

Supporting Information

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Synthesis and antimicrobial evaluation of 2-thioxoimidazolidinone derivatives

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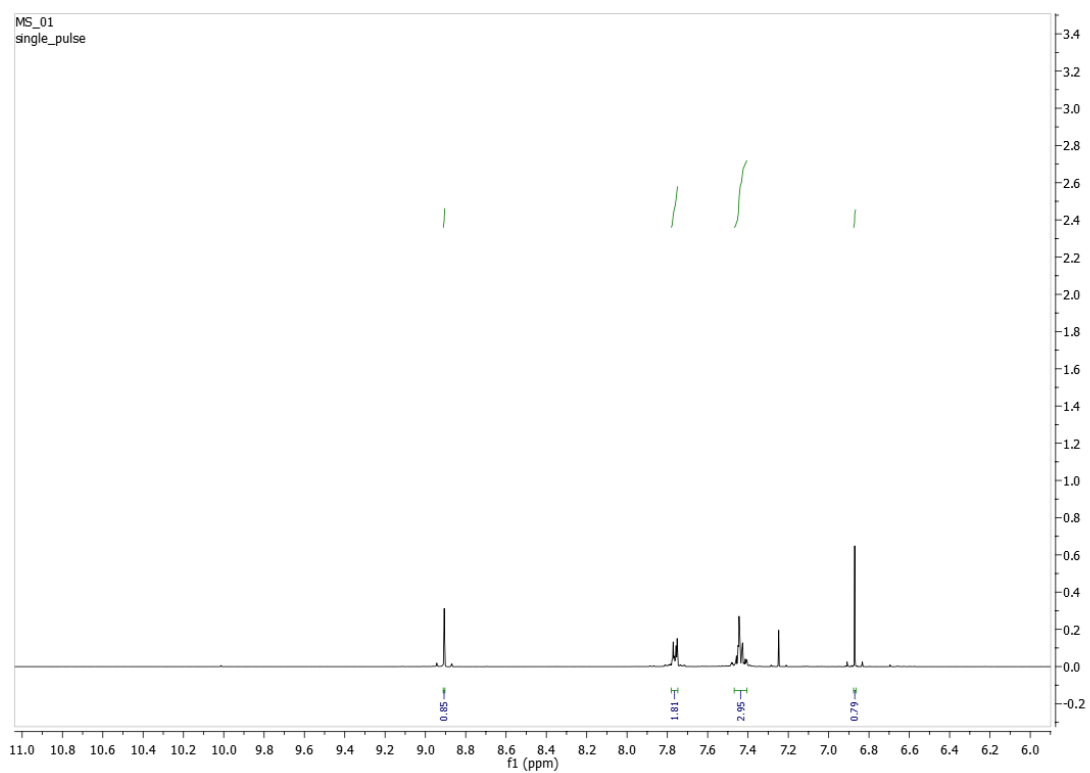
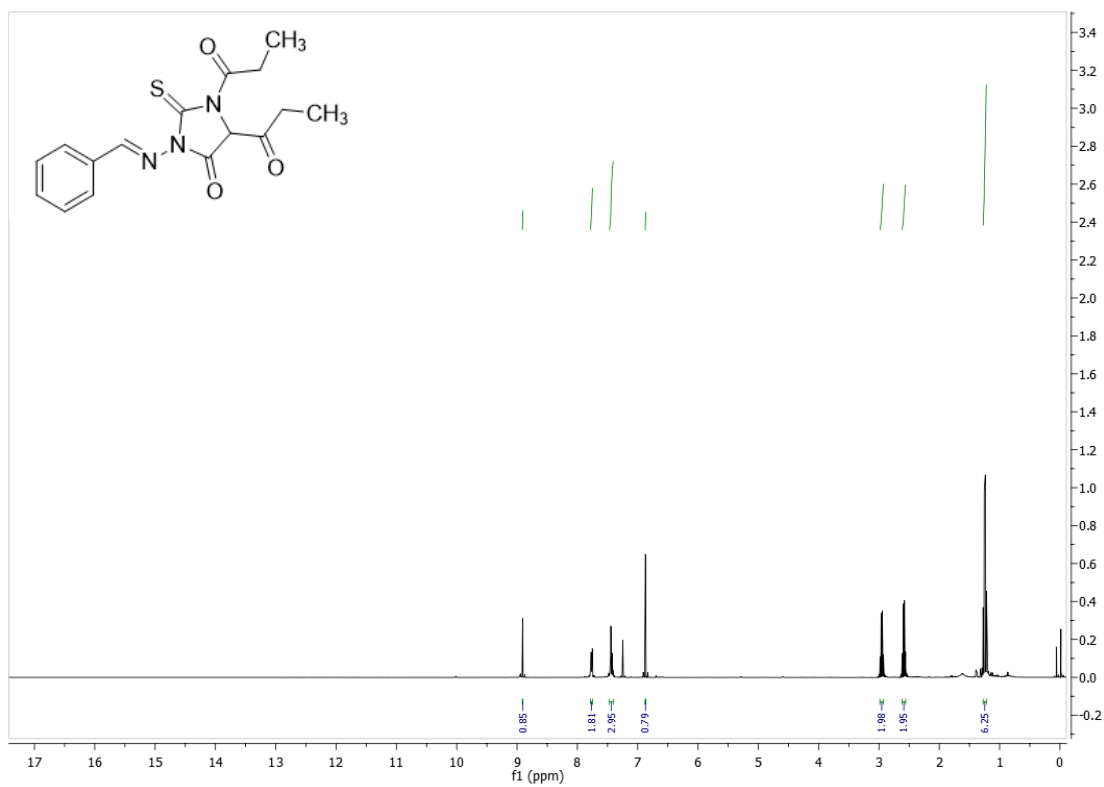


Figure S1: ¹H NMR of (3a)

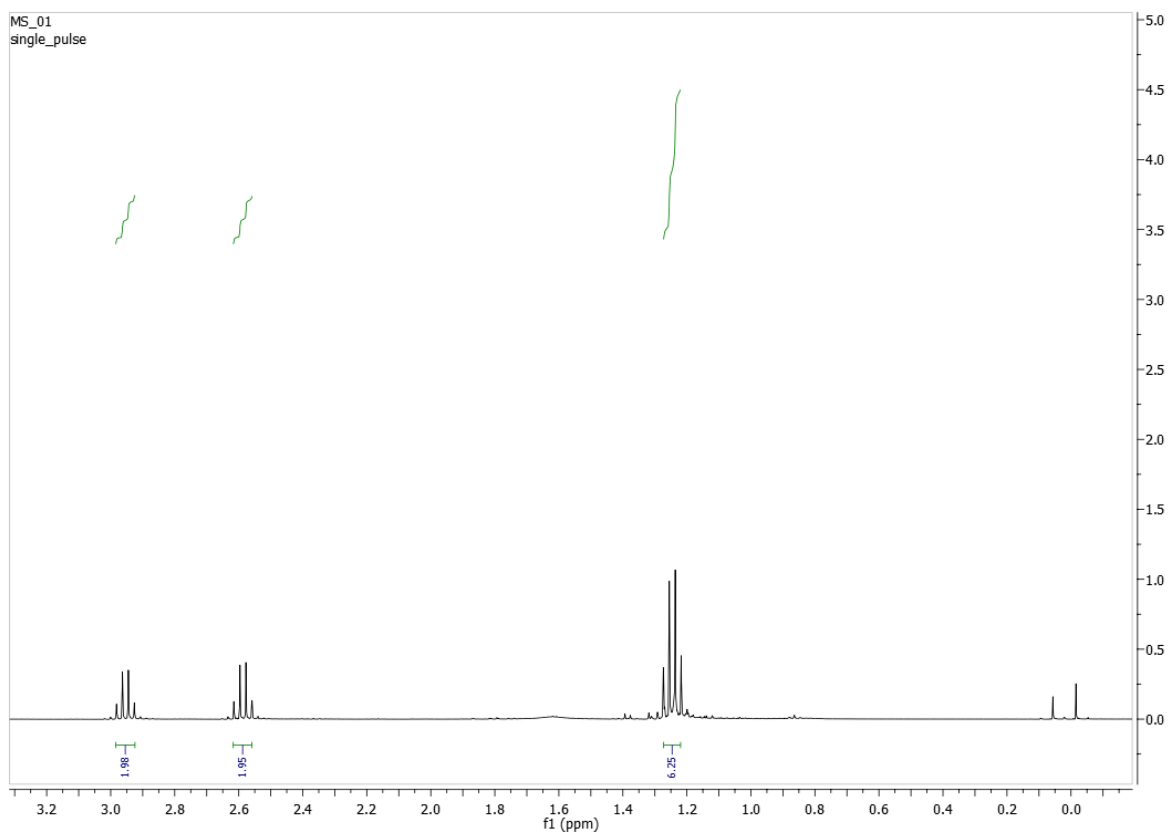


Figure S1: ^1H NMR of **(3a)**

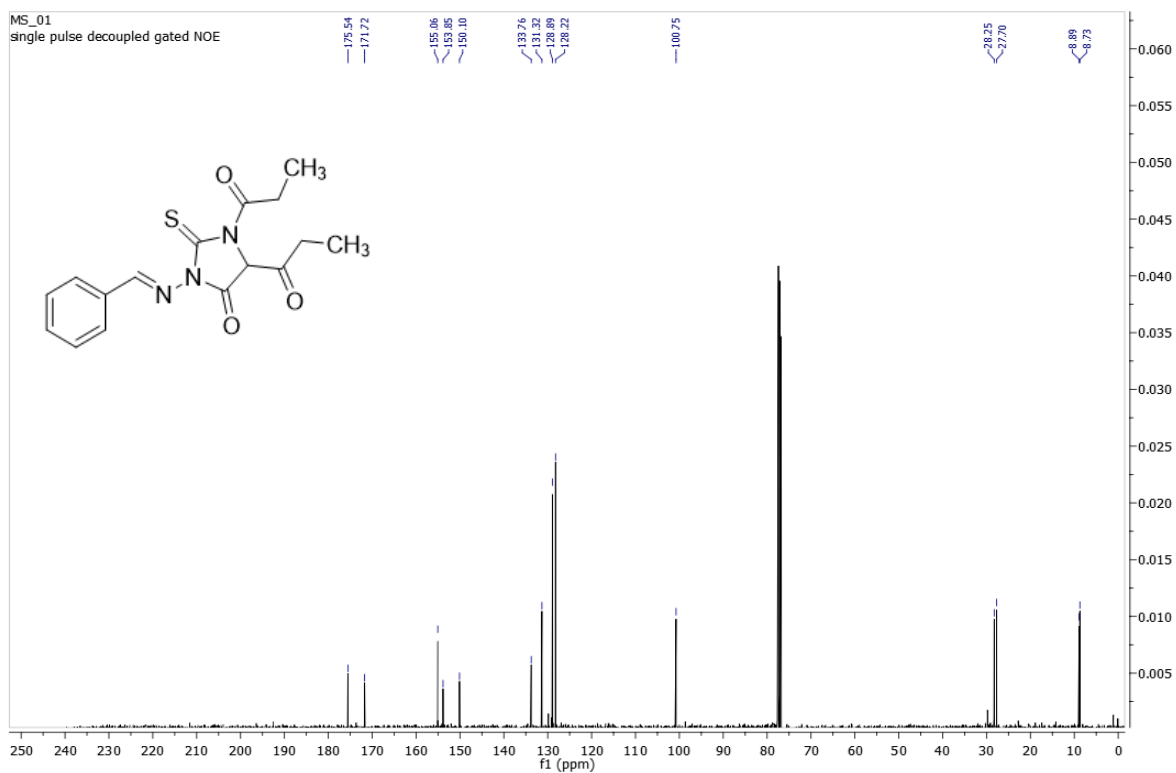


Figure S2: ^{13}C NMR of (3a)

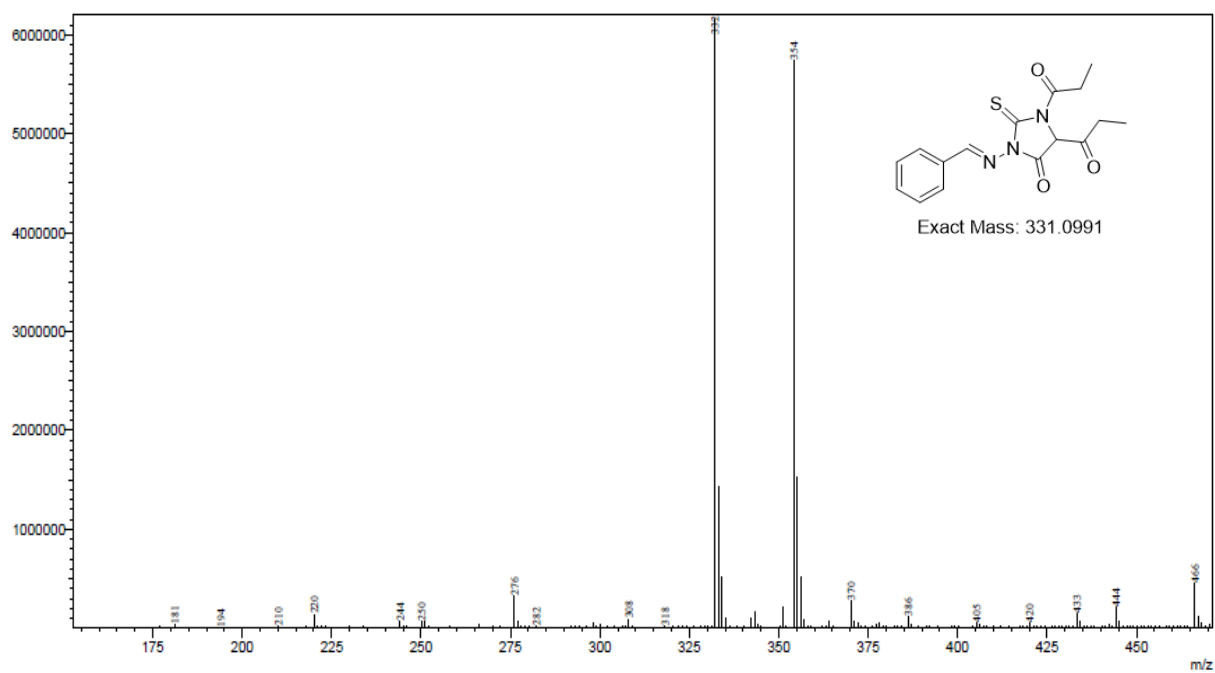


Figure S3: ESI-MS of (3a)

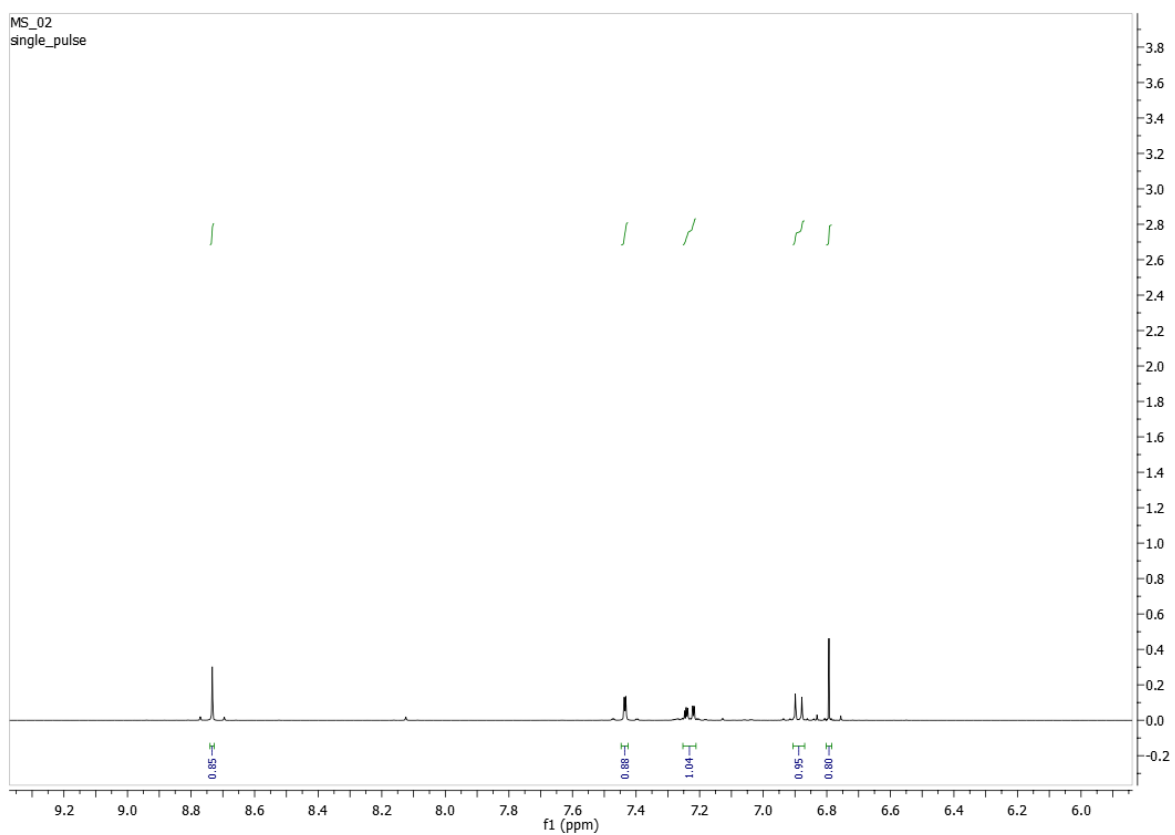
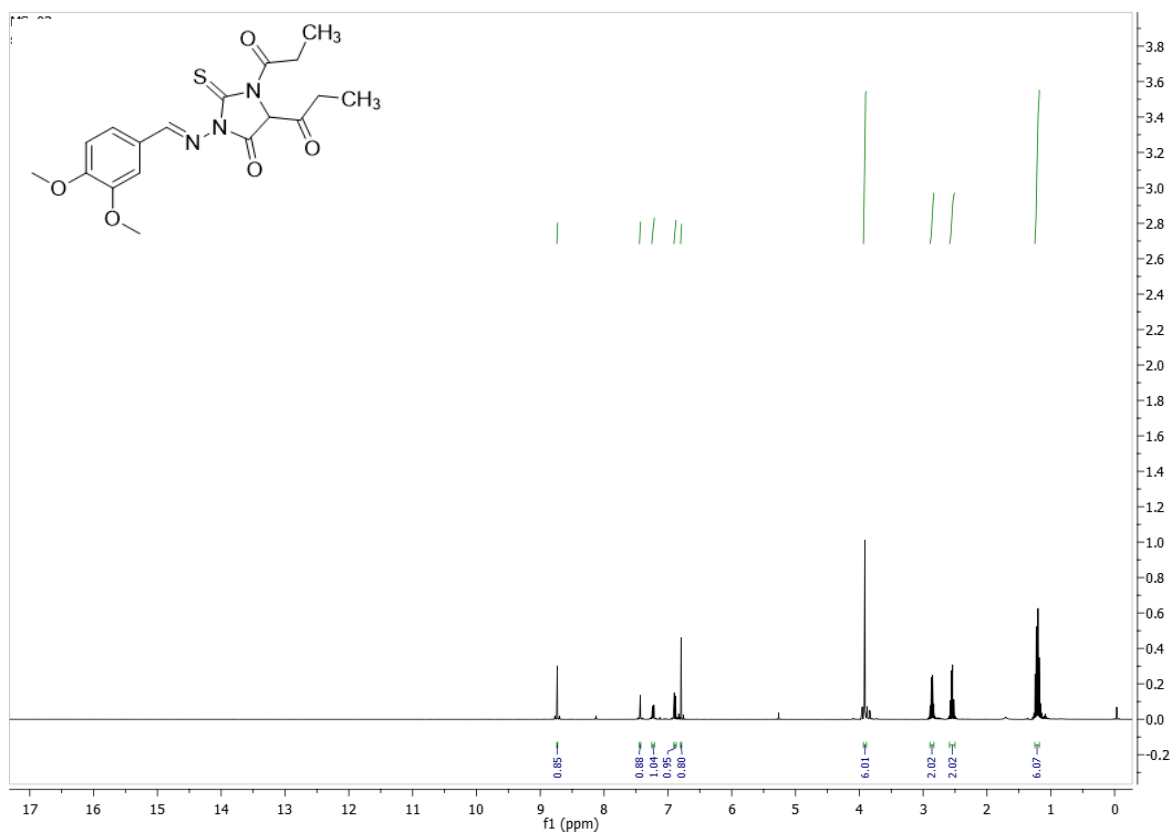


Figure S4: ^1H NMR of (3b)

