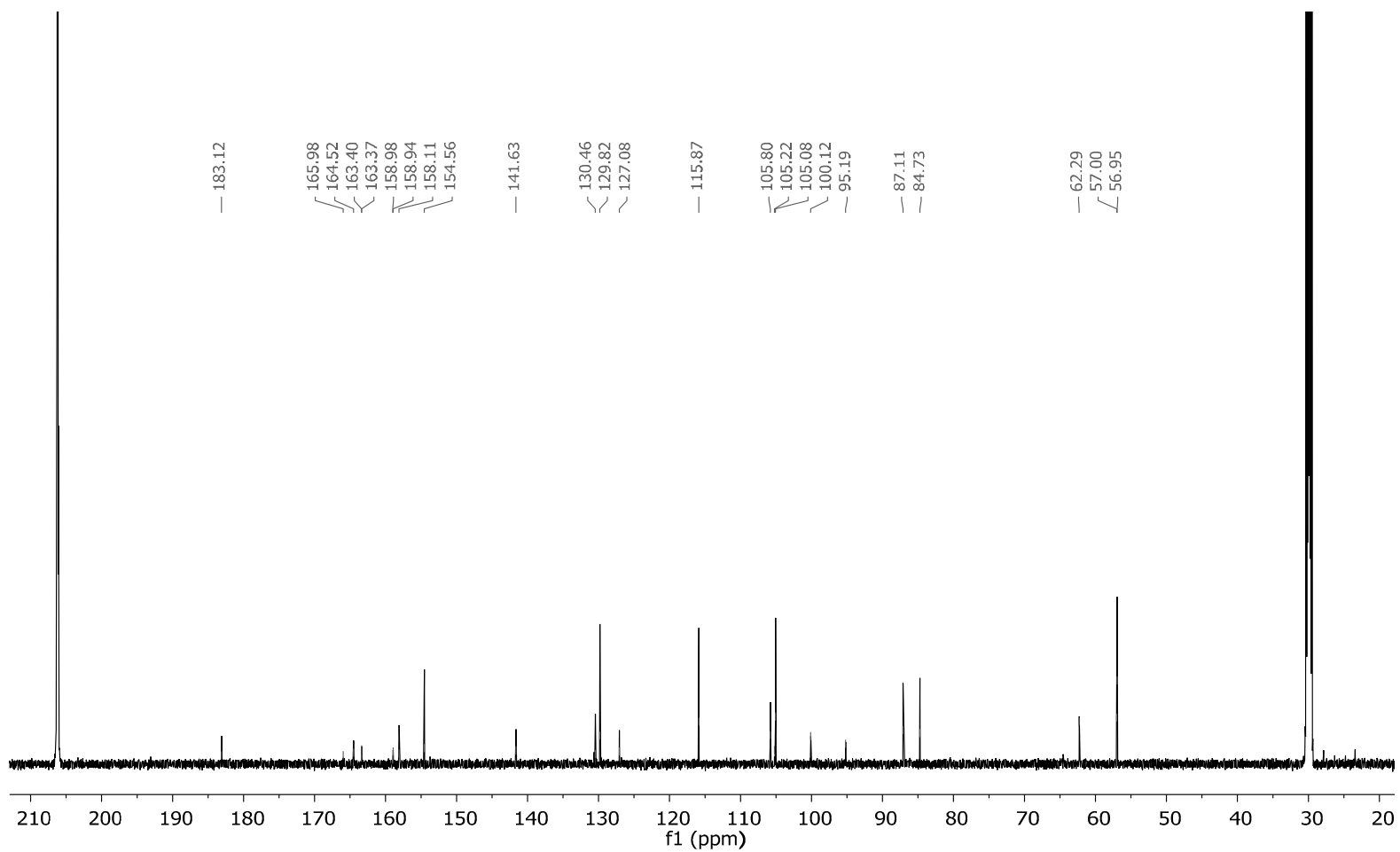


Figure S15. ^{13}C NMR (150 MHz) spectrum of compound 7 in acetone- d_6 .

