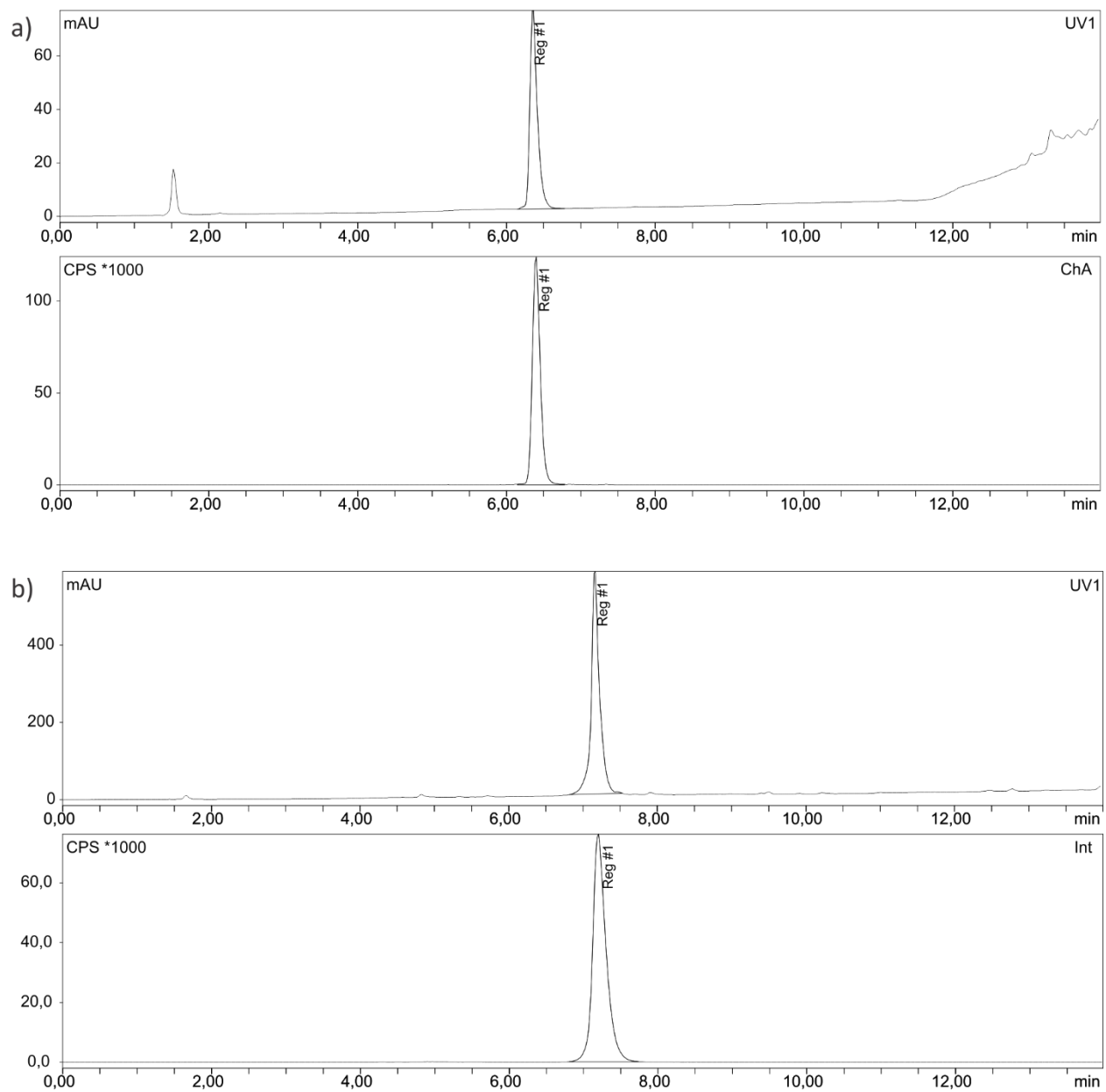


Supplemental information for

Caspase-3 probes for PET imaging of apoptotic tumor response to anticancer therapy

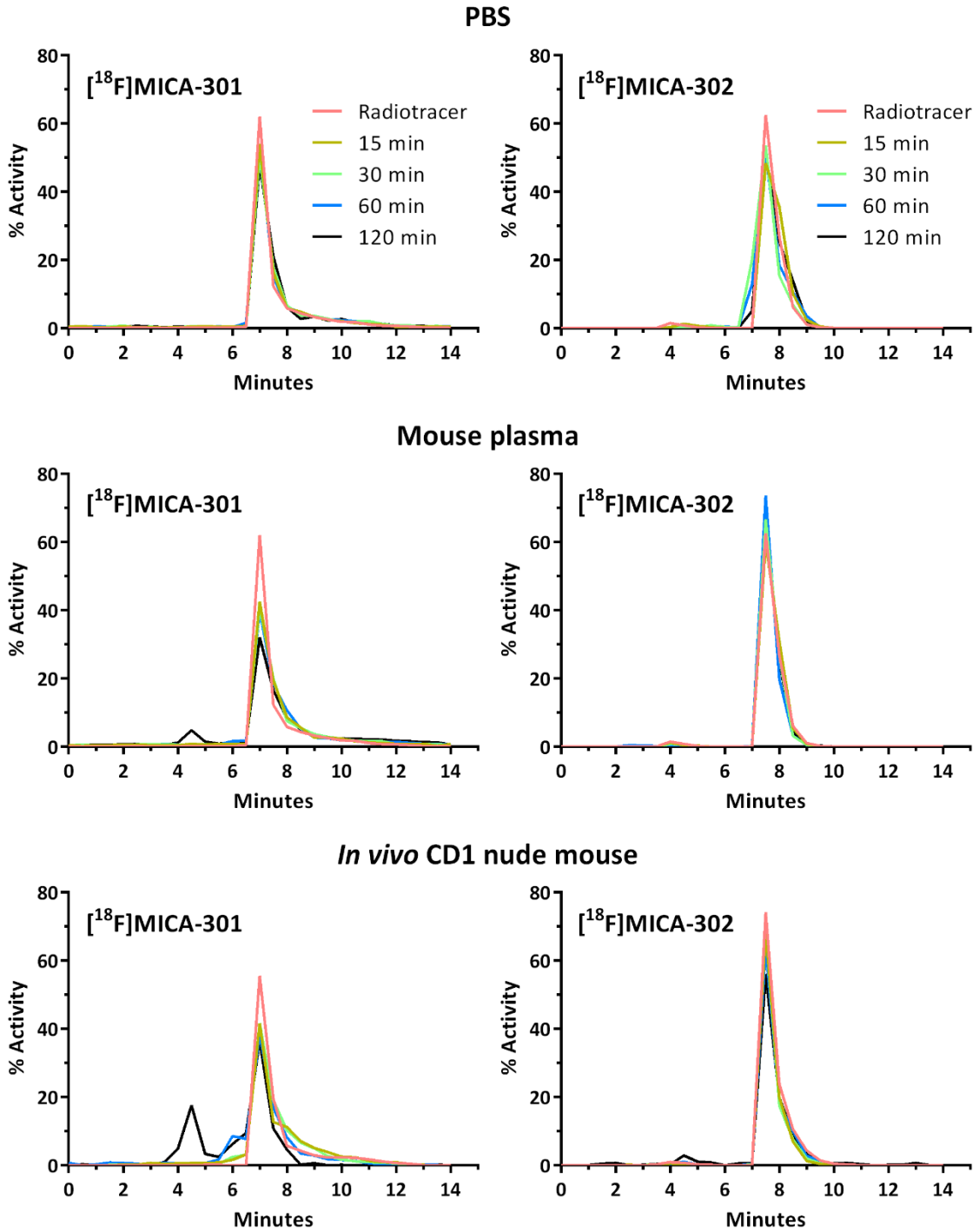
Filipe Elvas^{a,b,c†}, Tom Vanden Berghe^{d,e,f}, Yves Adriaenssens^b, Peter Vandenabeele^{d,e,g}, Koen Augustyns^b,
Steven Staelens^a, Sigrid Stroobants^{a,c}, Pieter Van der Veken^b, Leonie wyffels^{a,c}