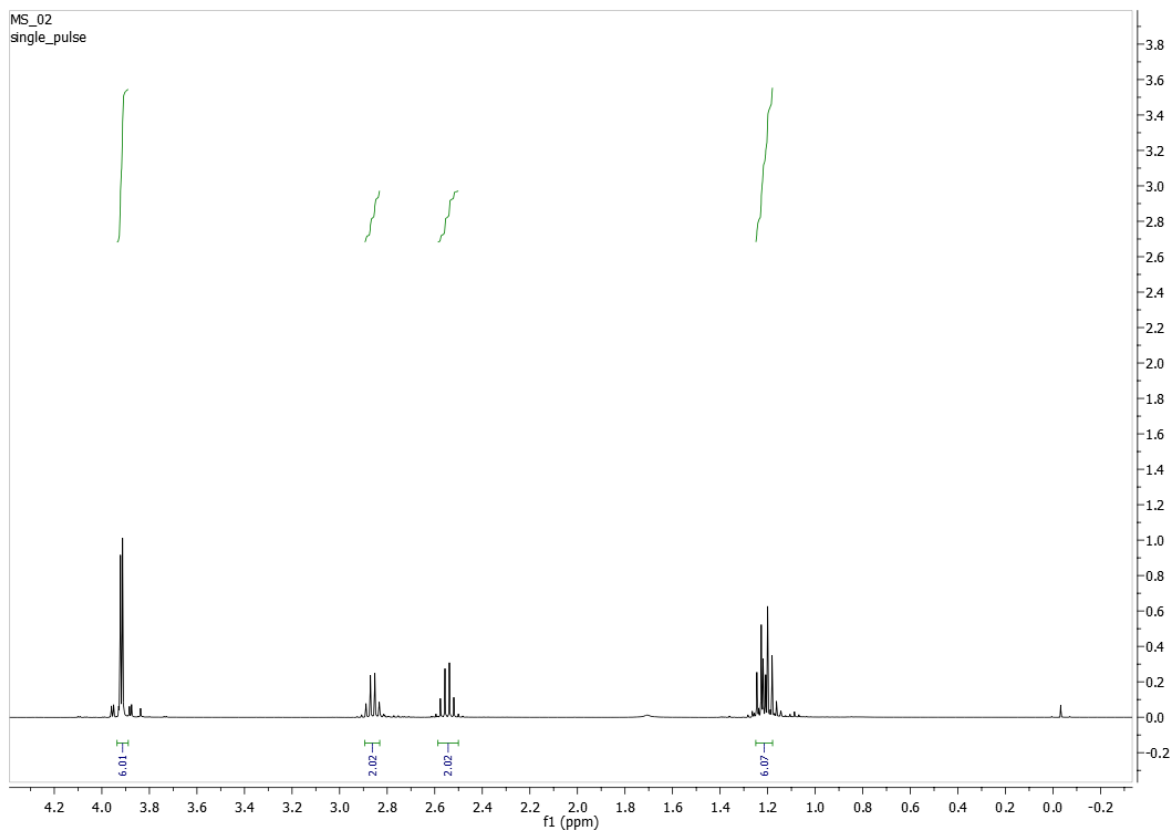


Figure S4: ^1H NMR of **(3b)** (Continued)

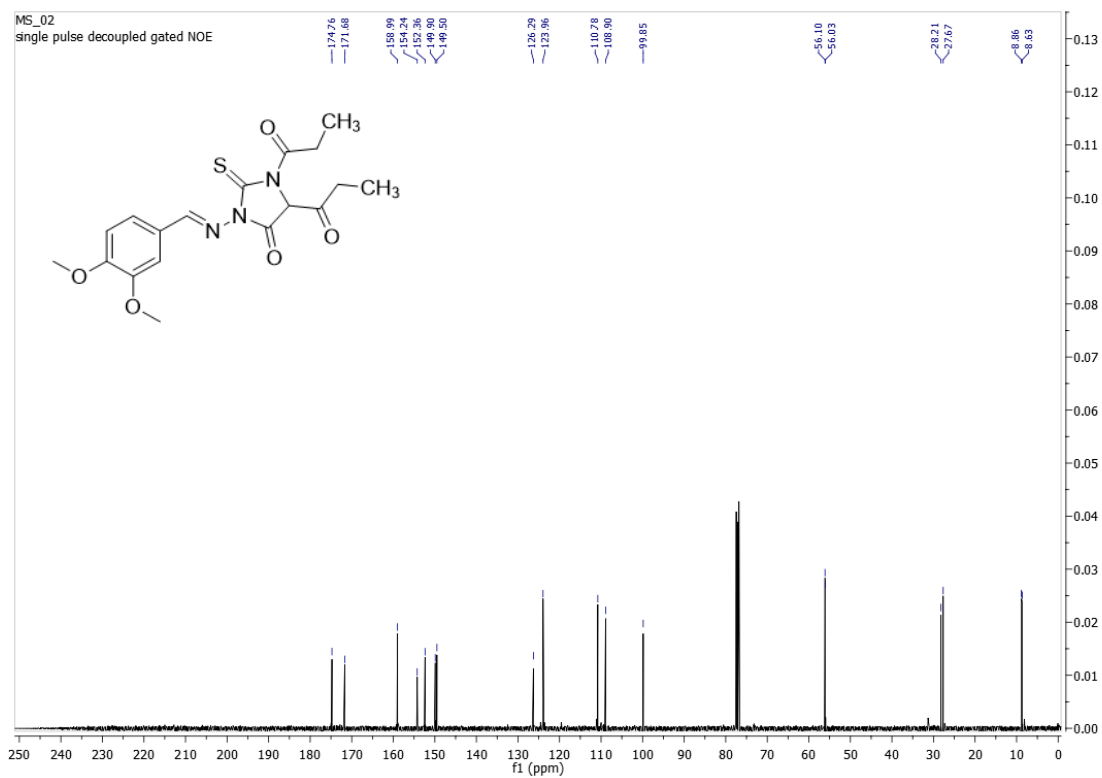


Figure S5: ^{13}C NMR of (3b)

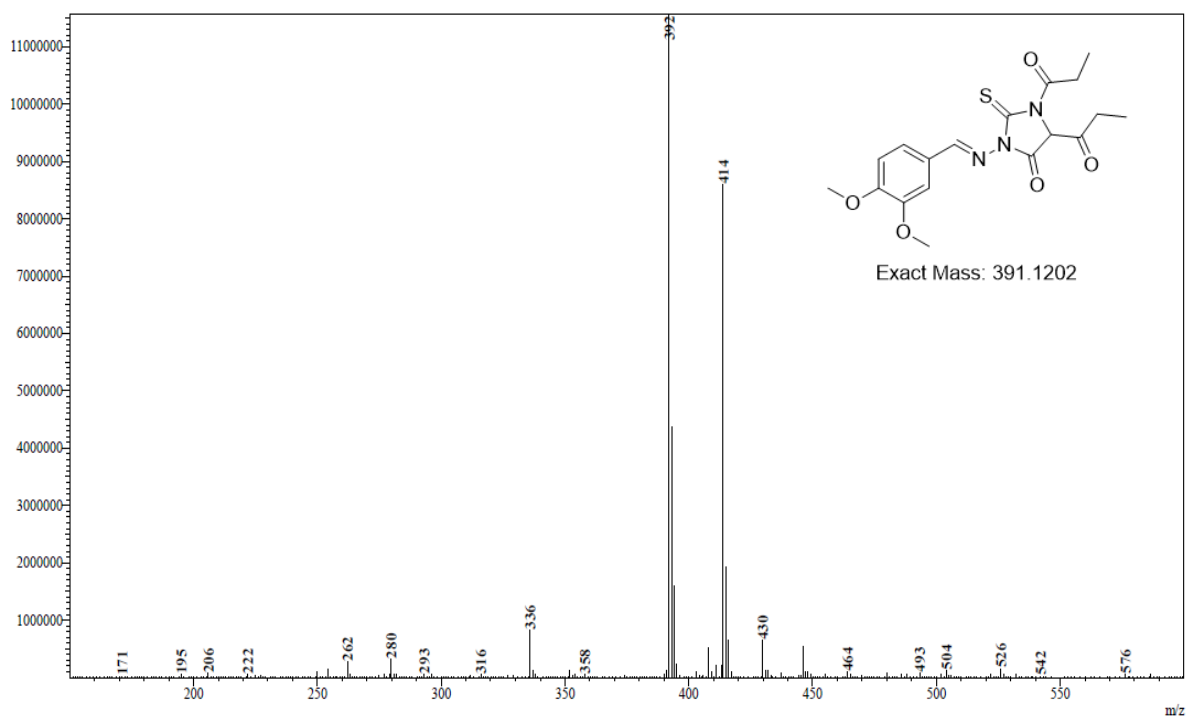


Figure S6: ESI-MS of (3b)

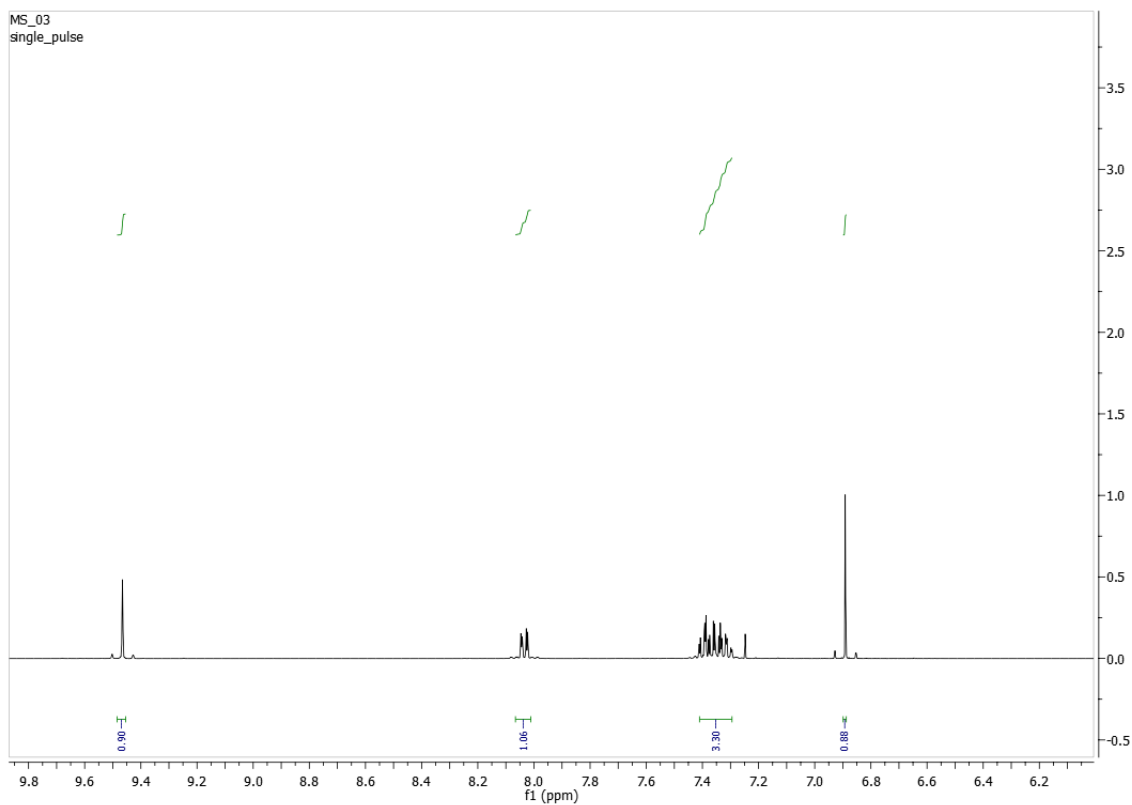
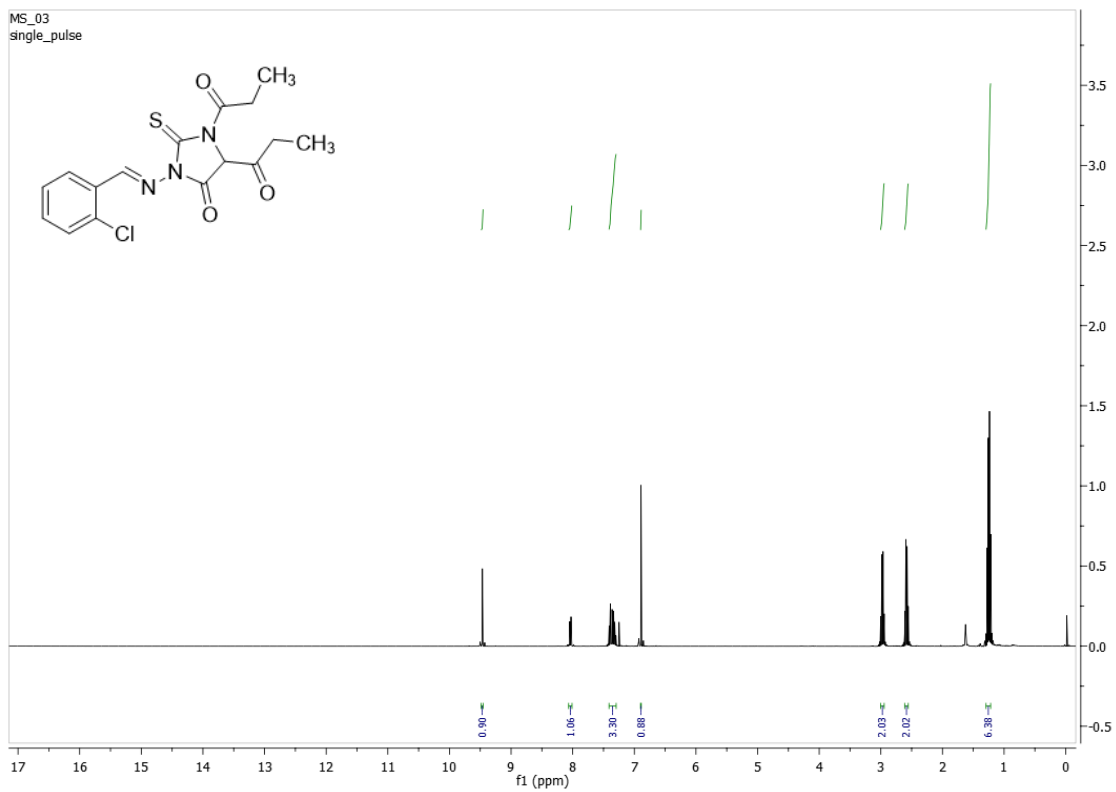


Figure S7: ^1H NMR of (3c)

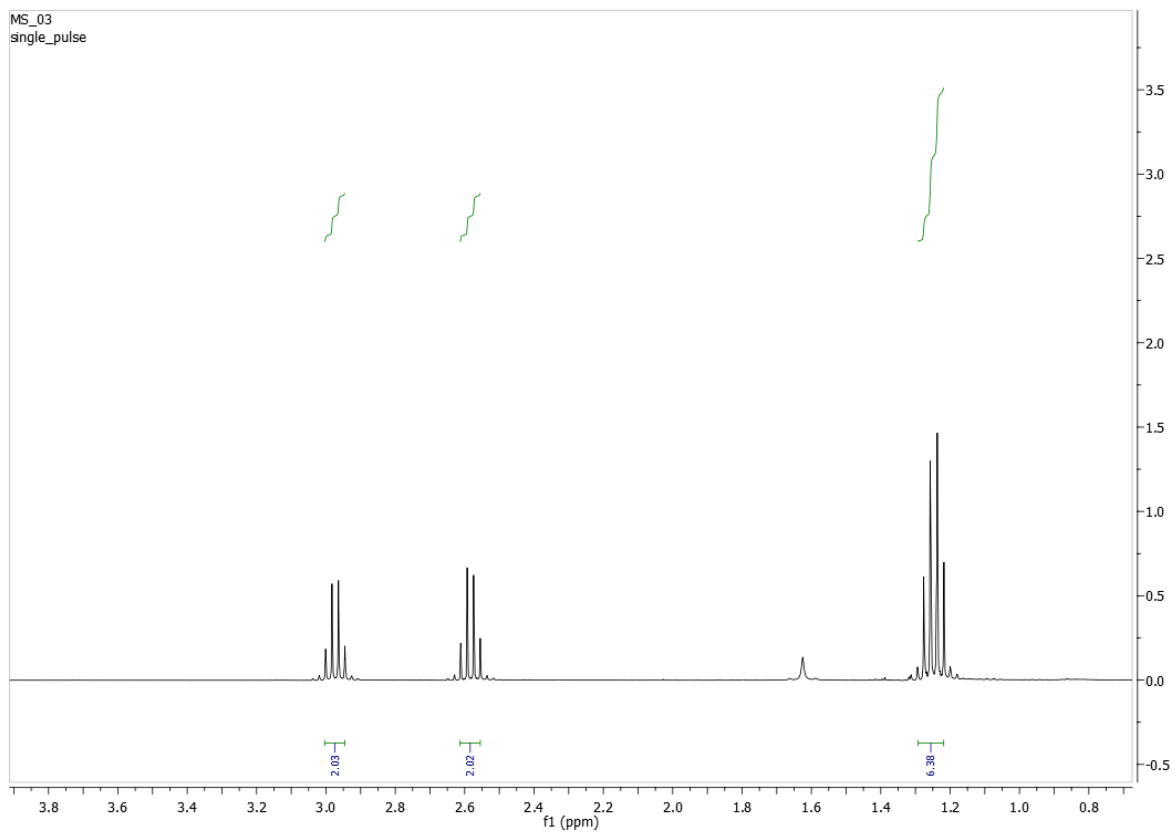


Figure S7: ^1H NMR of **(3c)** (Continued)

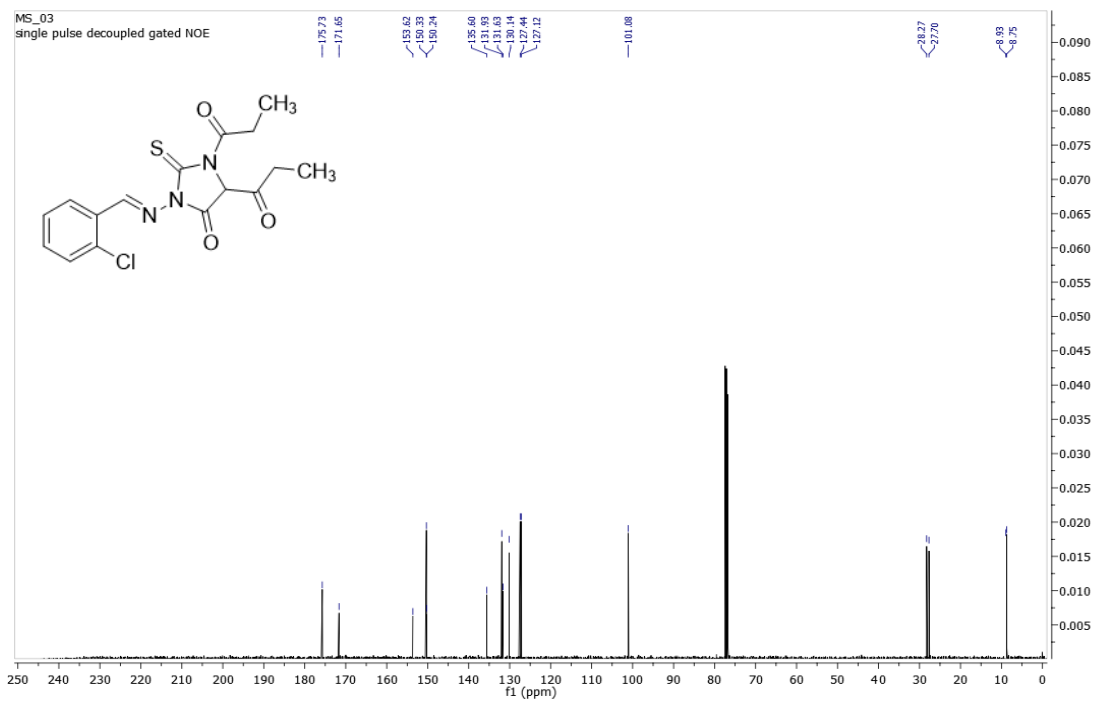


Figure S8: ^{13}C NMR of (3c)

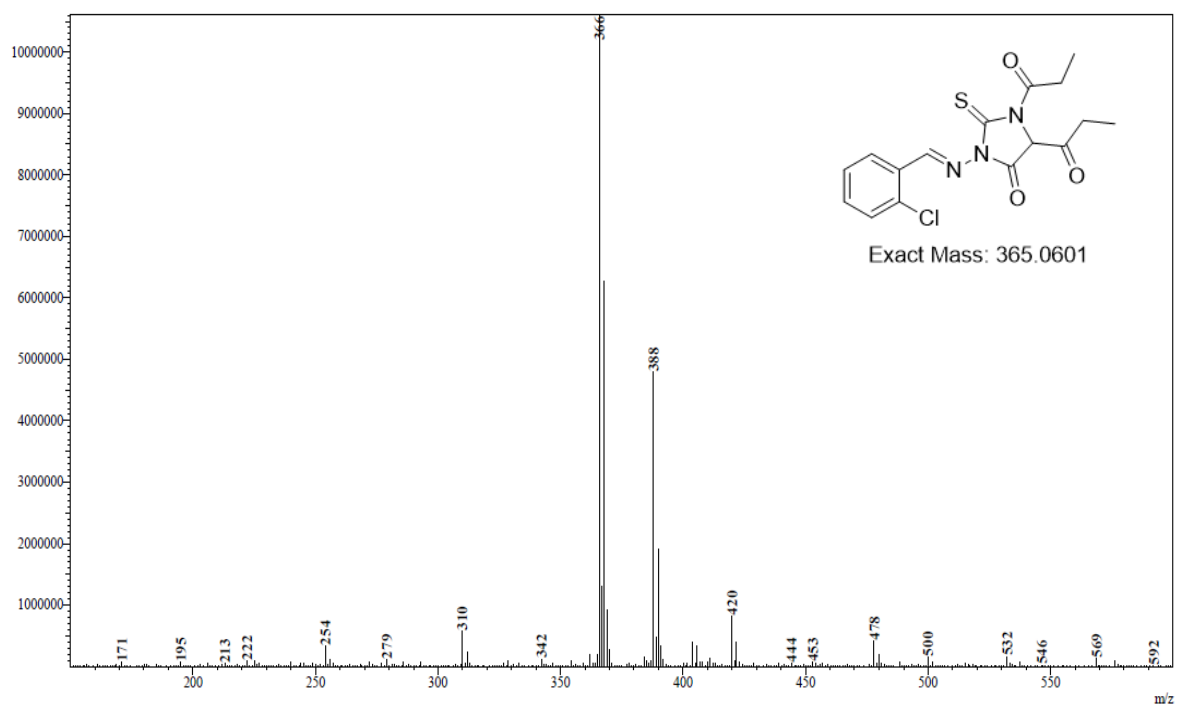


Figure S9: ESI-MS of (3c)