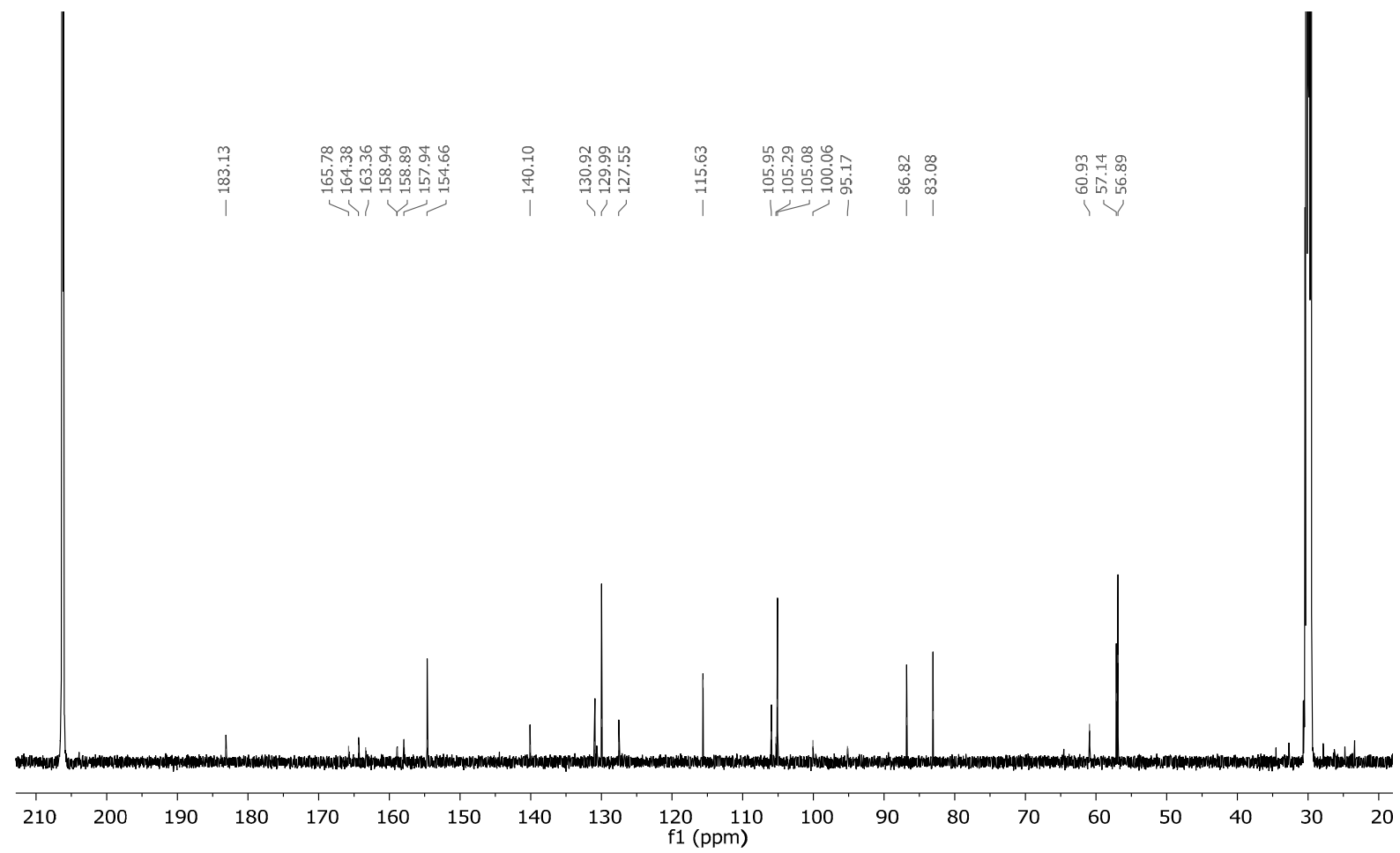


Figure S16. ^{13}C NMR (150 MHz) spectrum of compound 8 in acetone- d_6 .