Supplemental Figure 1



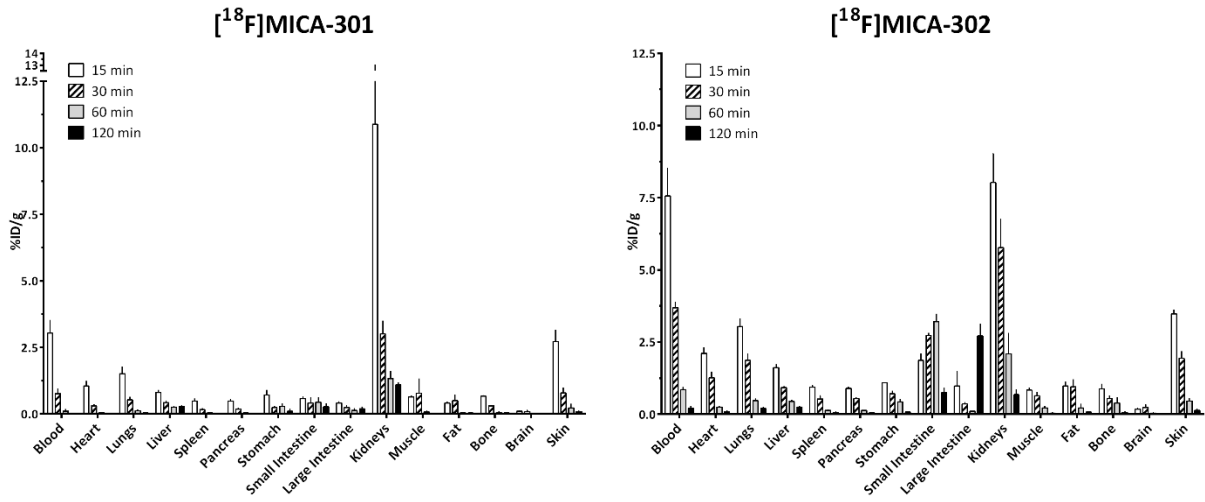
Supplemental Figure 1. UV-vis- (upper trace) and radio- (lower trace) HPLC chromatograms of [^{18}F]MICA-301 (a), and [^{18}F]MICA-302 (b) co-injected with the reference ^{18}F standard **1f** and **1d**, respectively.

Supplemental Figure 2



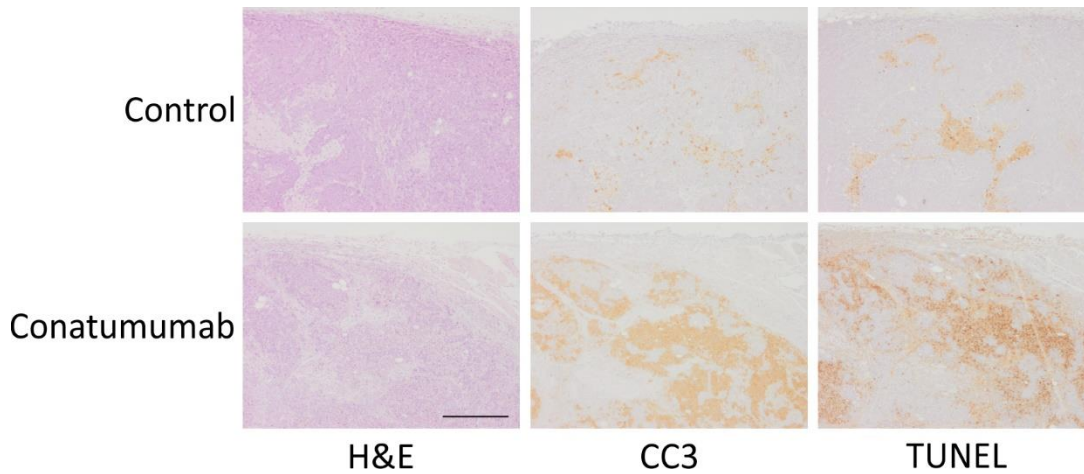
Supplemental Figure 2. *In vitro* and *in vivo* stability of [¹⁸F]MICA-301 (left) and [¹⁸F]MICA-302 (right).

Supplemental Figure 3



Supplemental Figure 3. *Ex vivo* tissue distribution (%ID/g ± SD) of [¹⁸F]MICA-301 (left) and [¹⁸F]MICA-302 (right) at different time points post injection in normal nude mice. Data are presented as mean ± SD.

Supplemental Figure 4



Supplemental Figure 4. Representative microscopic images of adjacent COLO205 tumor slices stained with H&E, CC3 and TUNEL acquired at x5 magnification. Cells in brown were positive for CC3 and TUNEL staining. Scale bar: 500µm.