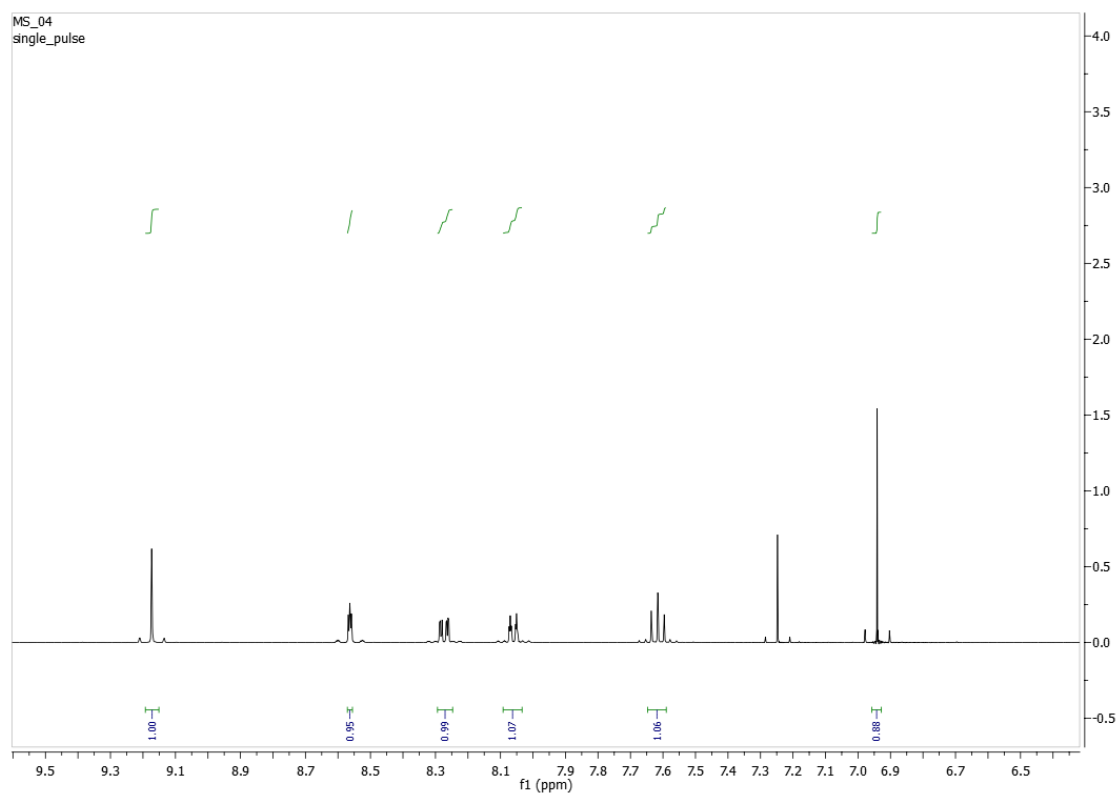
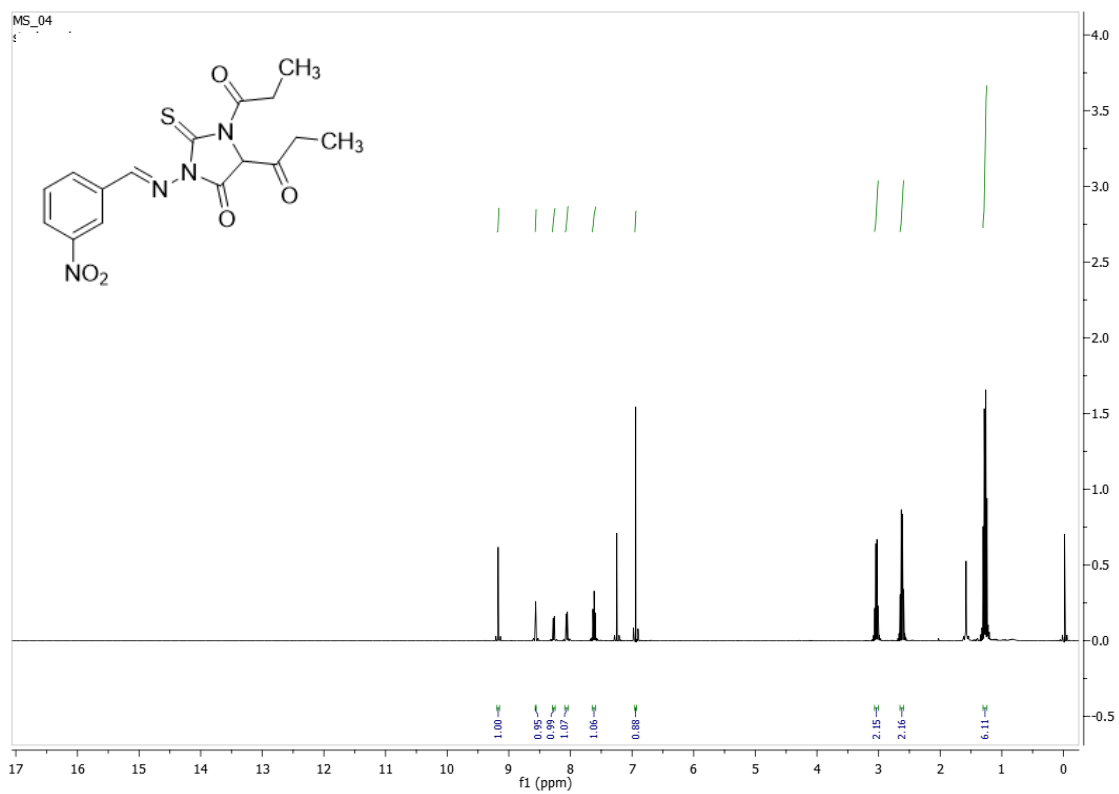


Figure S10: ^1H NMR of (3d)

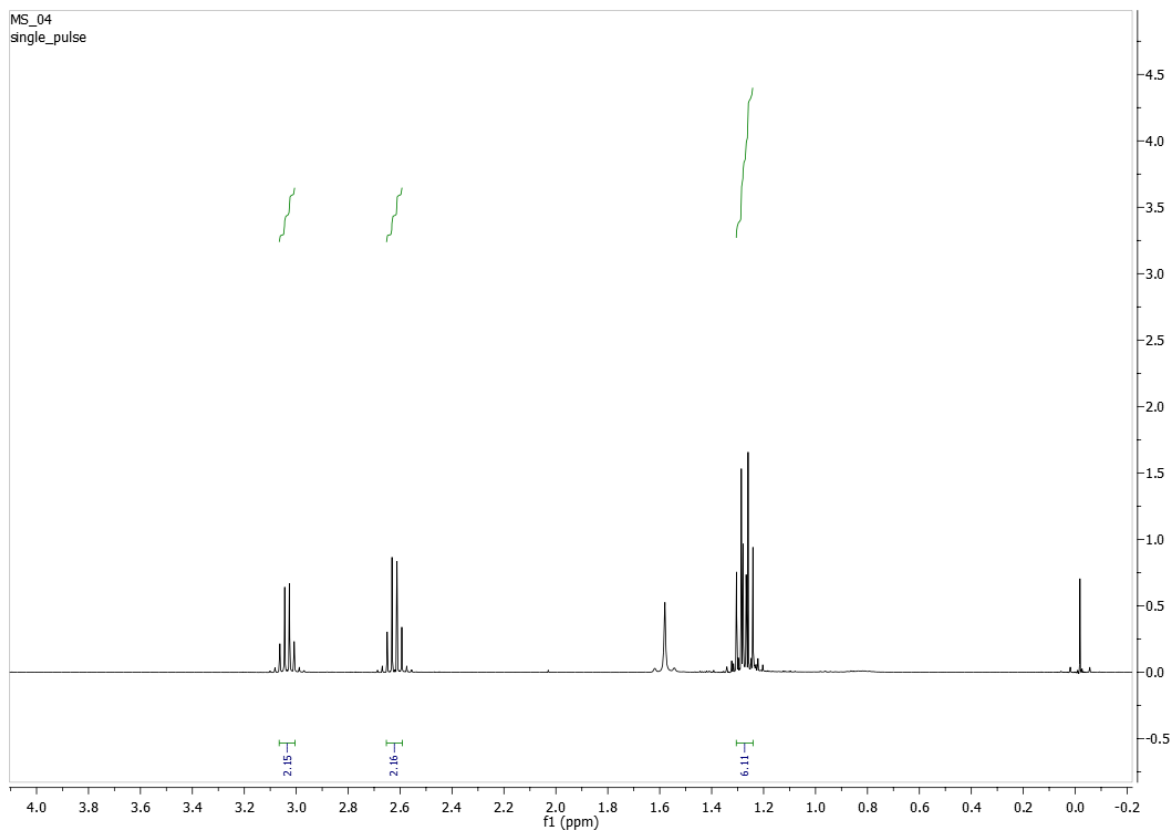


Figure S10: ^1H NMR of (**3d**) (Continued)

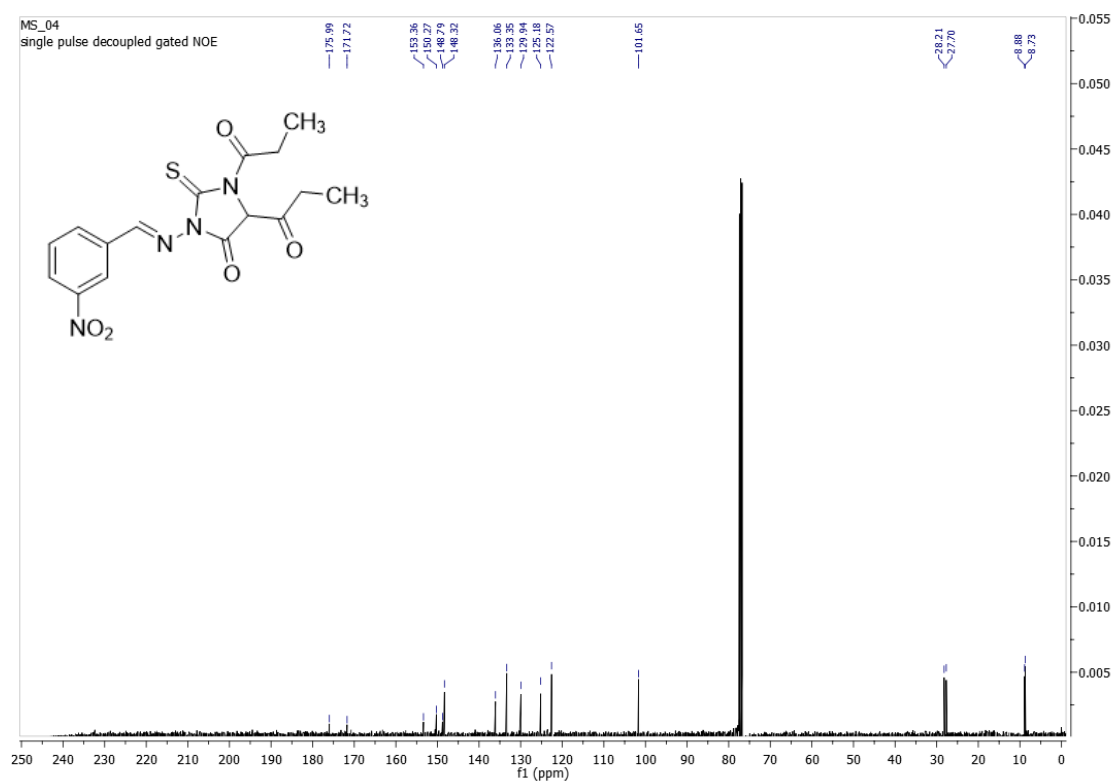


Figure S11: ^{13}C NMR of (3d)

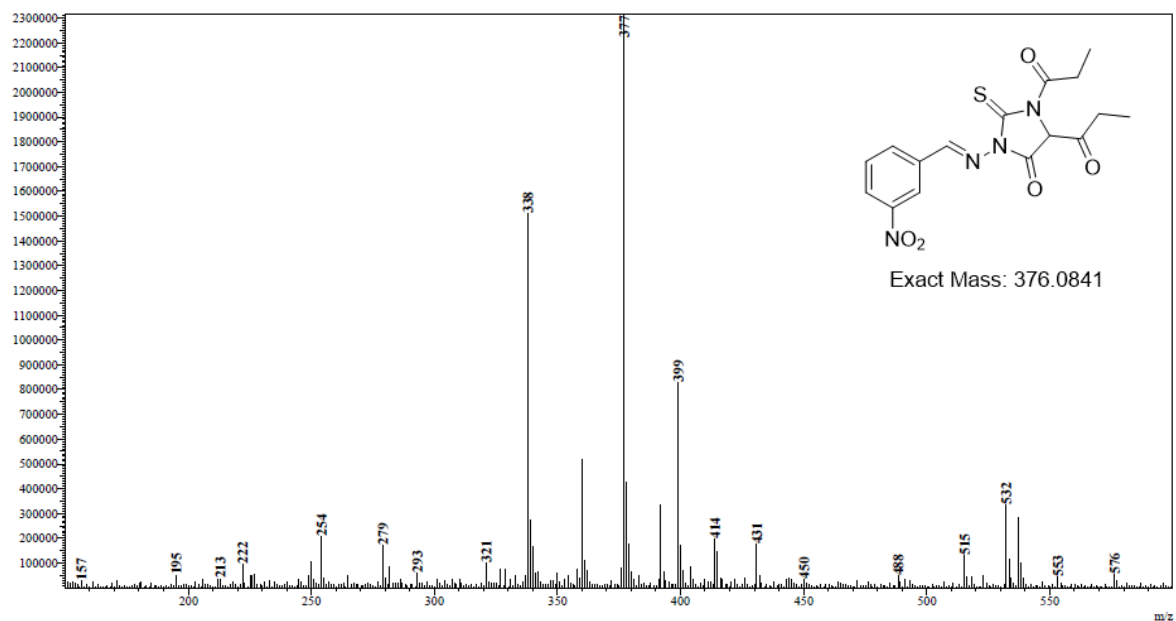


Figure S12: ESI-MS of (3d)

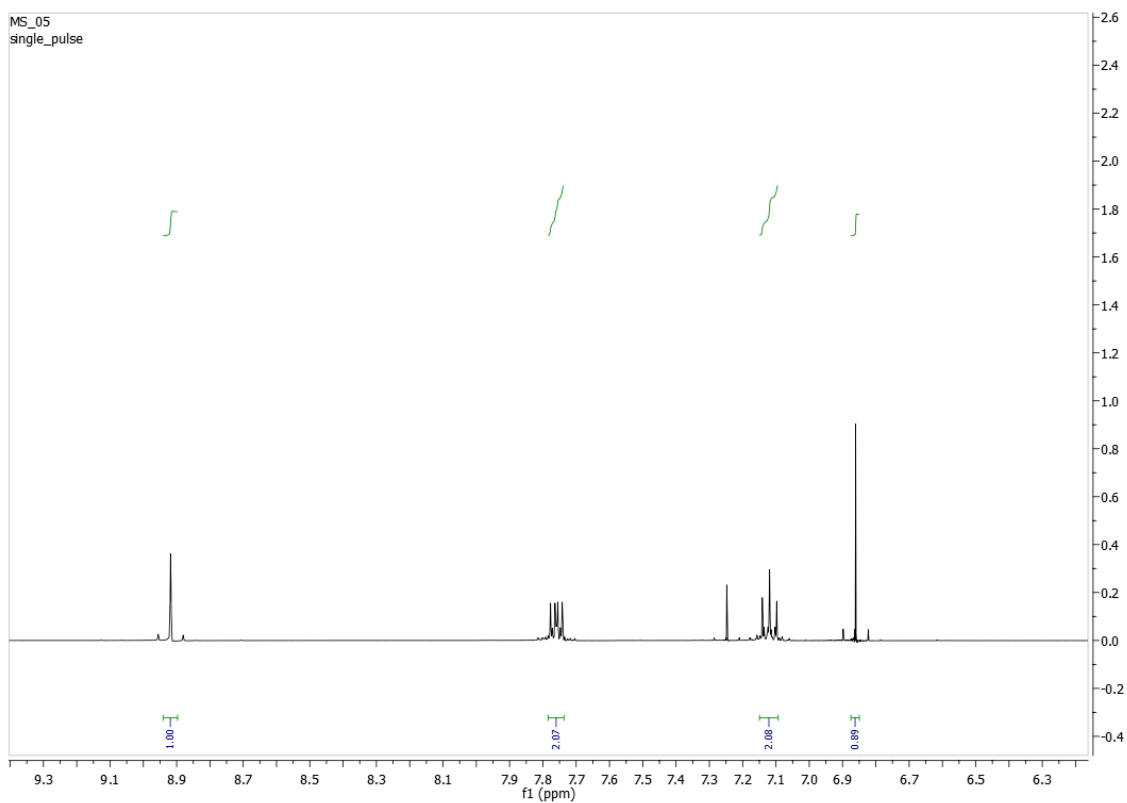
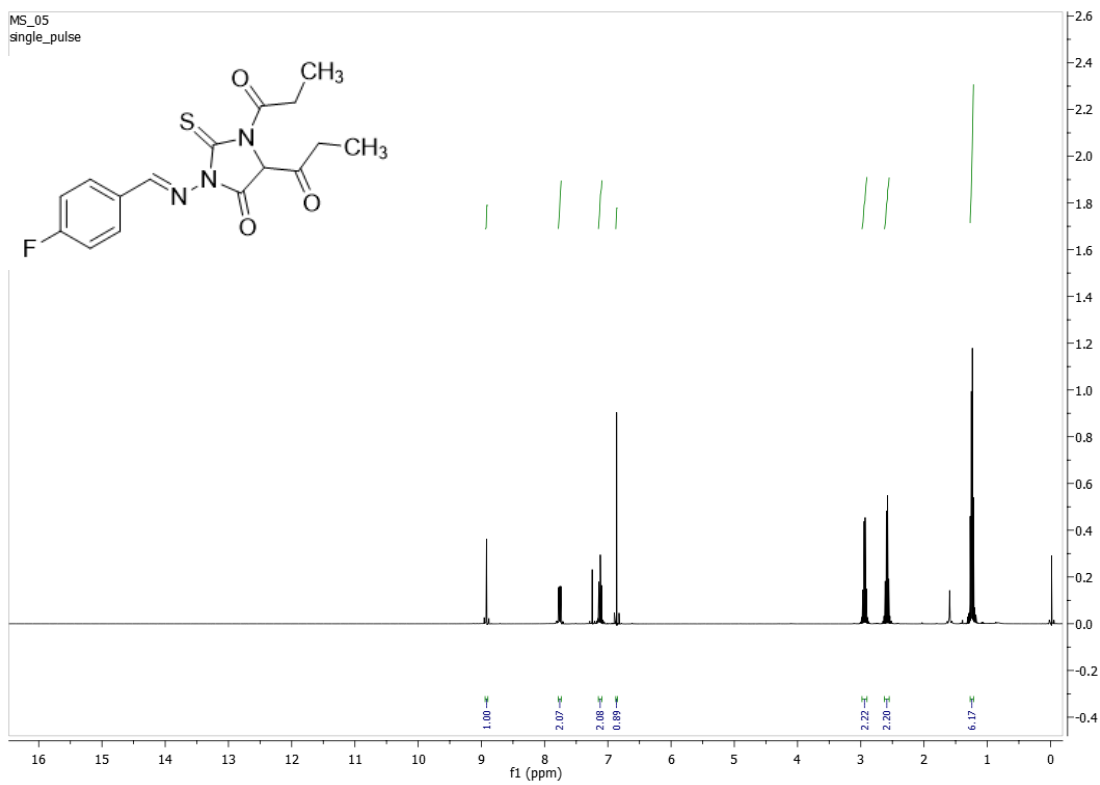


Figure S13: ^1H NMR of (3e)

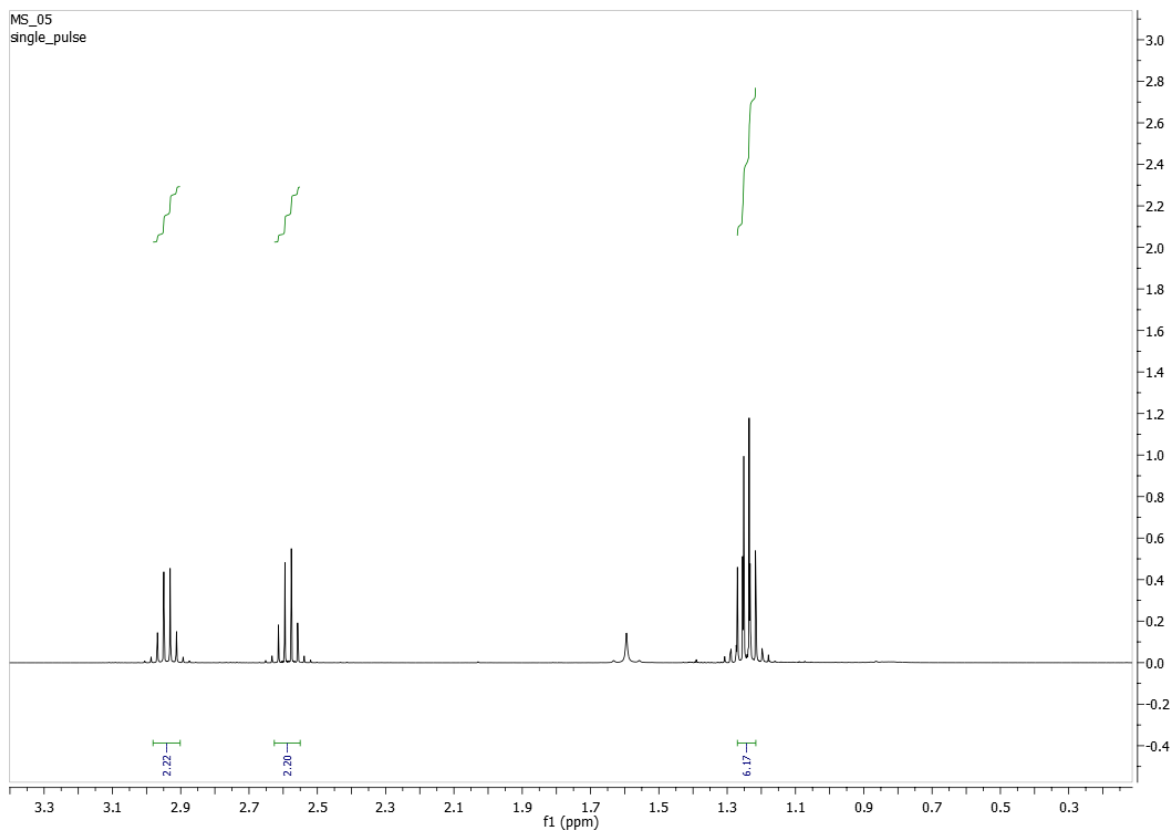


Figure S13: ^1H NMR of (**3e**) (Continued)

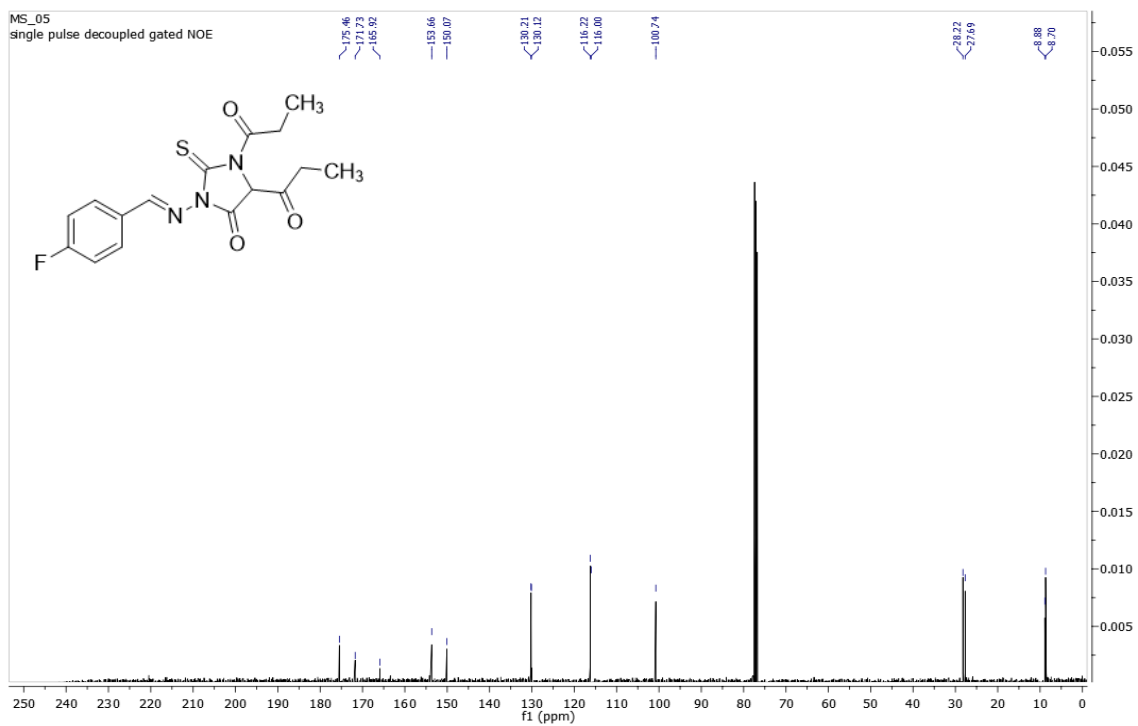


Figure S14: ^{13}C NMR of (3e)

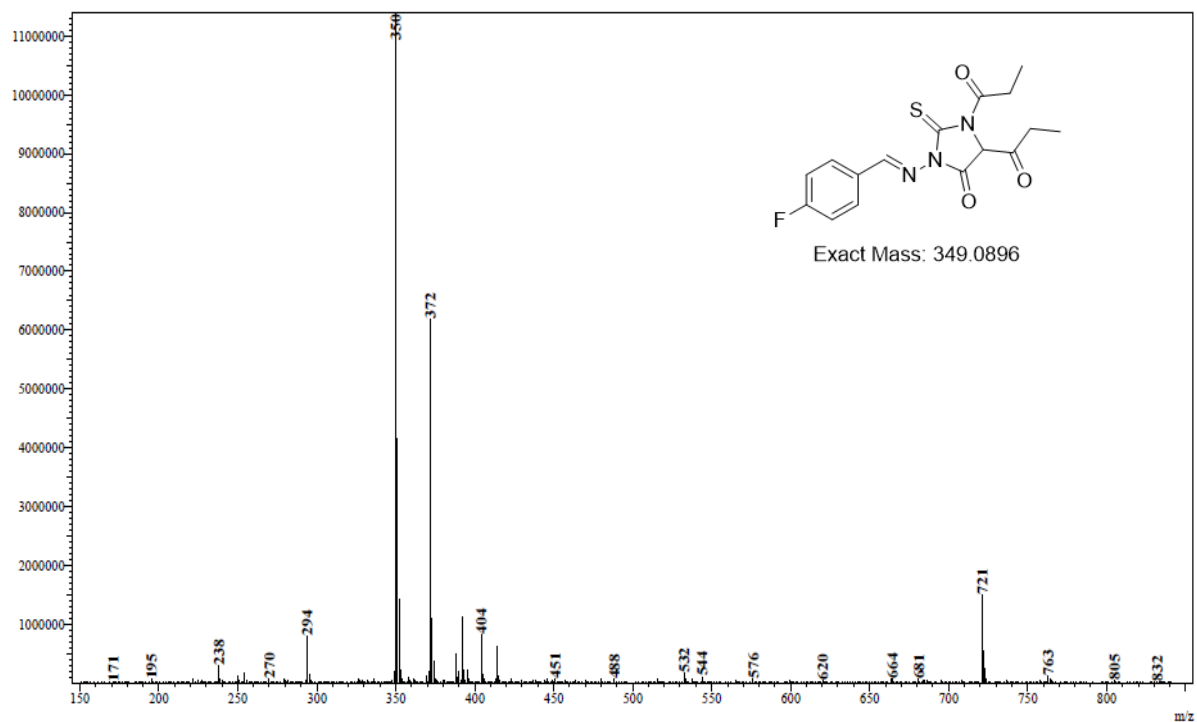


Figure S15: ESI-MS of (3e)

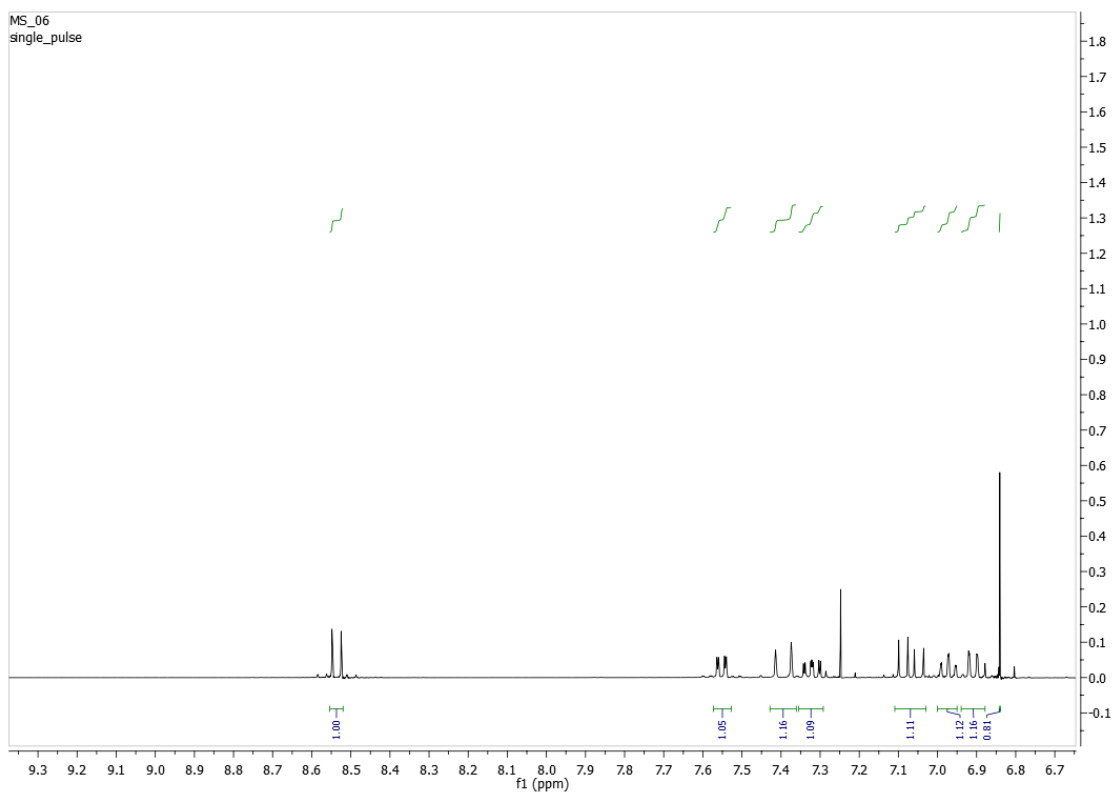
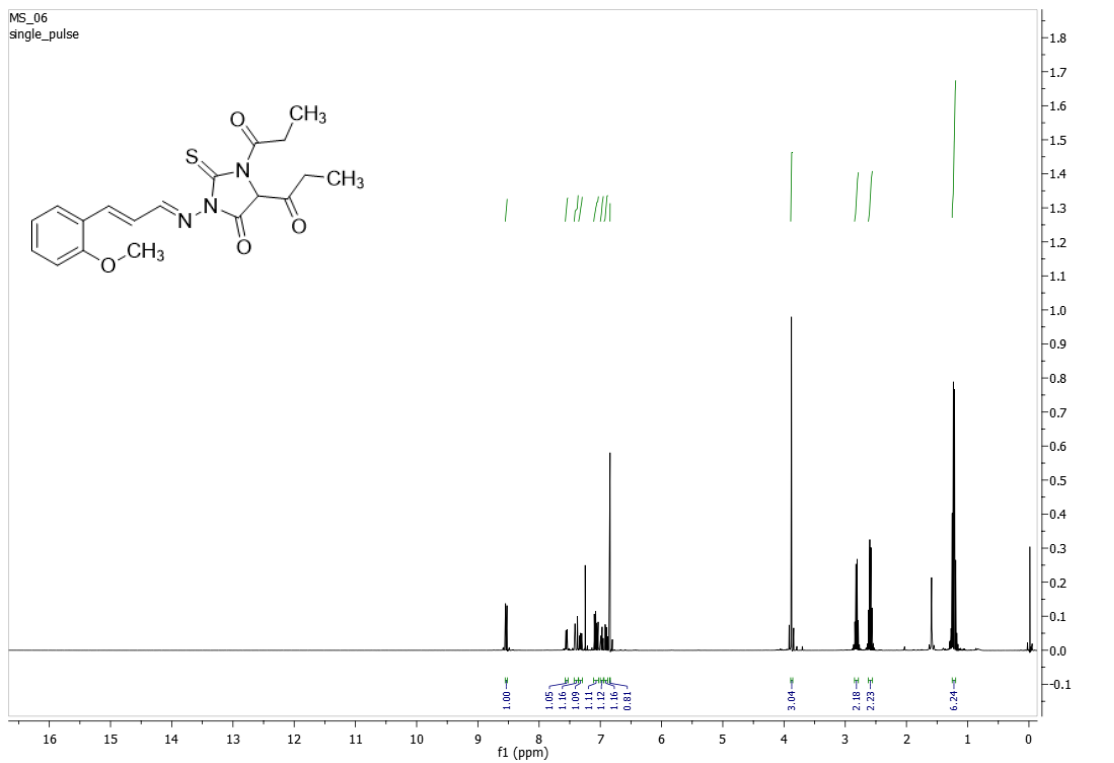


Figure S16: ^1H NMR of (**3f**)

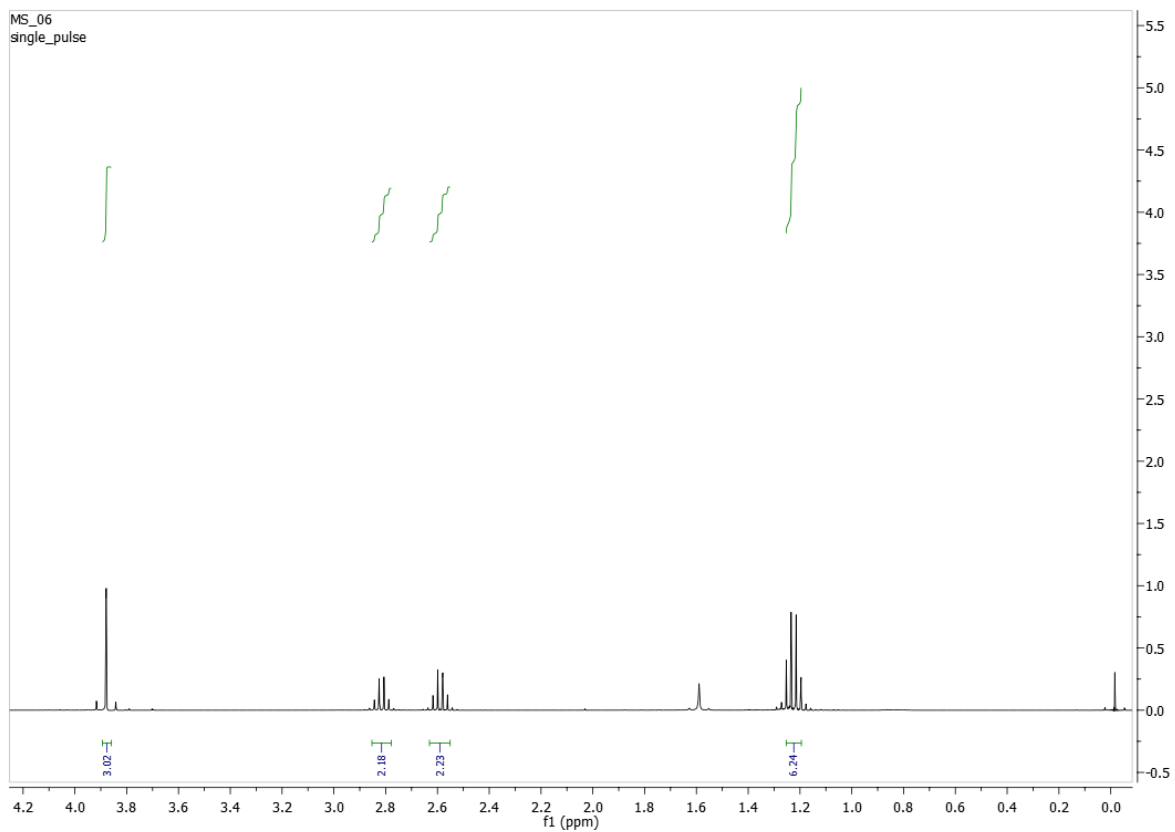


Figure S16: ^1H NMR of (**3f**) (Continued)

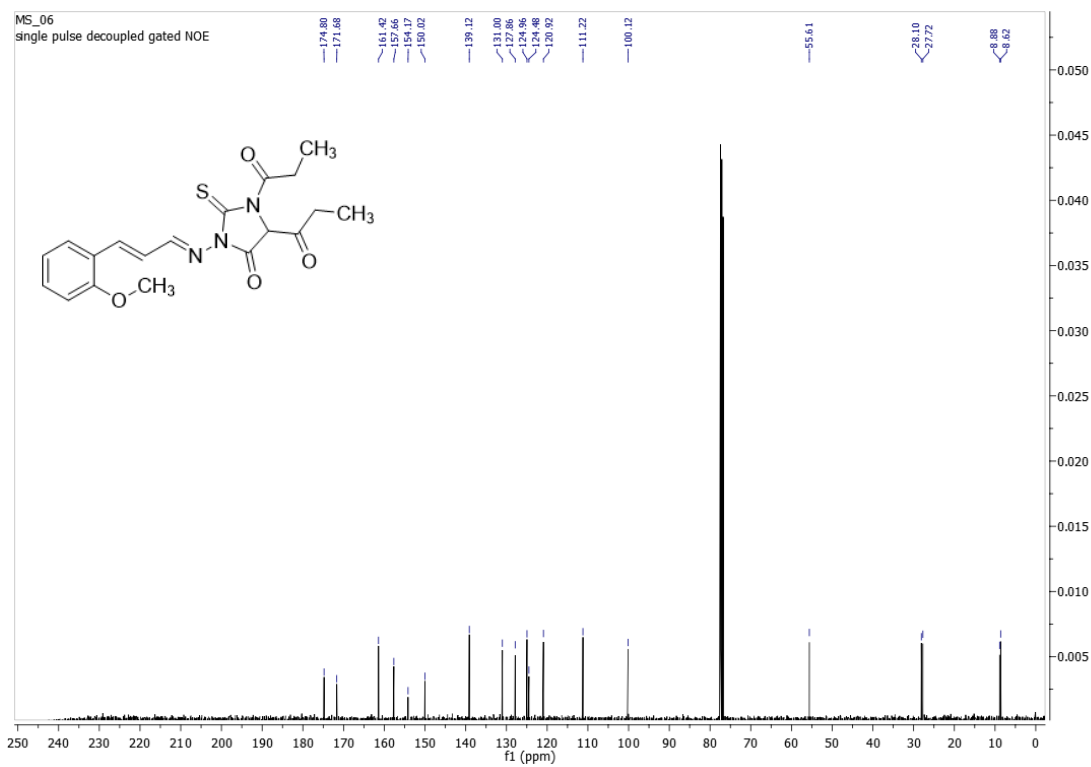


Figure S17: ^{13}C NMR of (3f)

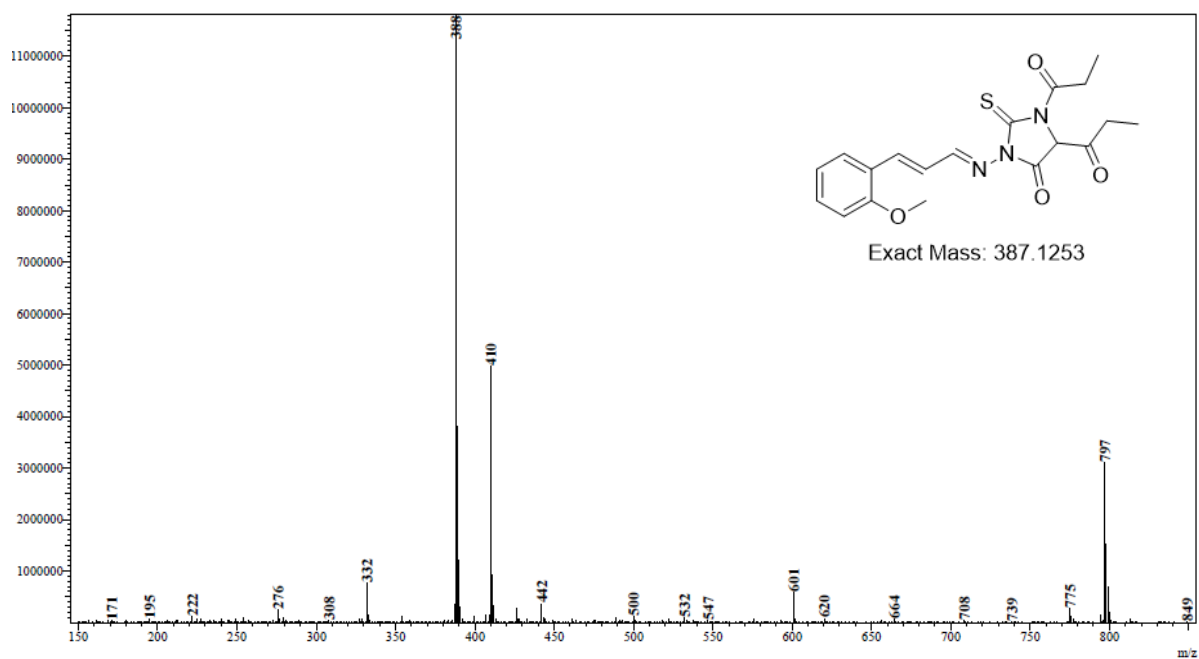


Figure S18: ESI-MS of (3f)