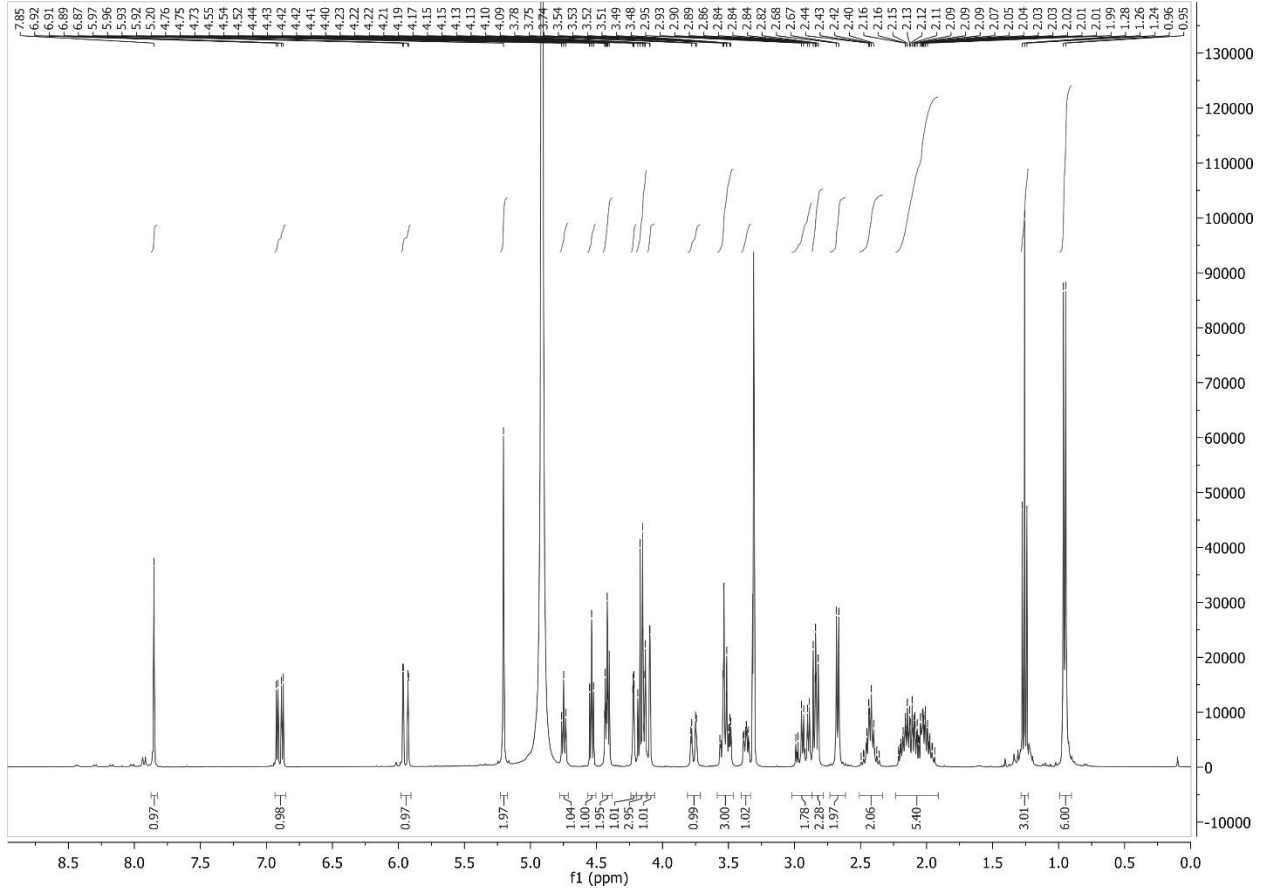
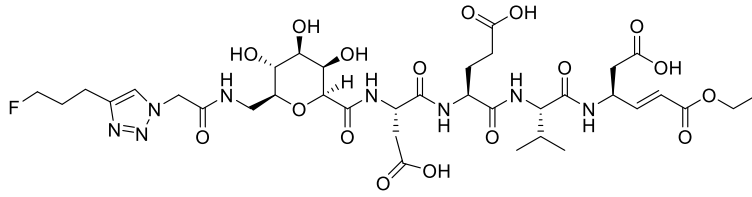
Supplementary Table 1 *Ex vivo* biodistribution data for selected tissues in IgG1 and conatumumab-treated mice 60 min p.i.

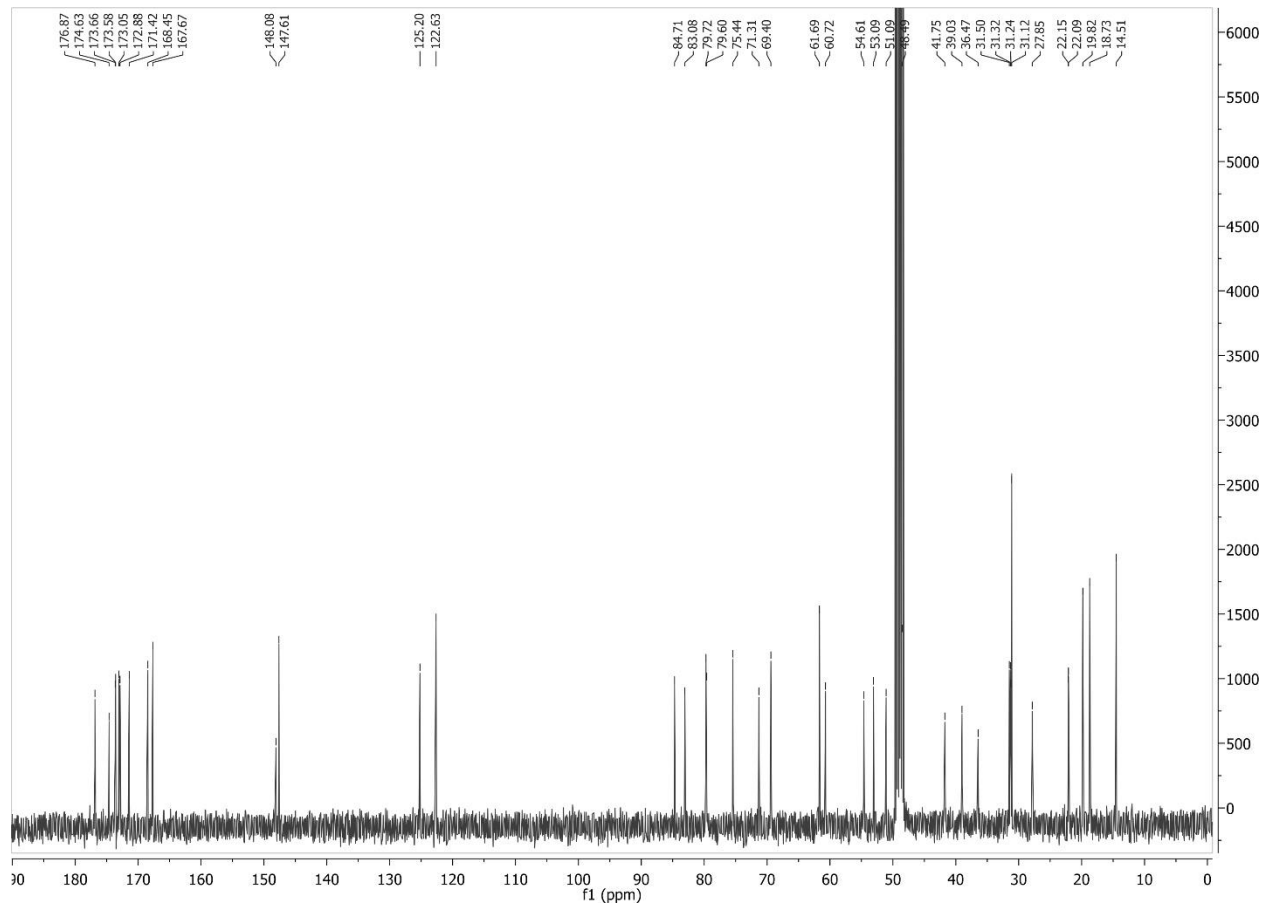
Tissue	^[18F] MICA-301		^[18F] MICA-302	
	IgG1	Conatumumab	IgG1	Conatumumab
Blood	0.53 ± 0.14	0.40 ± 0.32	0.99 ± 0.14	0.94 ± 0.04
Heart	0.14 ± 0.03	0.12 ± 0.08	0.73 ± 0.13	0.74 ± 0.31
Liver	0.54 ± 0.07	0.42 ± 0.07	1.26 ± 0.46	1.34 ± 0.61
Spleen	0.19 ± 0.02	0.16 ± 0.08	0.55 ± 0.16	0.64 ± 0.15
Stomach	0.17 ± 0.03	0.15 ± 0.08	1.05 ± 0.53	0.96 ± 0.46
Small intestine	0.27 ± 0.04	0.20 ± 0.07	5.54 ± 2.64	4.04 ± 0.95
Large intestine	0.19 ± 0.04	0.15 ± 0.07	0.51 ± 0.08	0.45 ± 0.18
Kidneys	4.44 ± 0.85	2.70 ± 1.68	5.22 ± 1.37	8.23 ± 2.31
Muscle	0.17 ± 0.02	0.23 ± 0.02	0.41 ± 0.19	0.37 ± 0.07
Bone	0.22 ± 0.15	0.15 ± 0.08	0.56 ± 0.26	0.50 ± 0.10
Brain	0.05 ± 0.01	0.05 ± 0.05	0.11 ± 0.02	0.14 ± 0.05
Urine	734.42 ± 288.80	449.33 ± 320.88	334.79 ± 154.66	227.80 ± 24.02
Tumor	0.21 ± 0.05	0.29 ± 0.03	0.79 ± 0.18	1.47 ± 0.26*