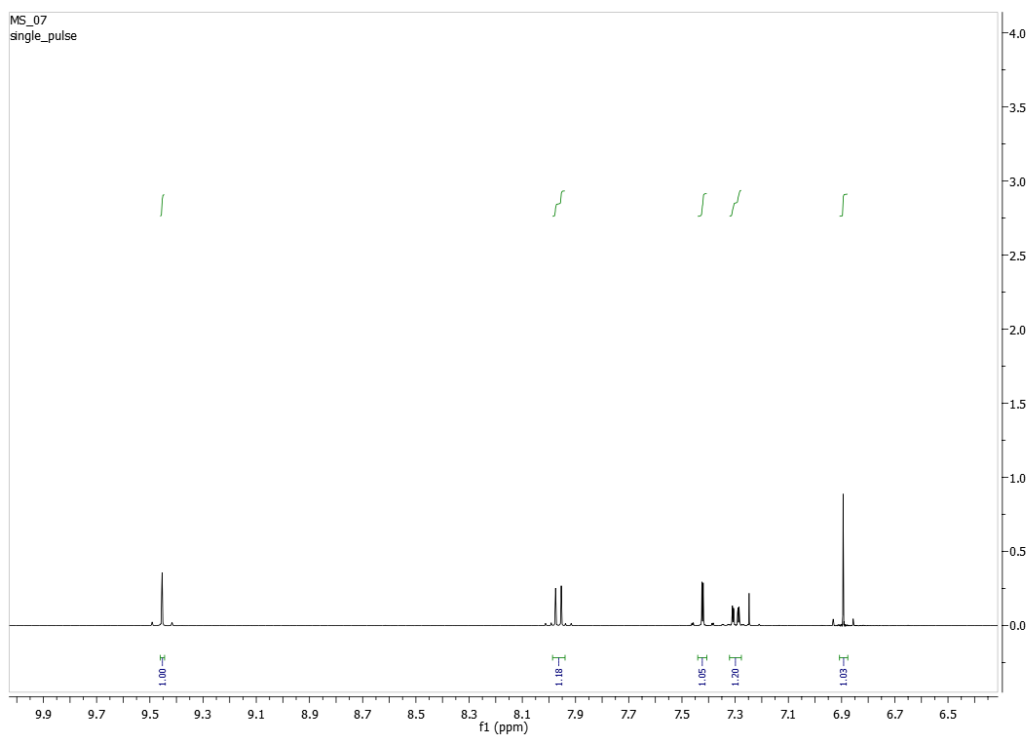
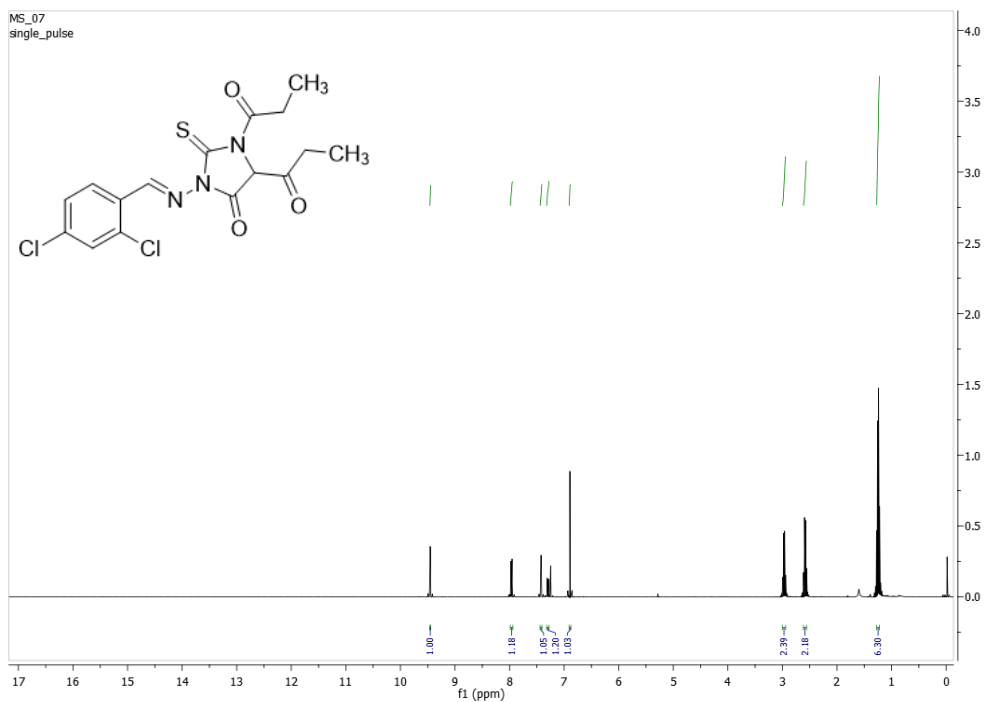


Figure S19: ^1H NMR of (**3g**)

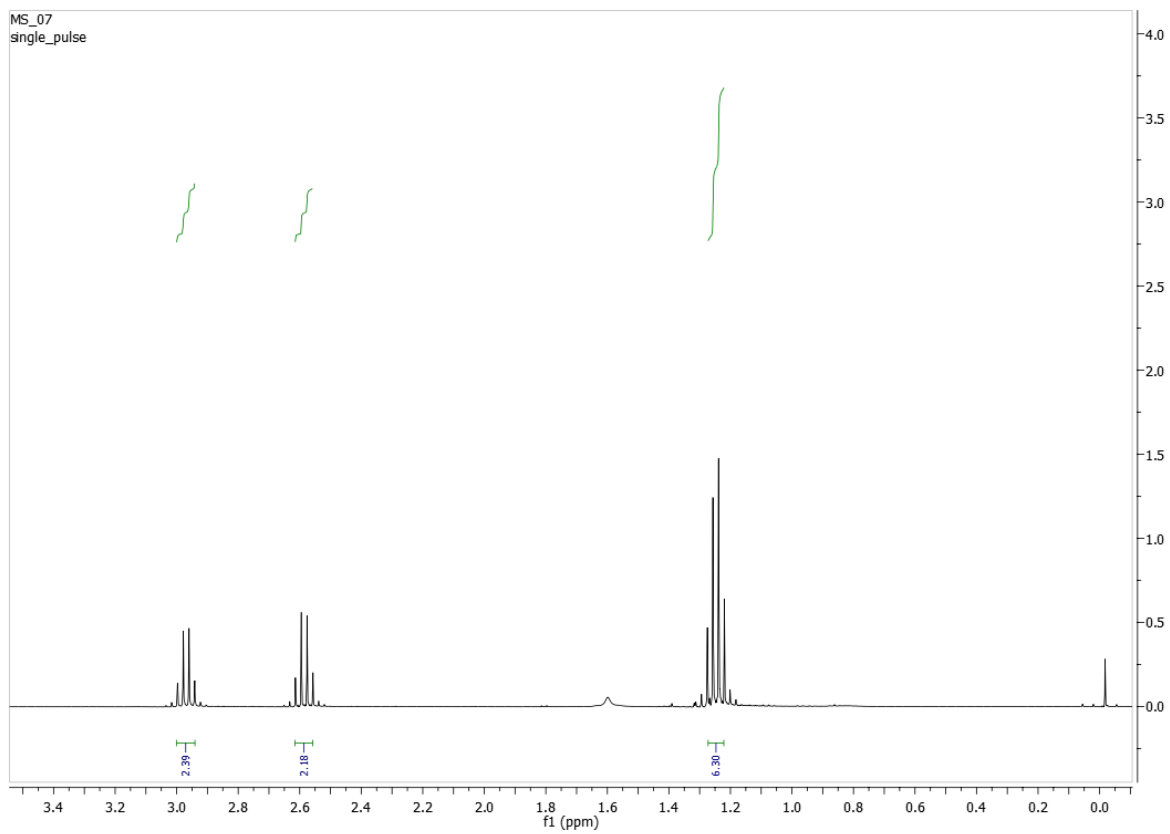


Figure S19: ^1H NMR of (**3g**) (Continued)

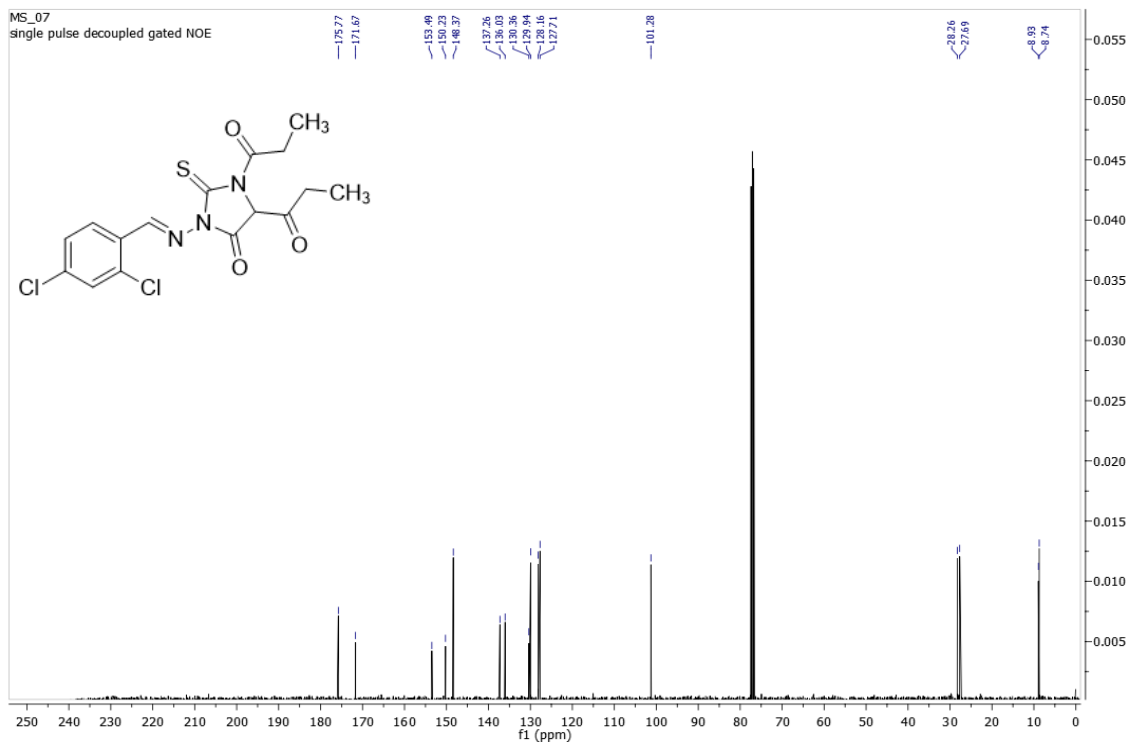


Figure S20: ^{13}C NMR of (**3g**)

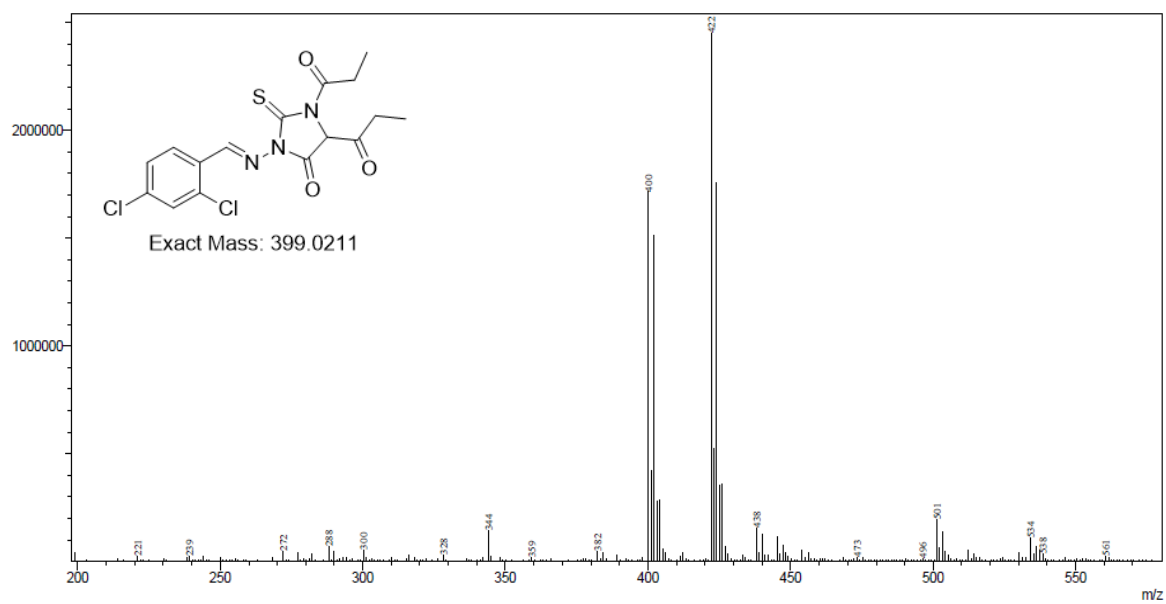


Figure S21: ESI-MS of (3g)

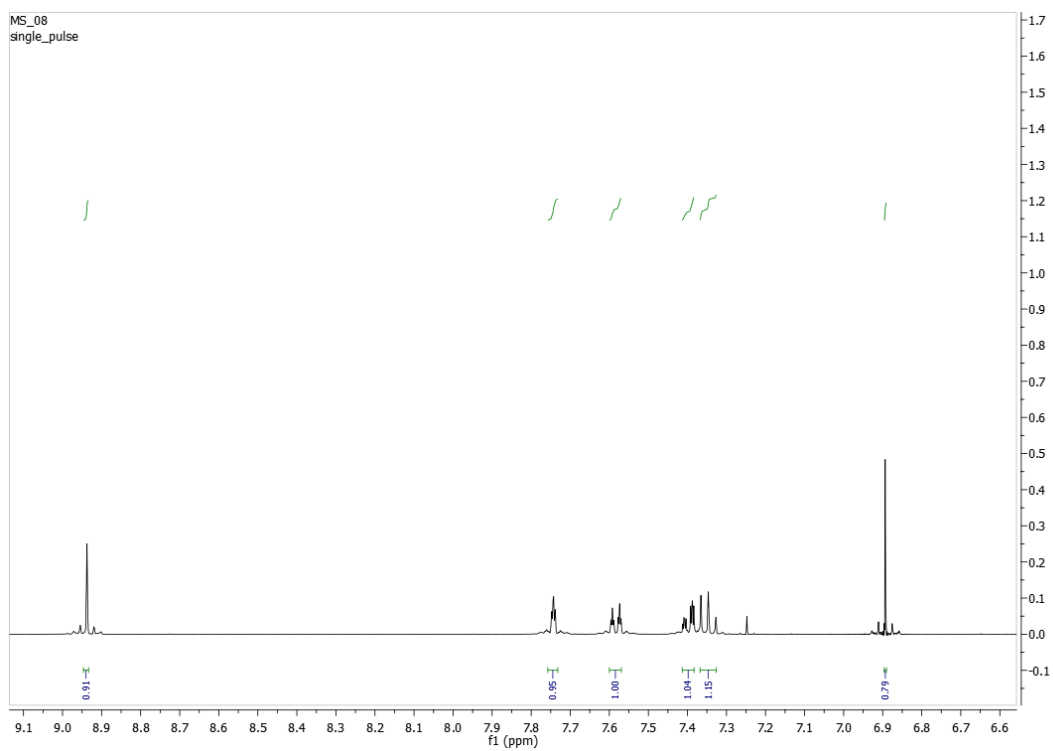
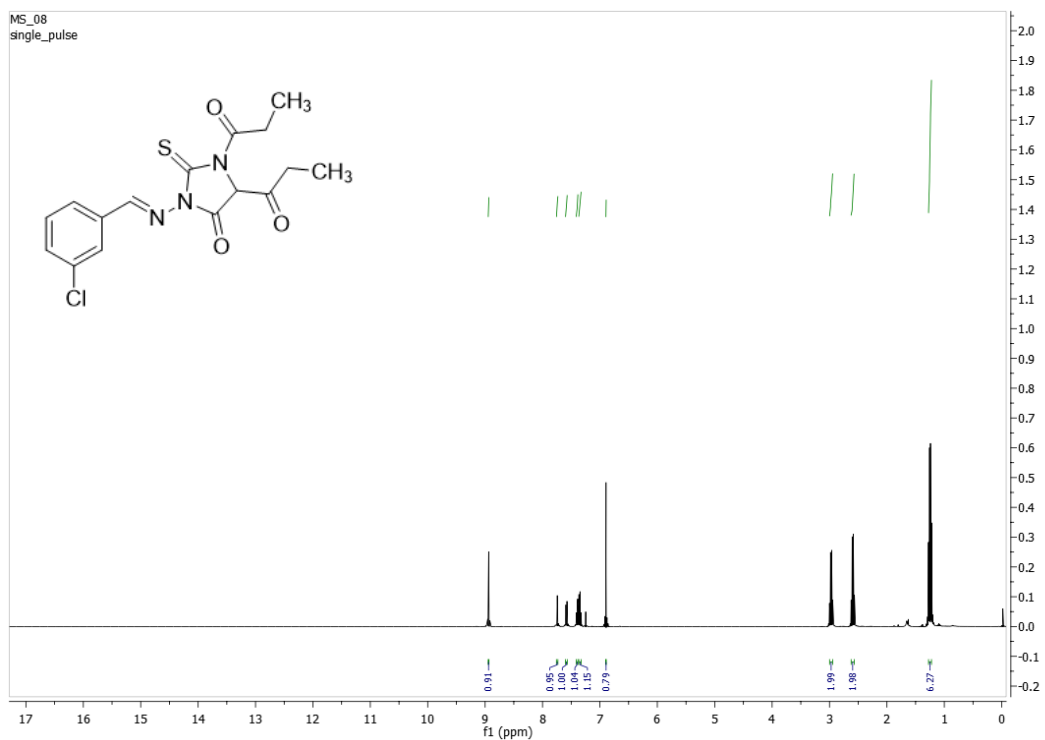


Figure S22: ^1H NMR of (3h)

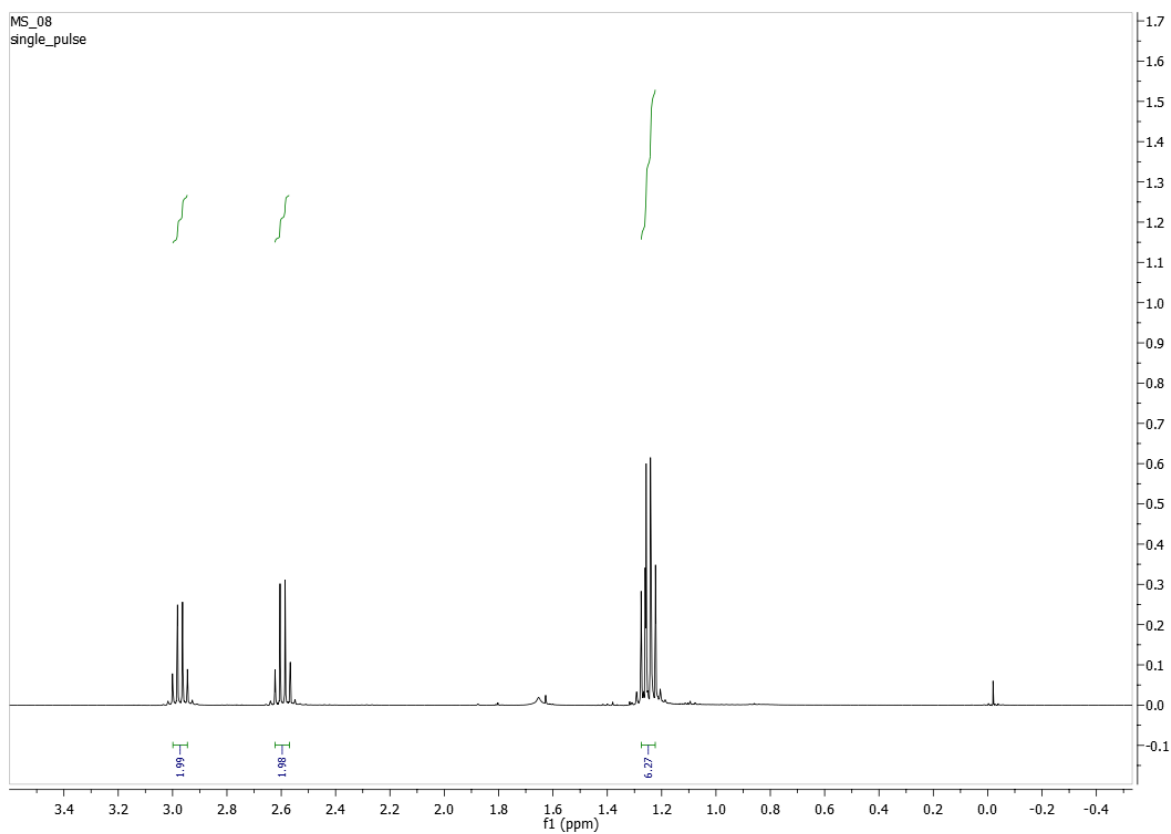


Figure S22: ^1H NMR of (**3h**) (Continued)

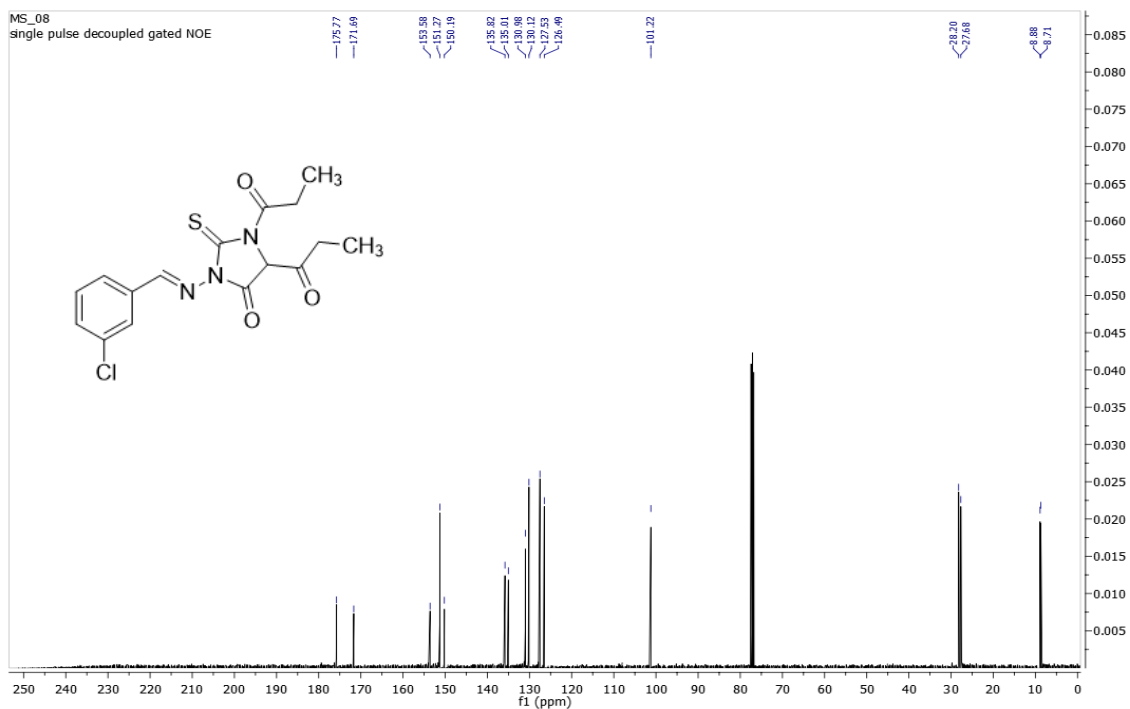


Figure S23: ^{13}C NMR of (**3h**)

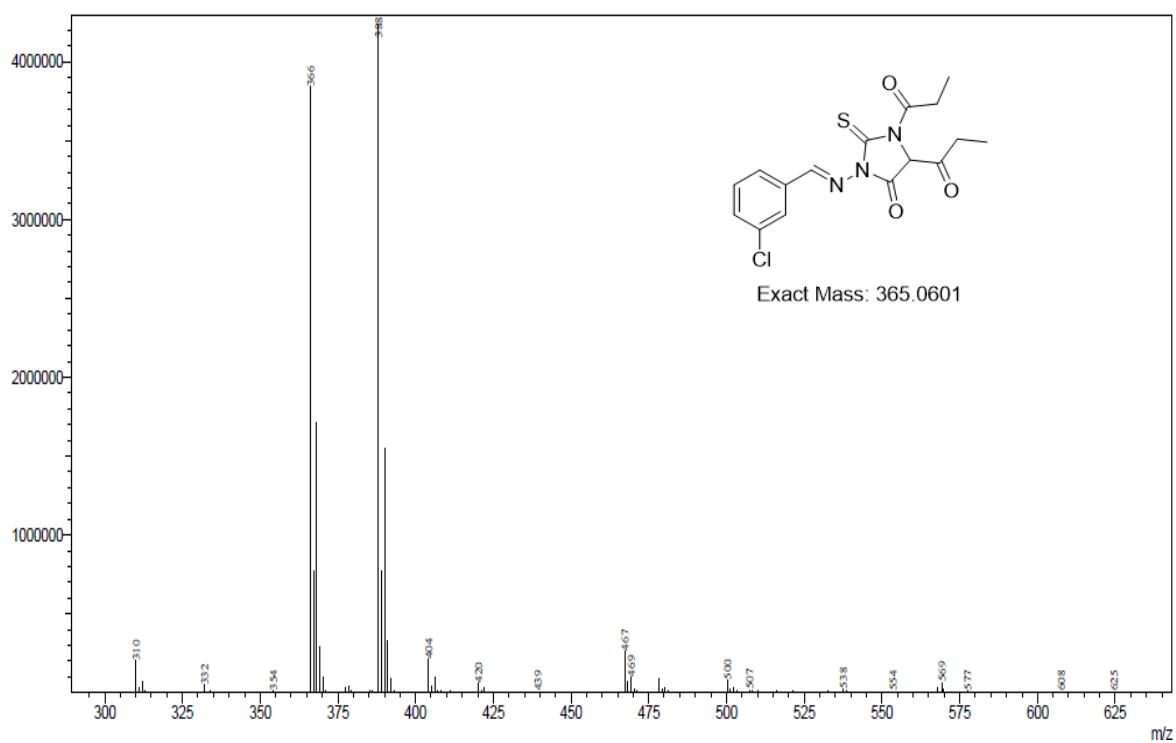


Figure S24: ESI-MS of (3h)

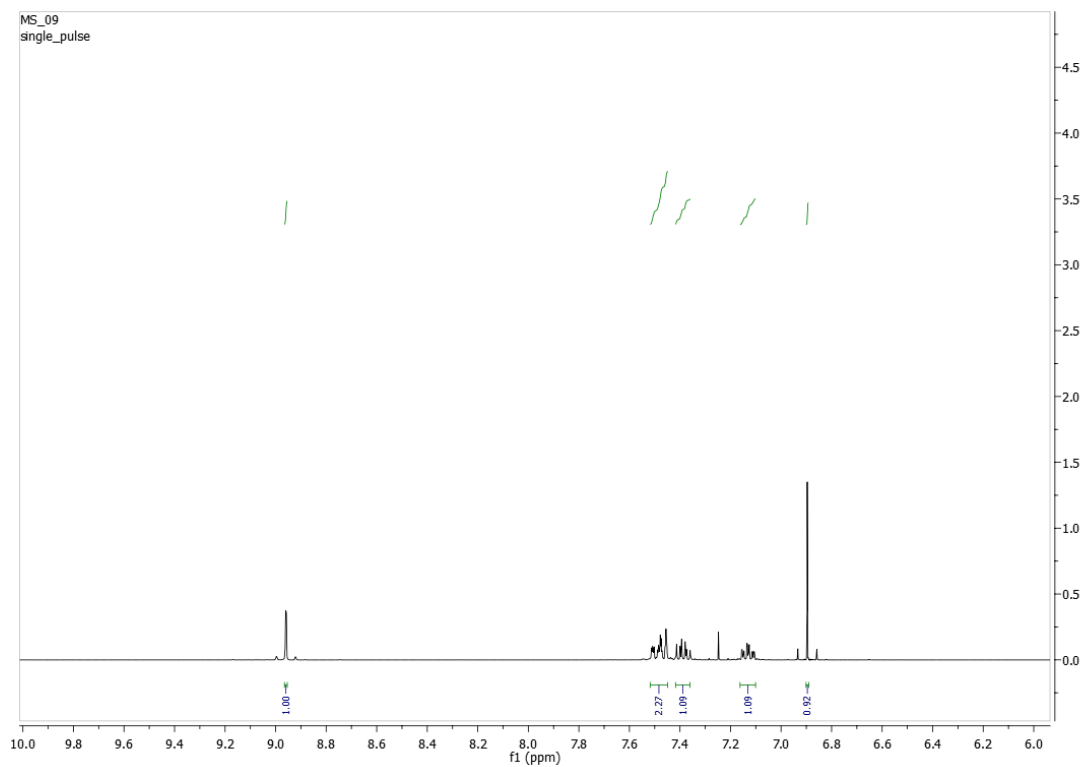
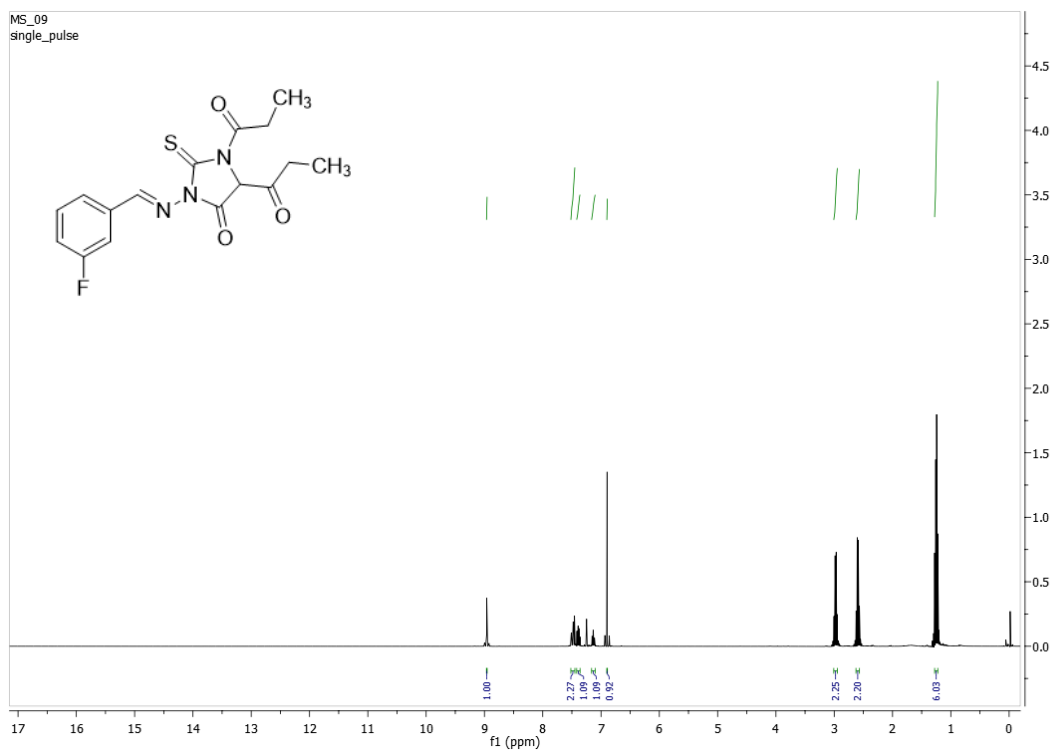


Figure S25: ^1H NMR of (3i)

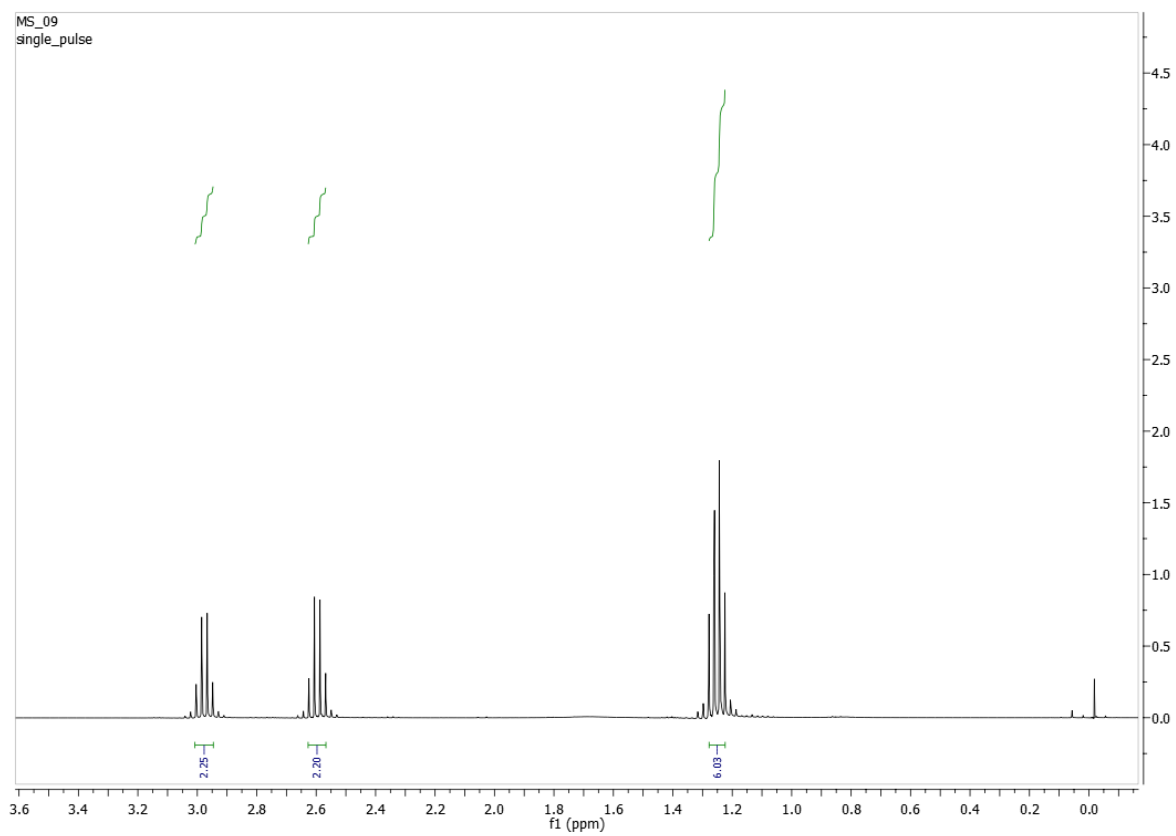


Figure S25: ^1H NMR of (**3i**) (Continued)

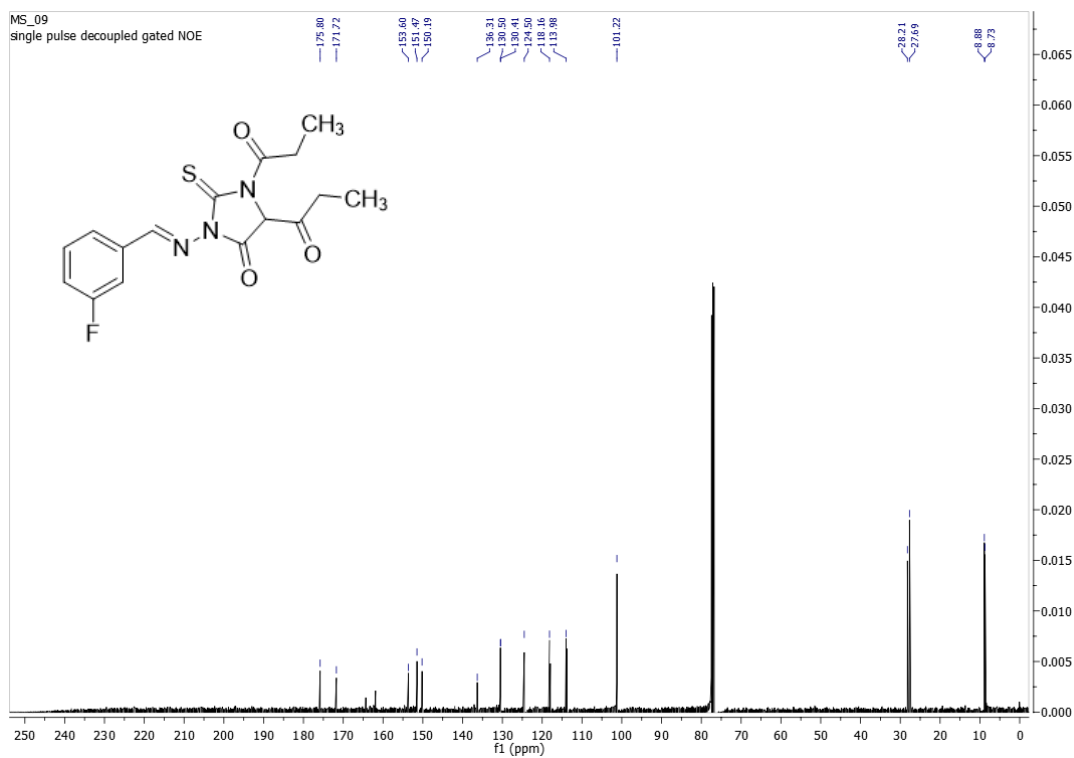


Figure S26: ¹³C NMR of (3i)

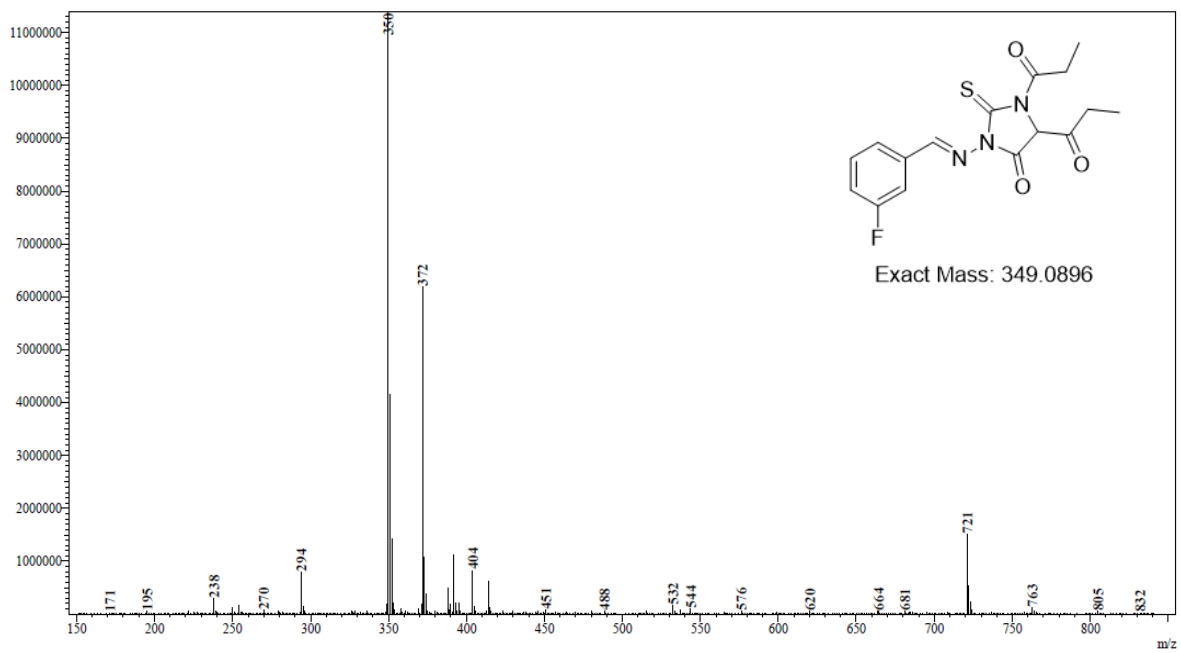


Figure S27: ESI-MS of (3i)