Data are mean ± SD

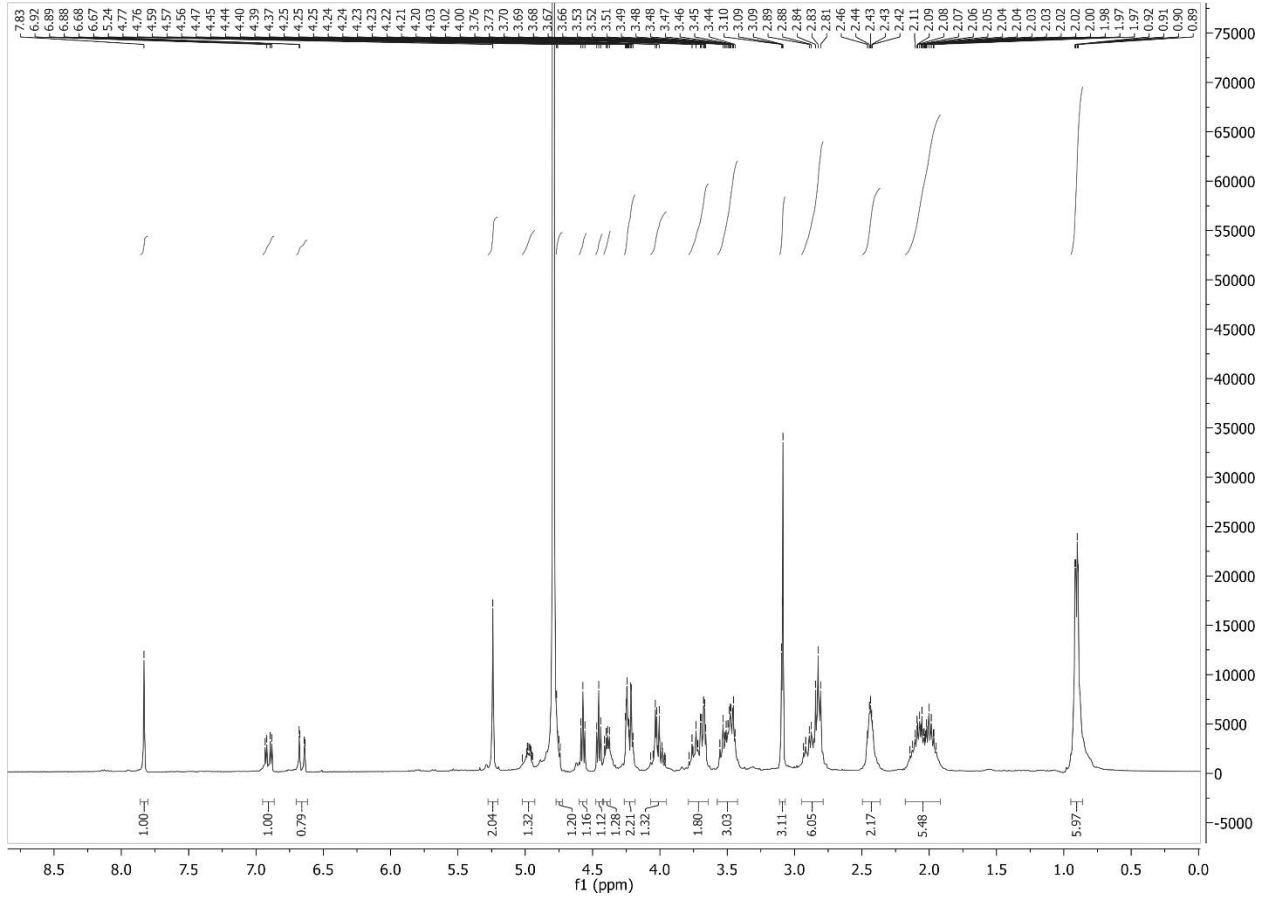
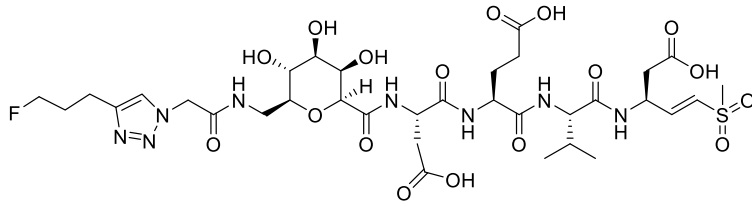
*p=0.025, vs. IgG1-control group