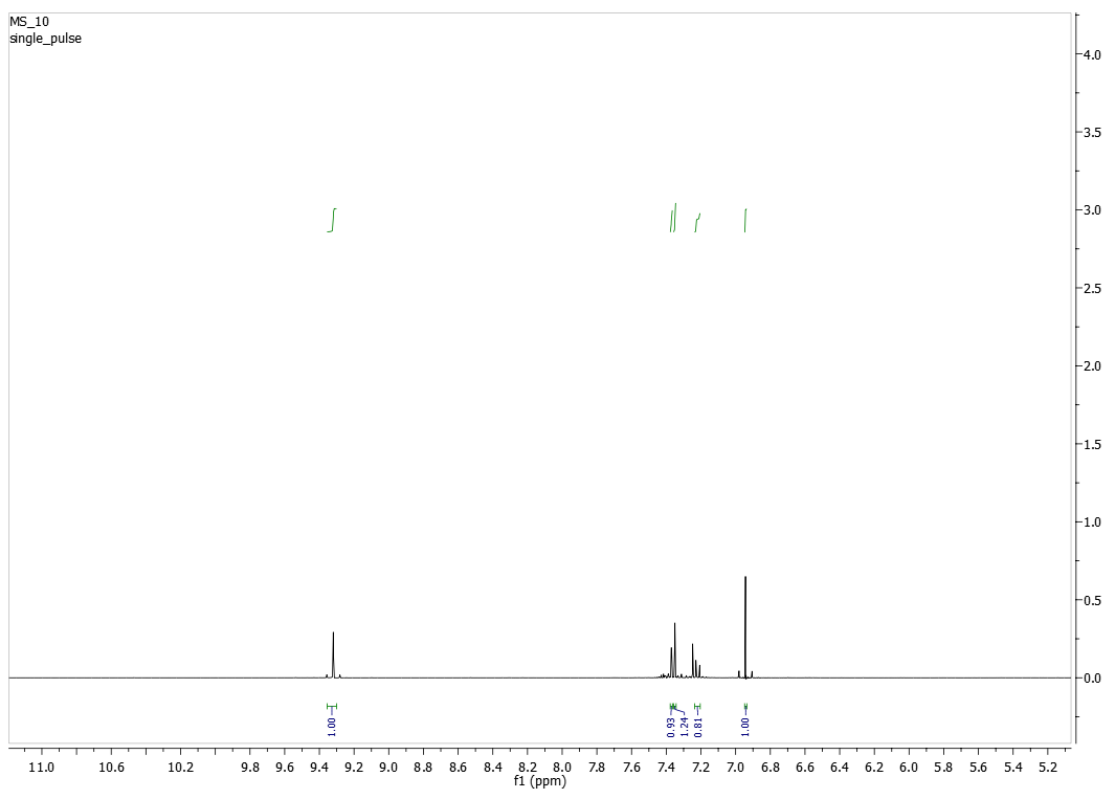
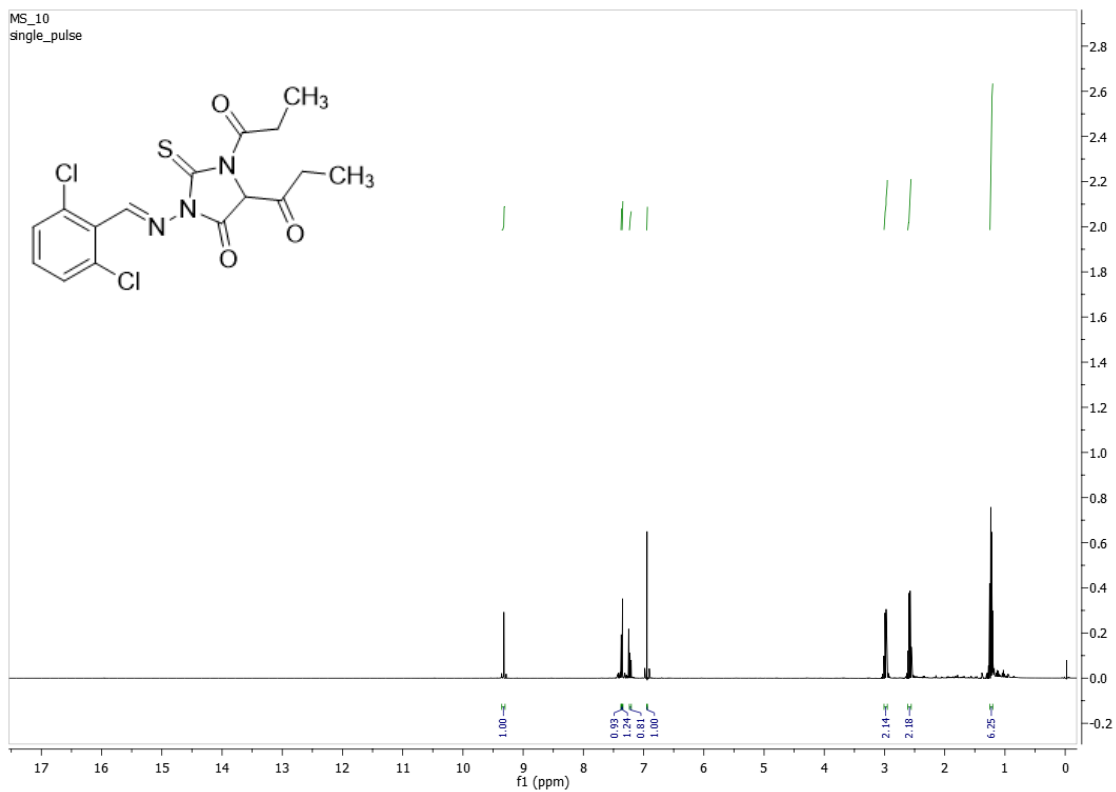


Figure S28: ^1H NMR of (3j)

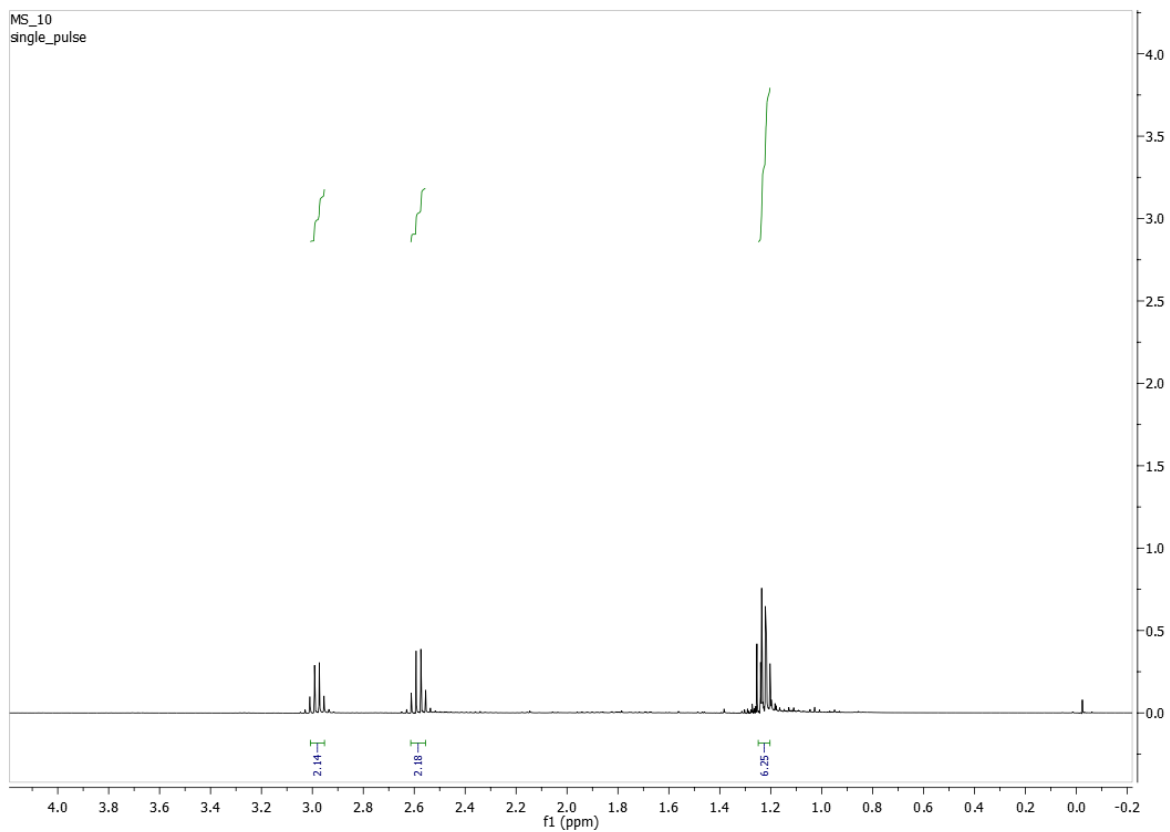


Figure S28: ¹H NMR of (**3j**) (Continued)

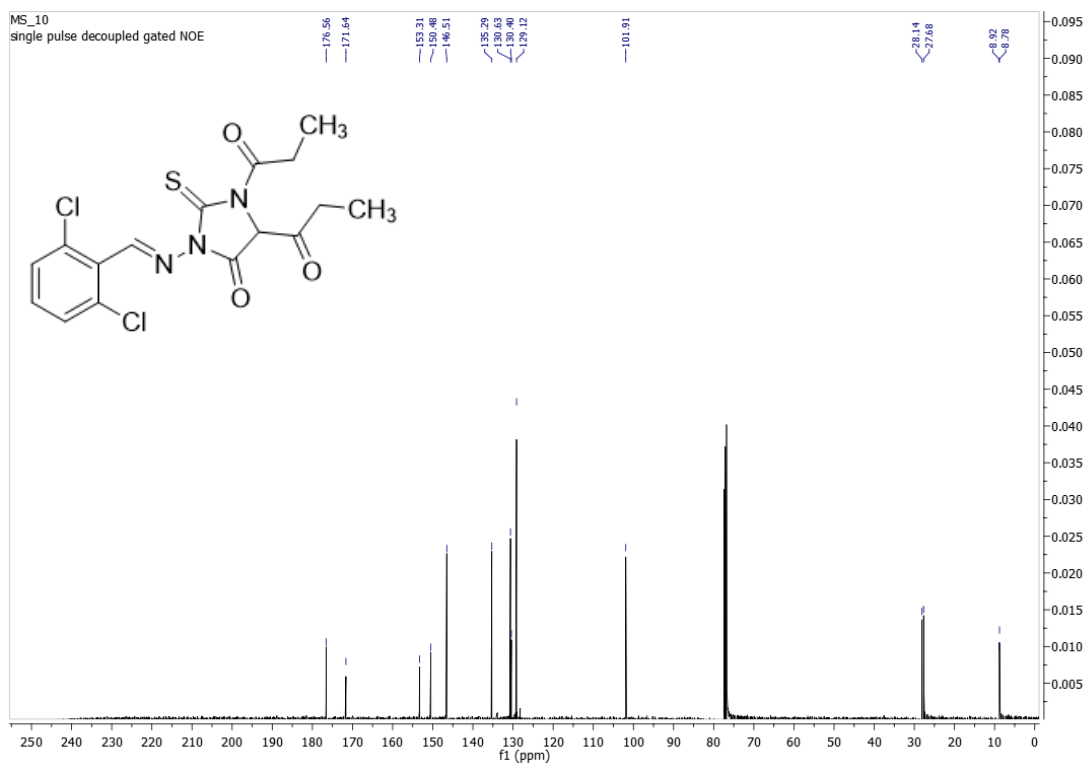


Figure S29: ^{13}C NMR of (3j)

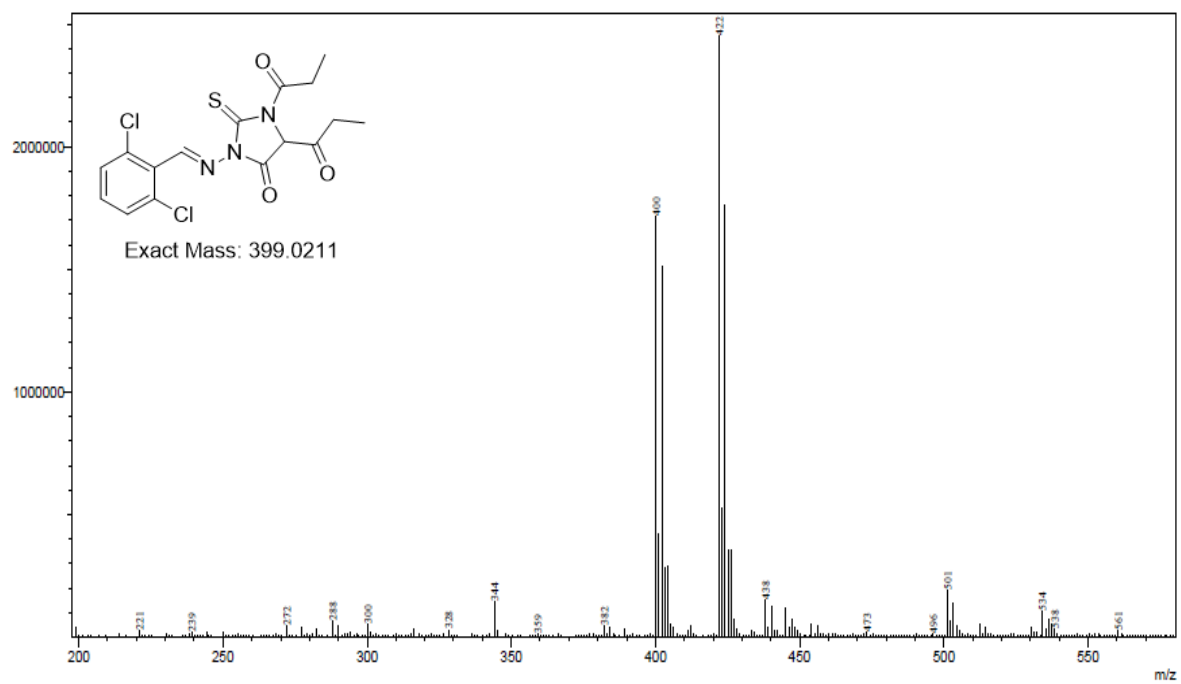


Figure S30: ESI-MS of (3j)

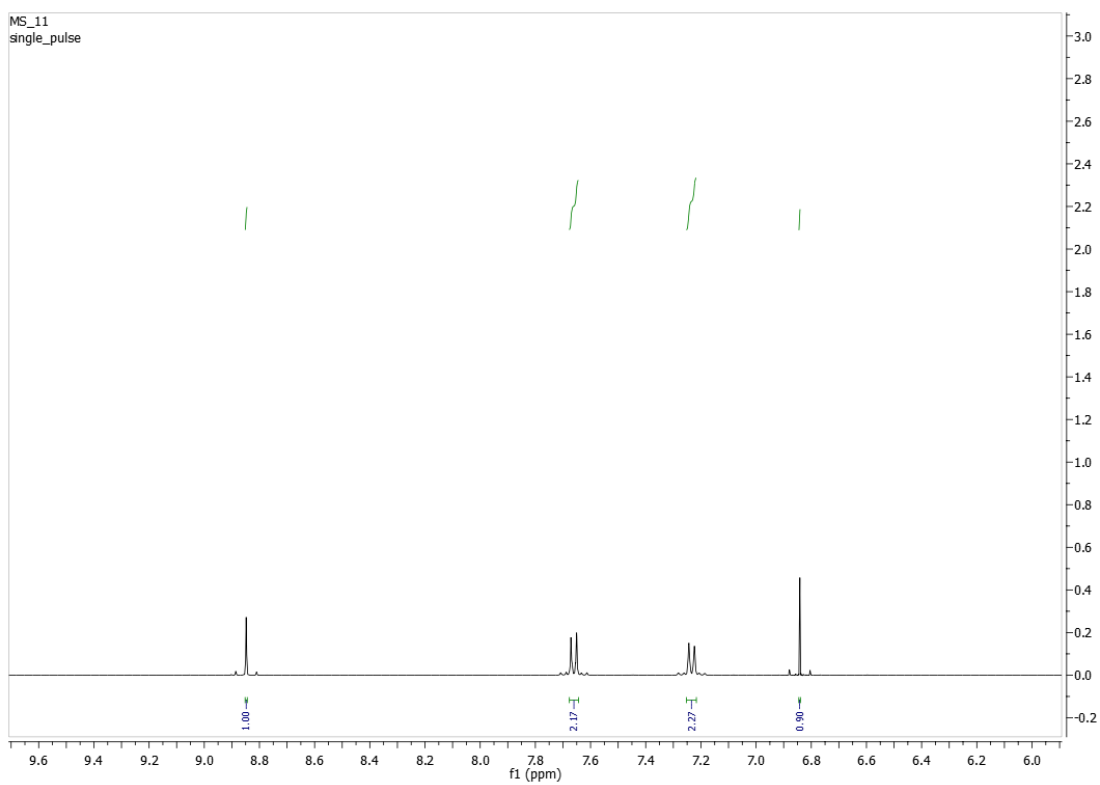
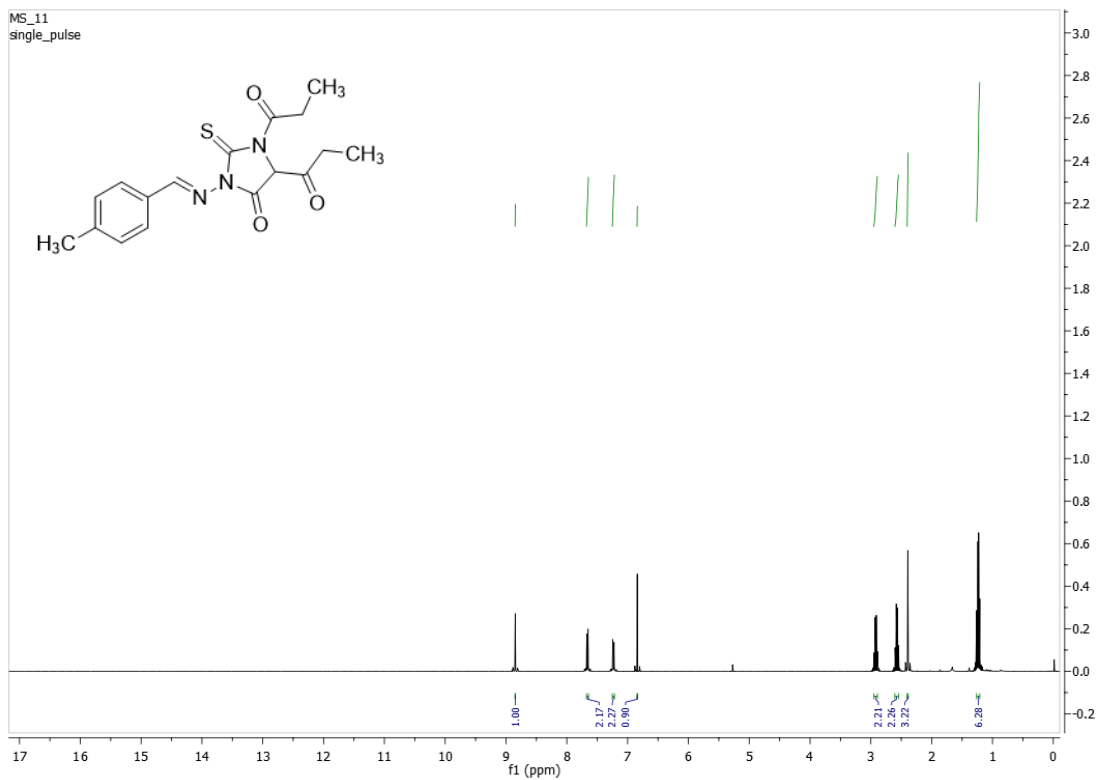


Figure S31: ^1H NMR of (3k)

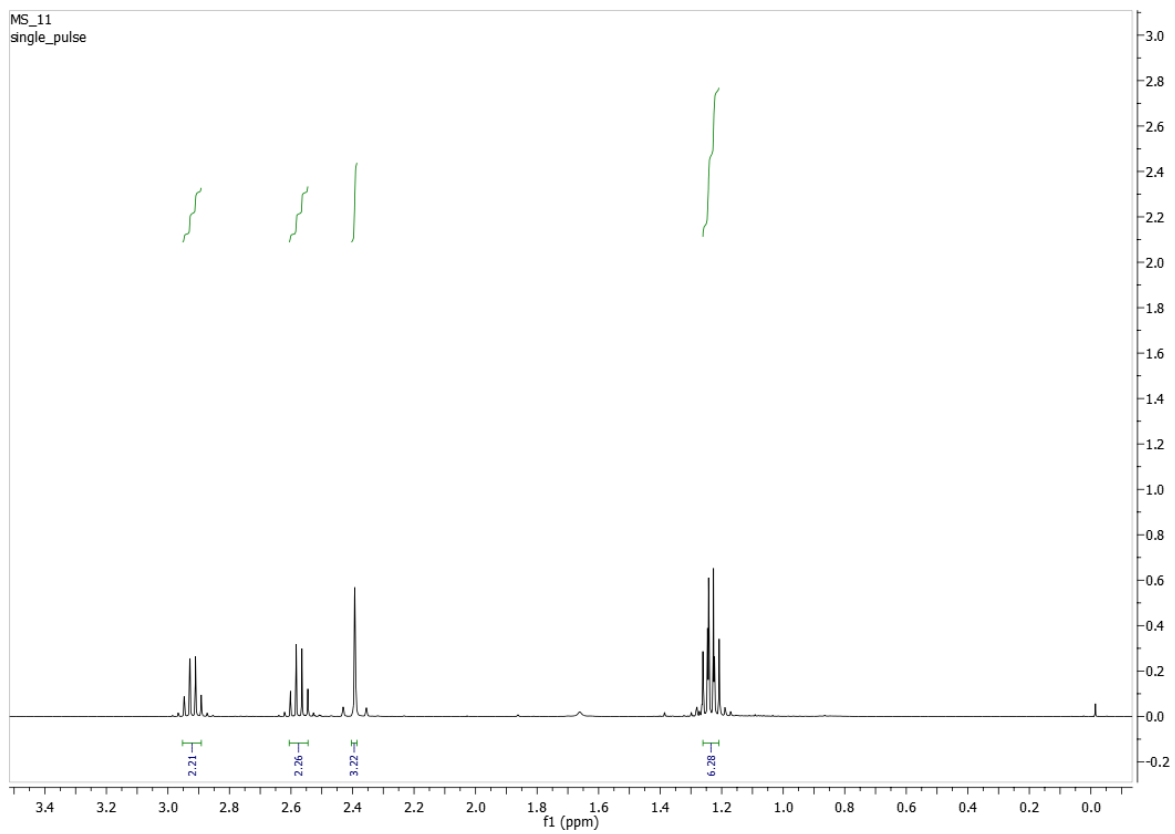


Figure S31: ^1H NMR of (**3k**) (continued)