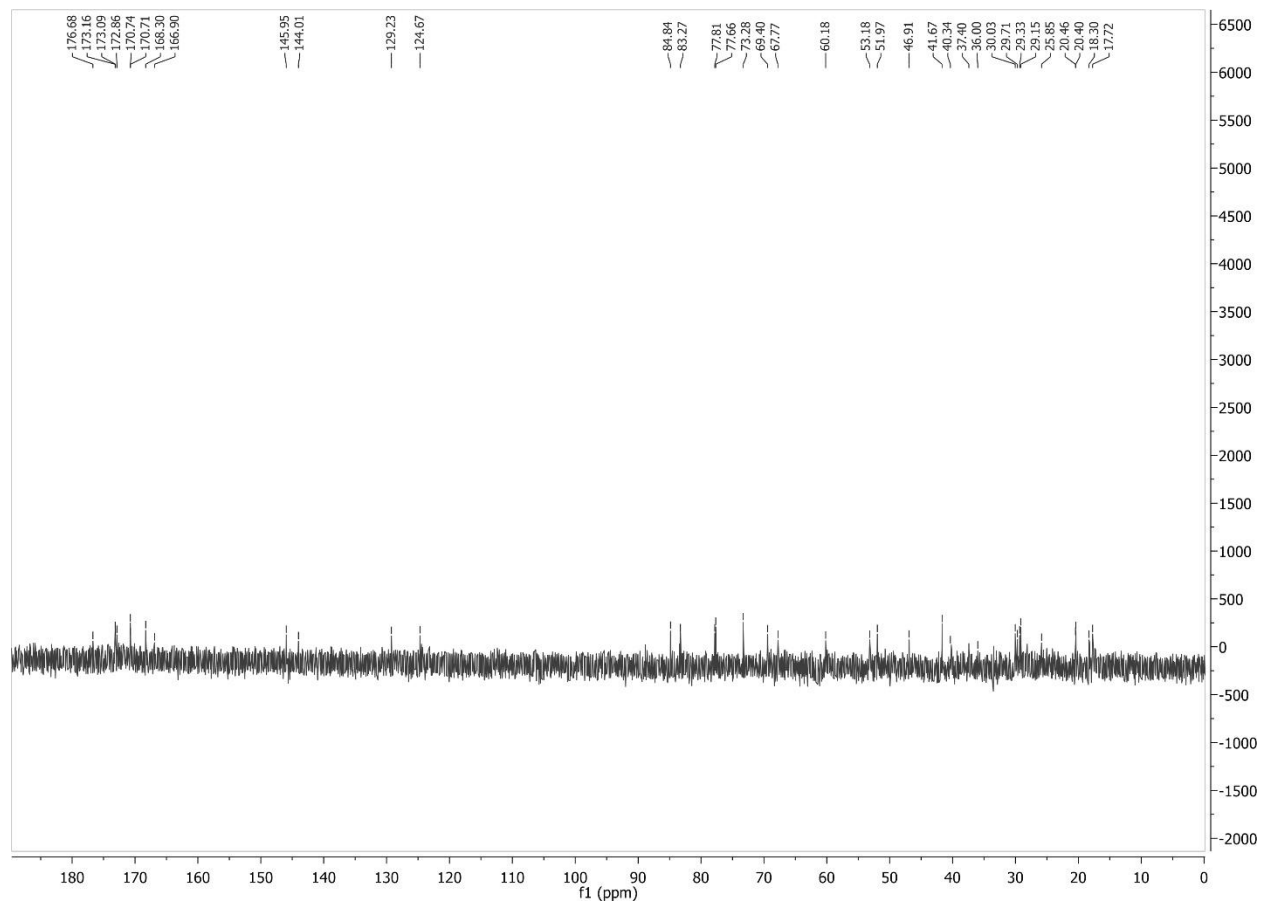
Compound 1a (in CD₃OD, standardized to 3.31 signal)

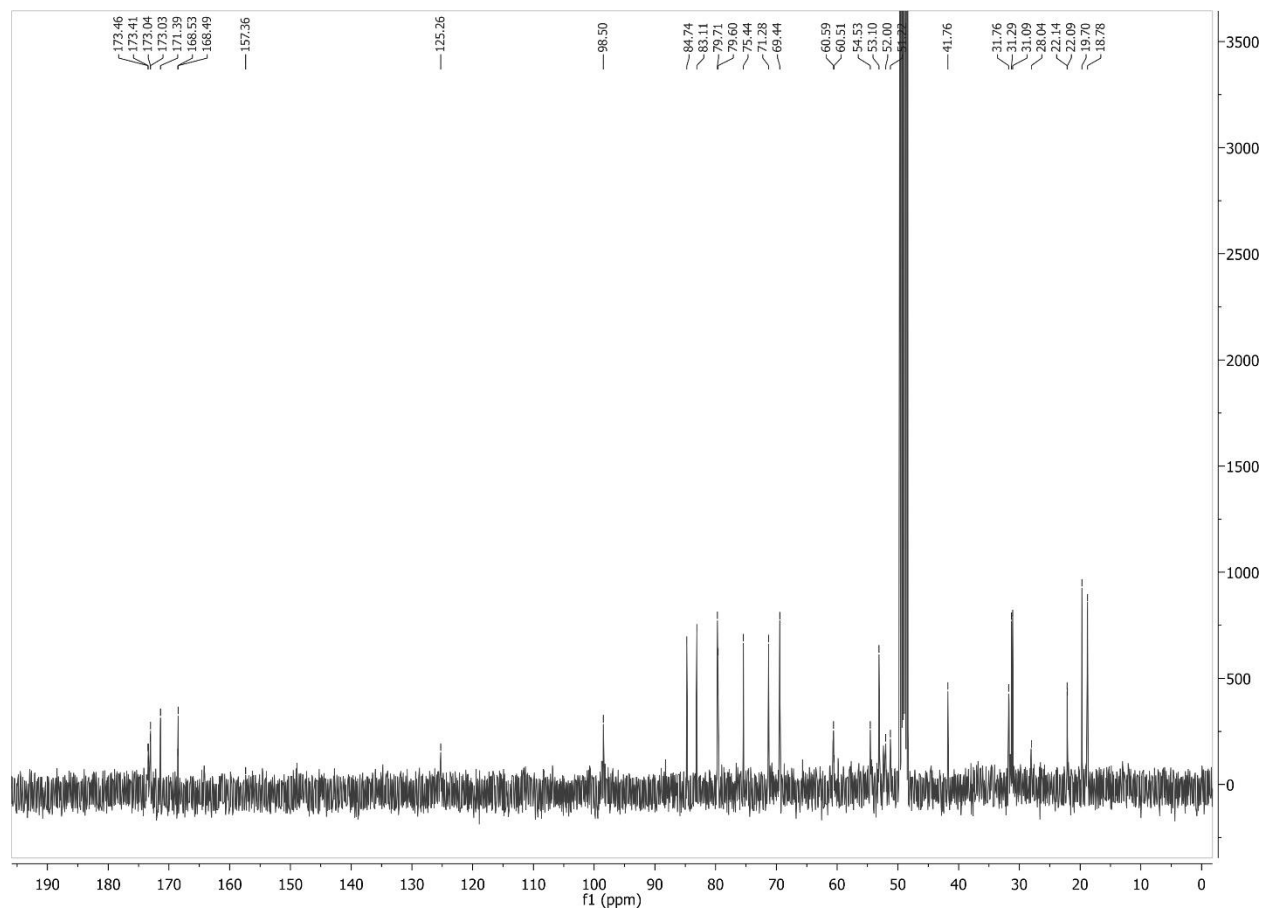


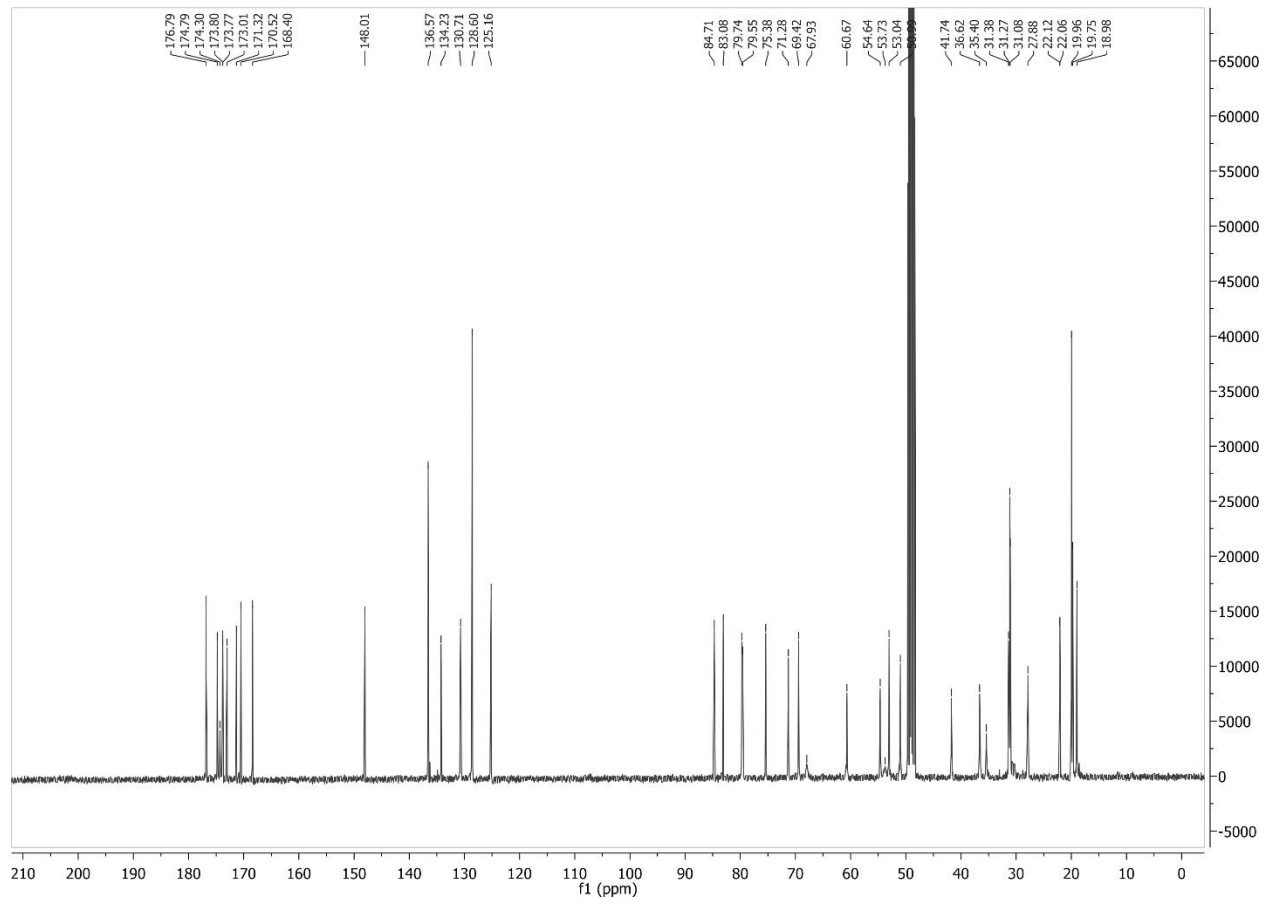


Compound 1b (in D₂O, standardized to 4.79 signal)

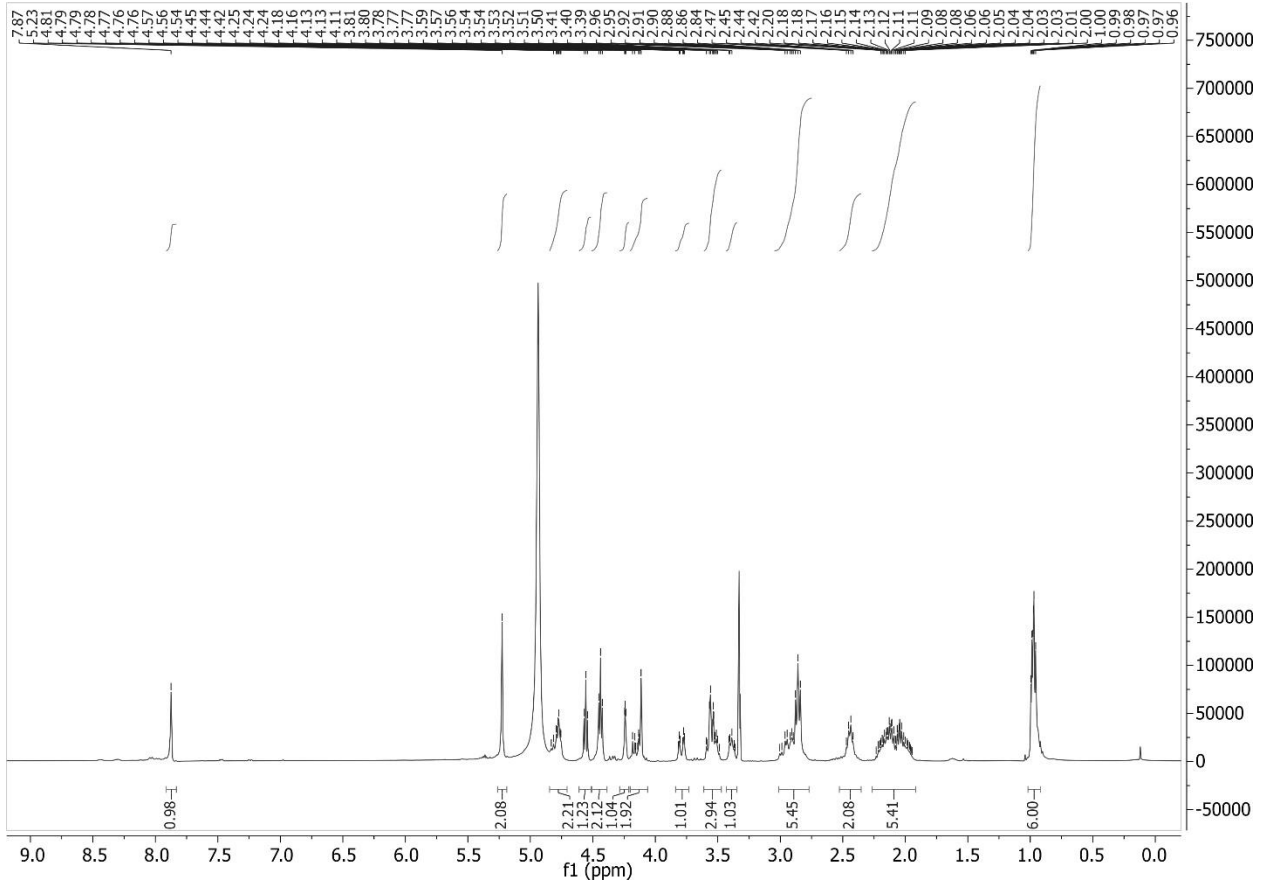
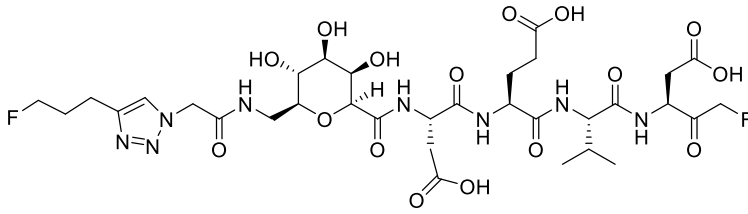


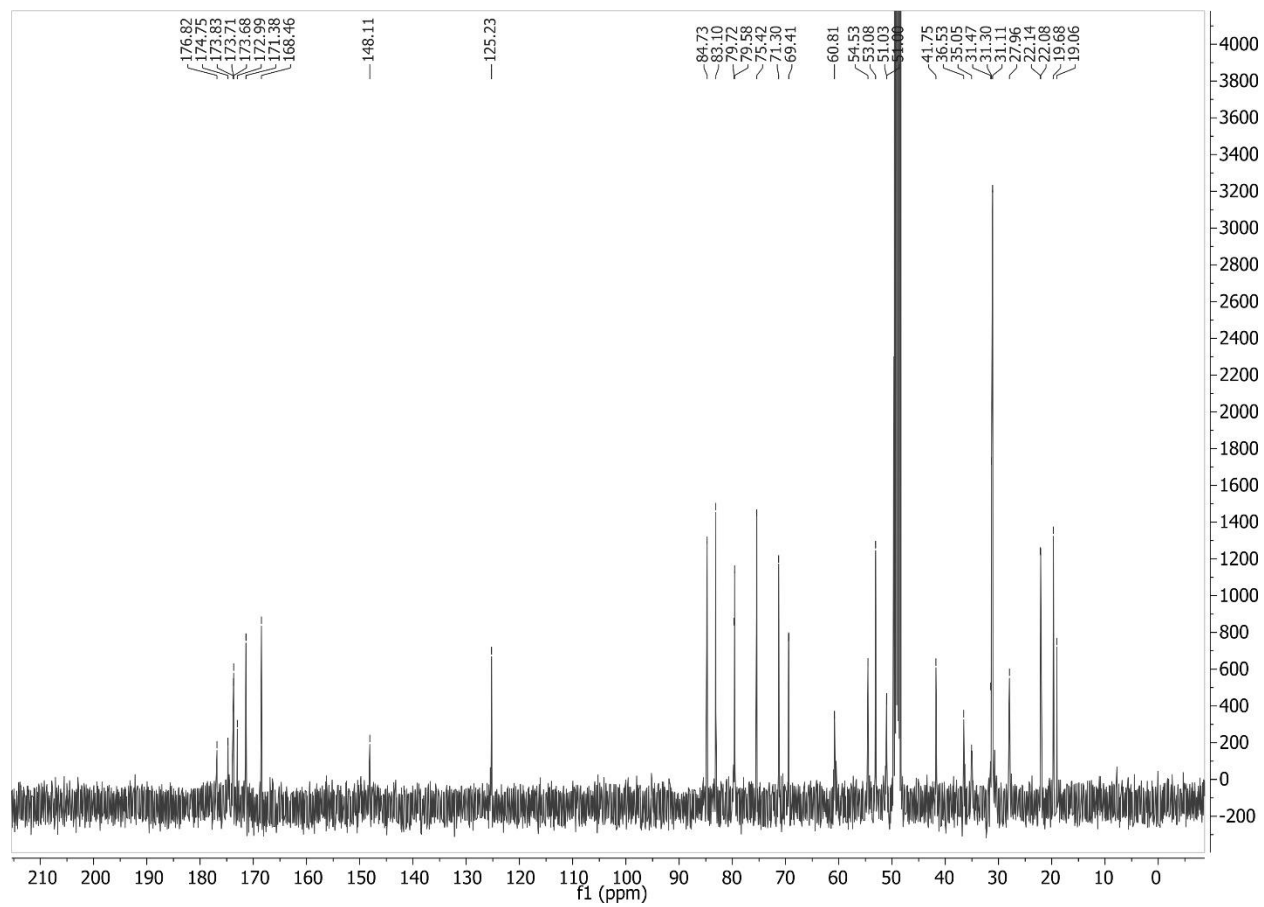


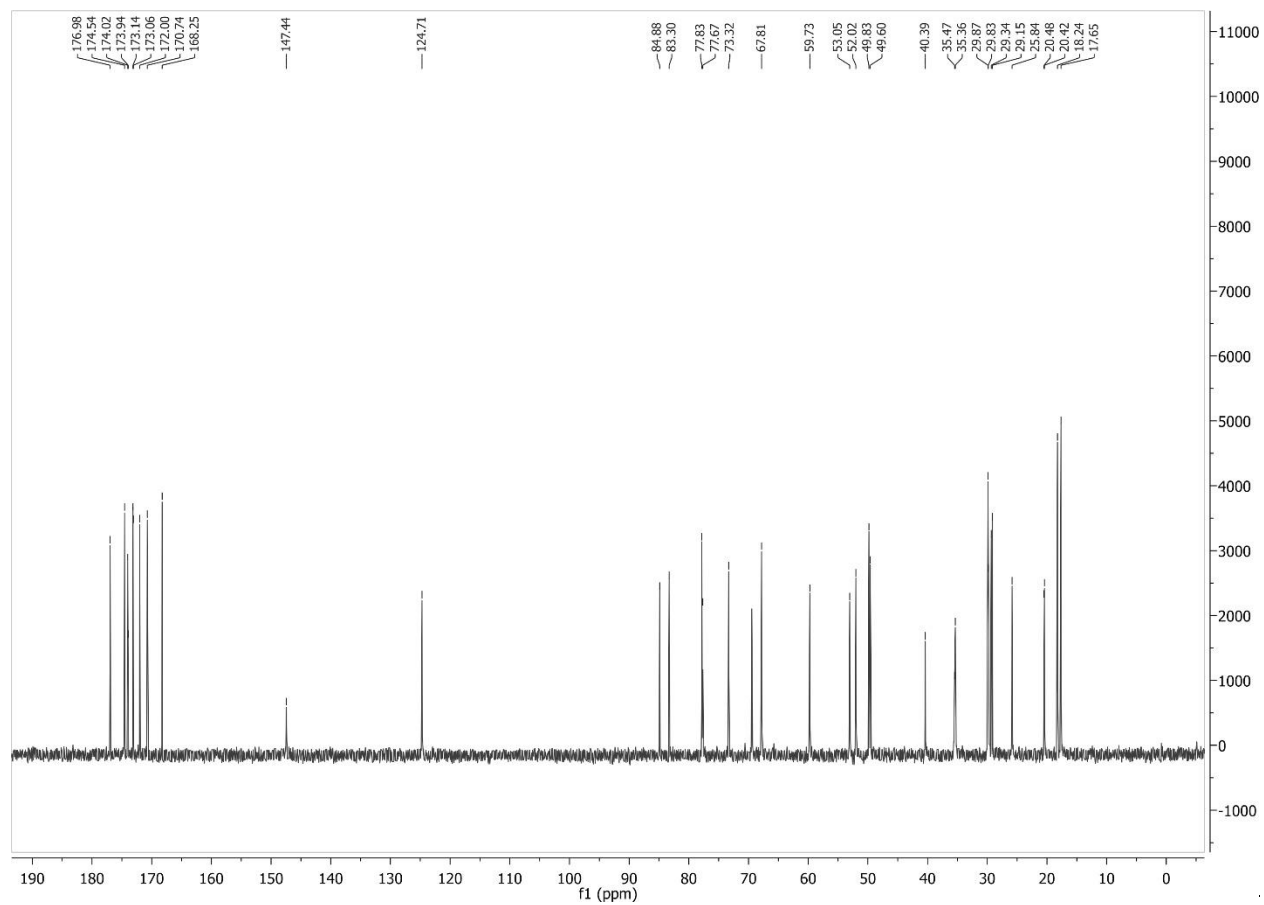


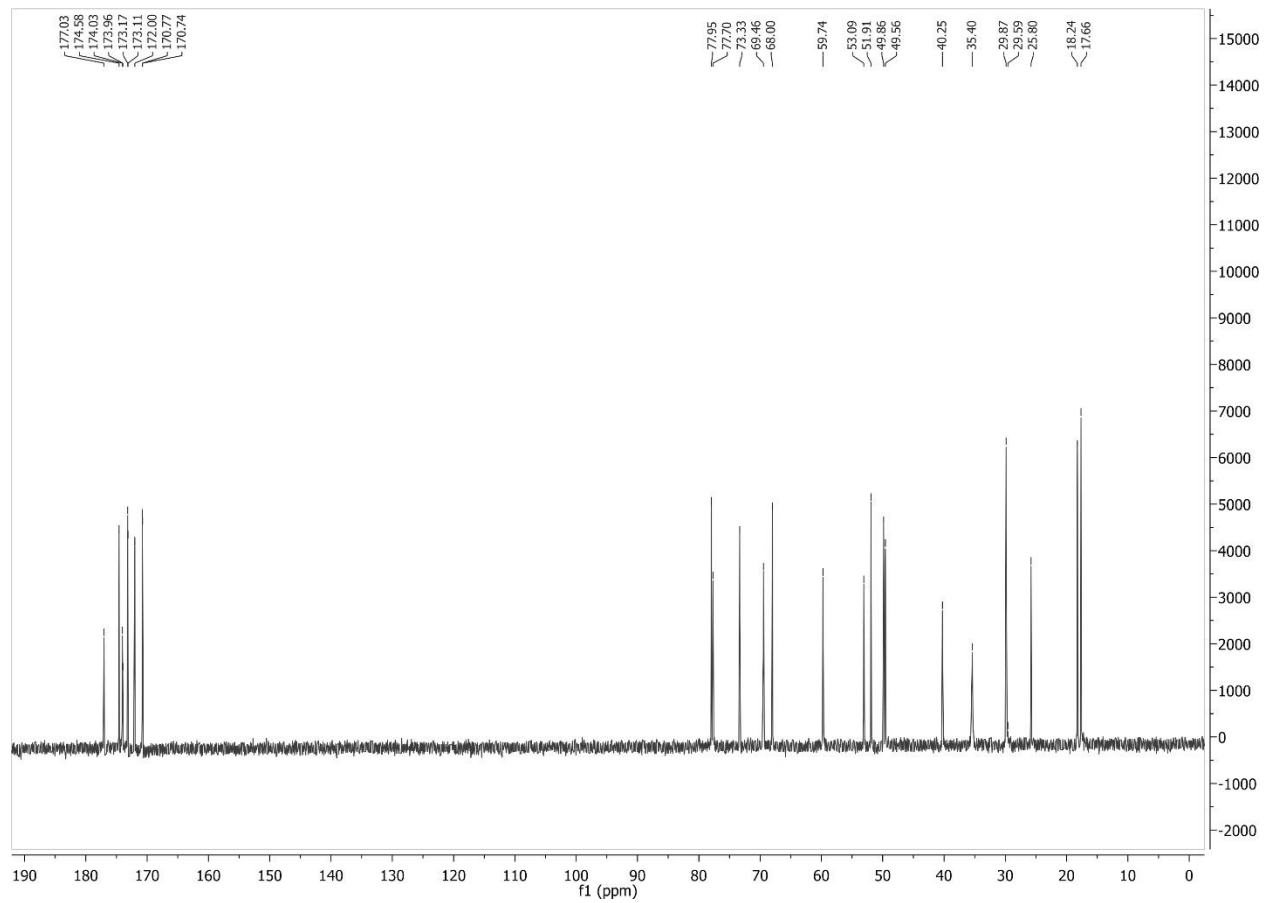


Compound 1e (in CD₃OD, standardized to 3.31 signal)









Compound 20b (in CD₃OD, standardized to 3.31 signal)