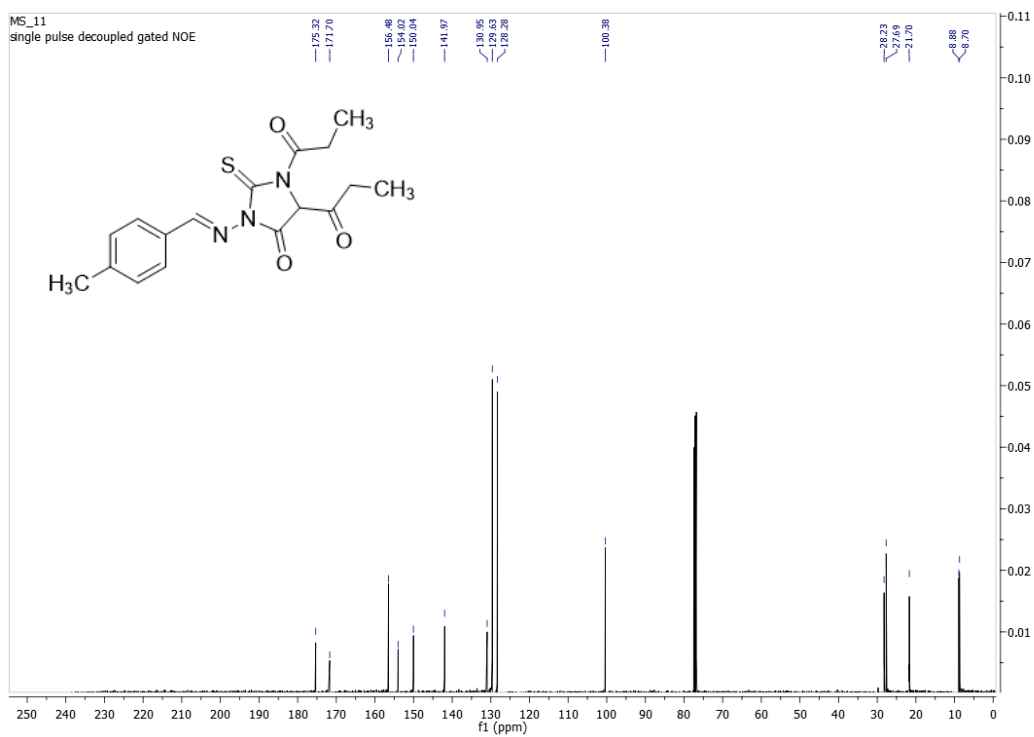


Figure S32: ¹³C NMR of (3k)

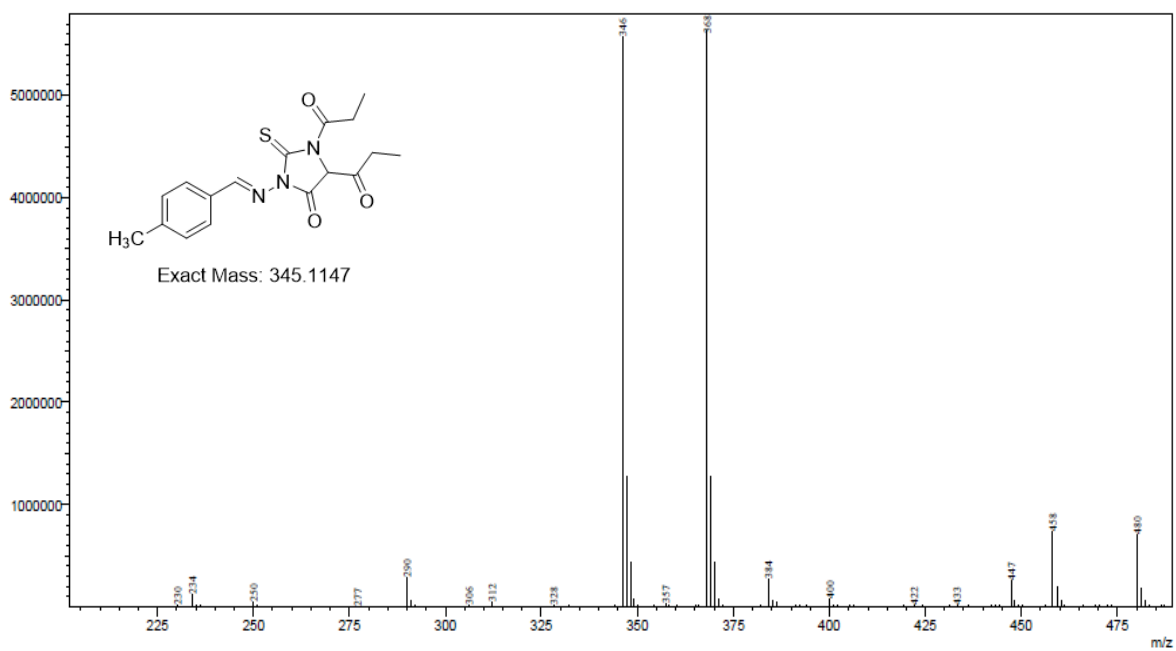


Figure S33: ESI-MS of (3k)

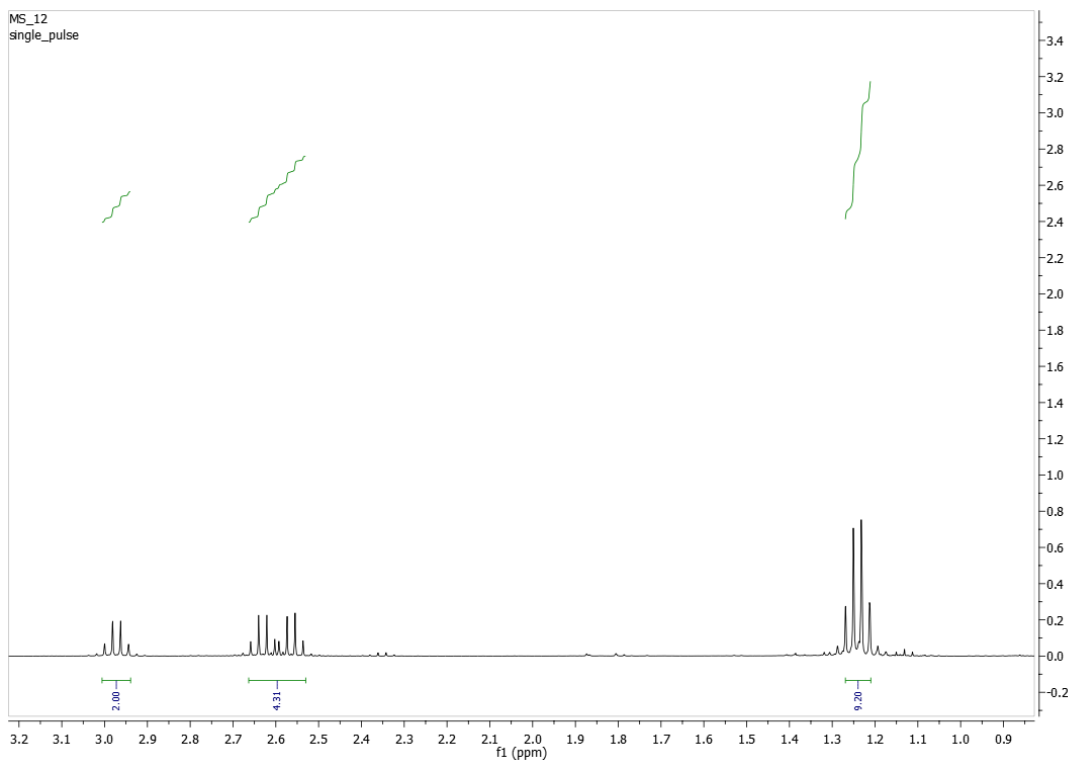
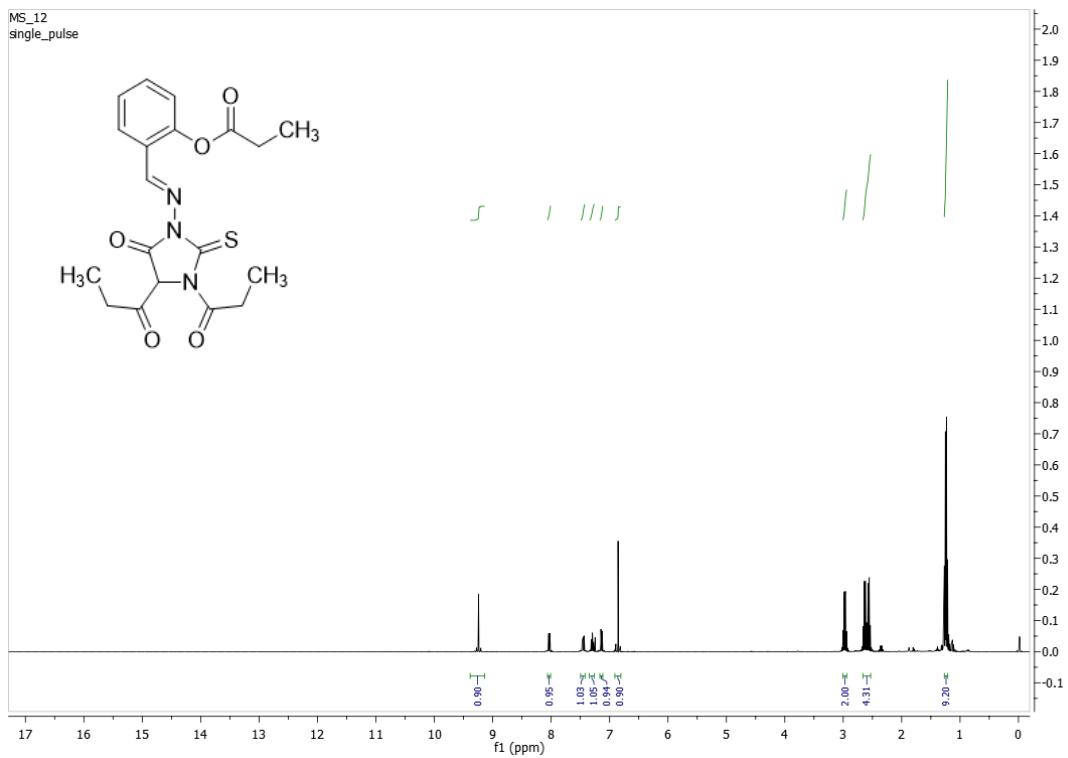


Figure S34: ^1H NMR of (31)

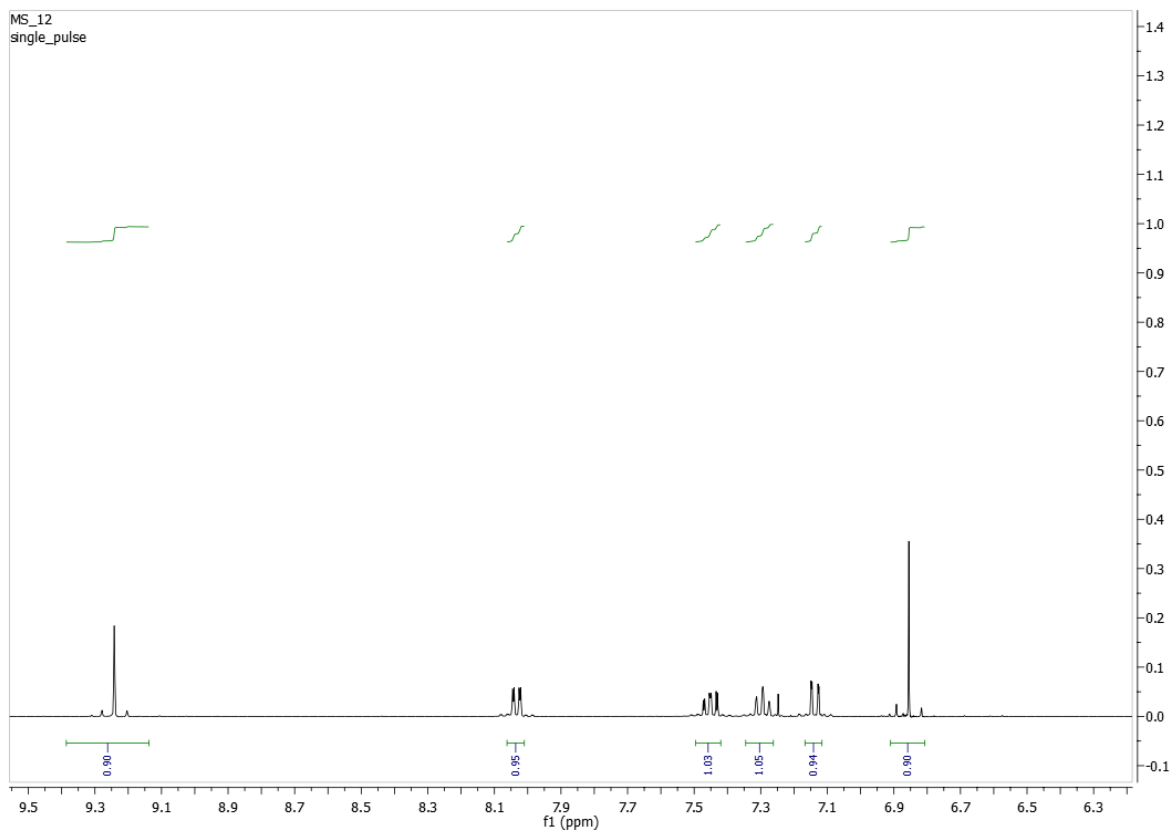


Figure S34: ^1H NMR of (**31**) (Continued)

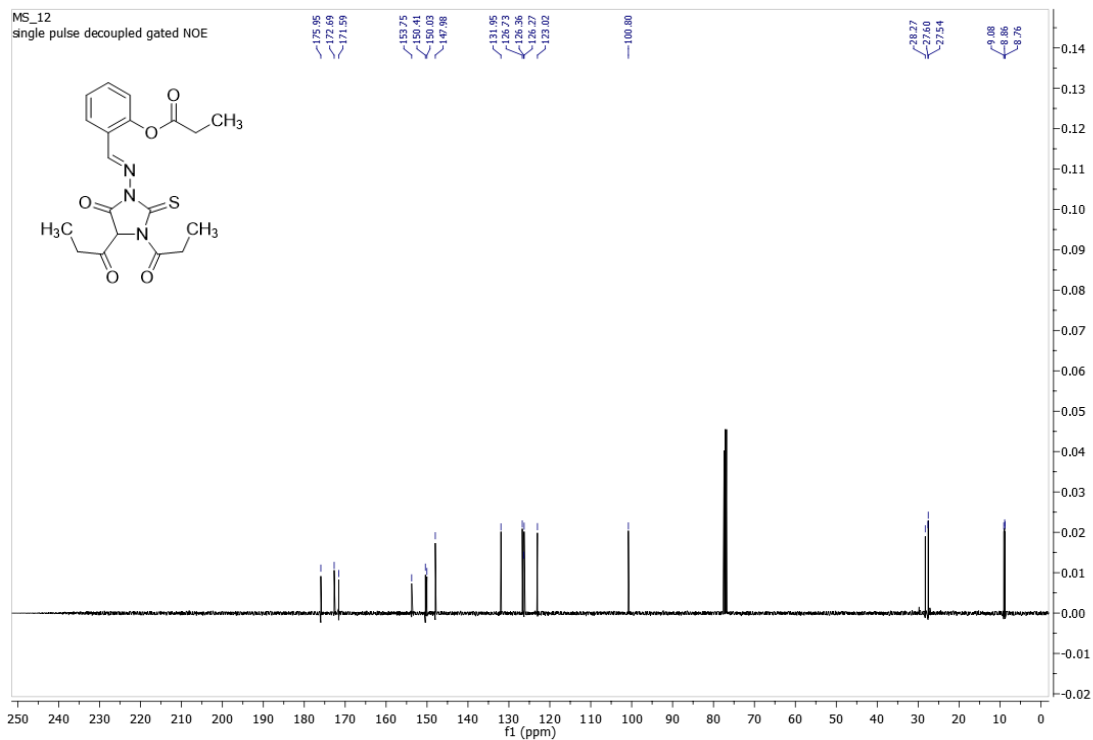


Figure S35: ¹³C NMR of (31)

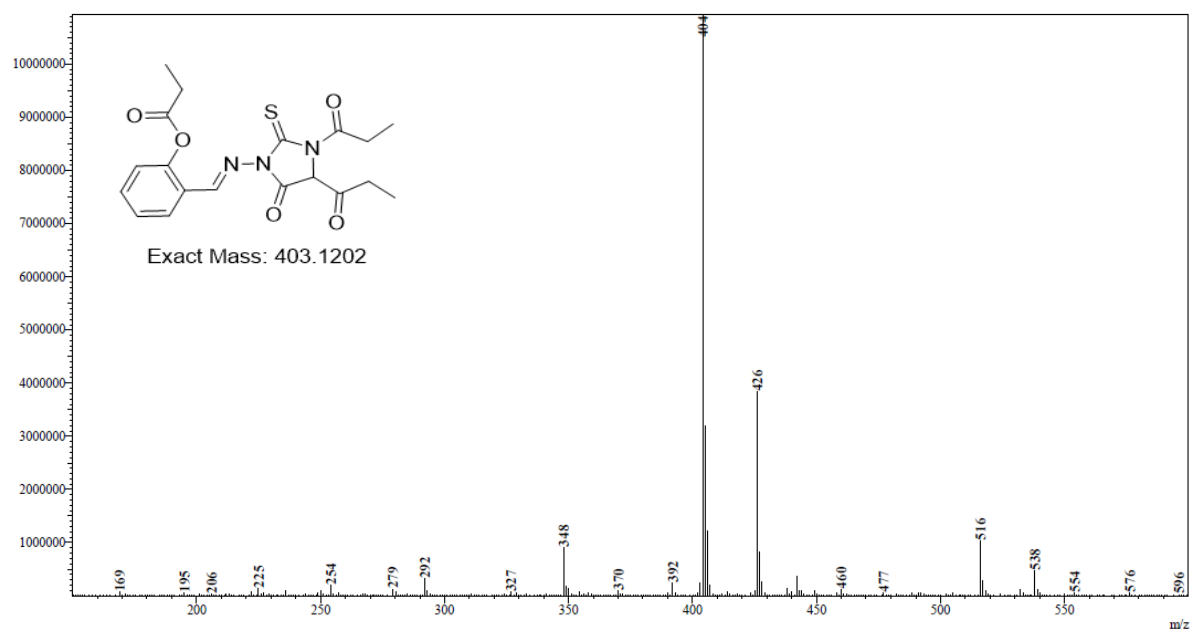


Figure S36: ESI-MS of (31)

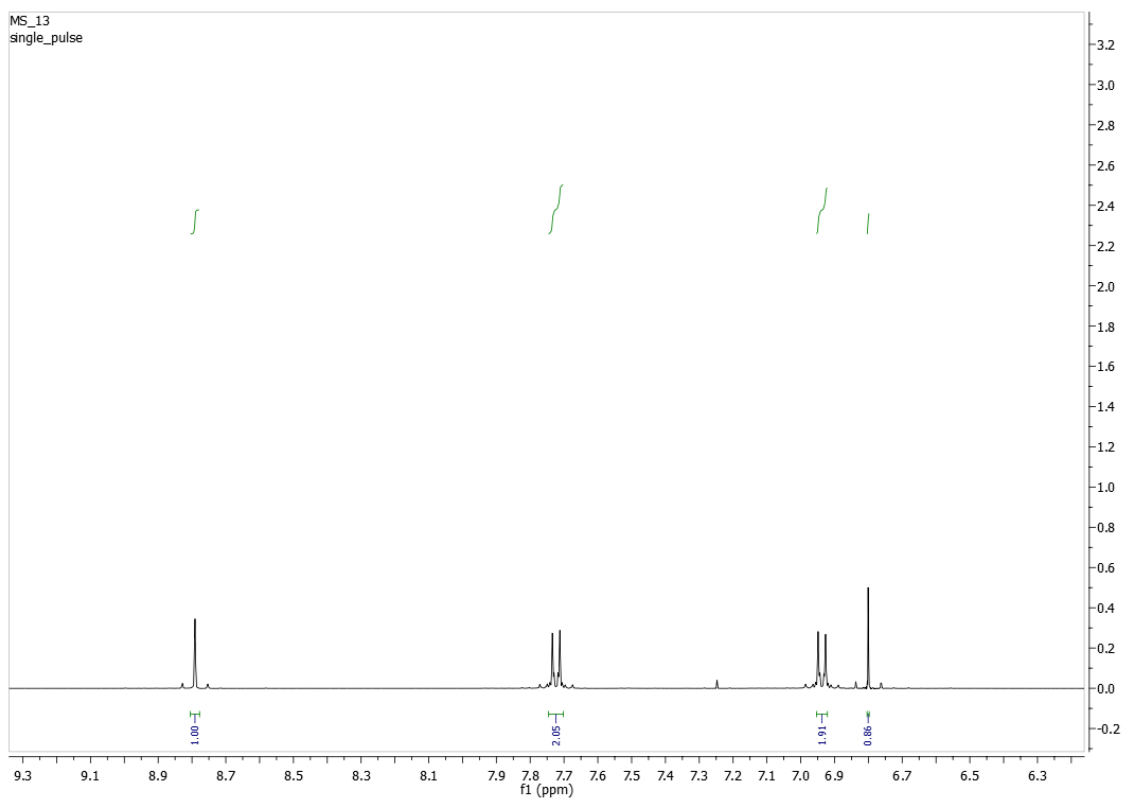
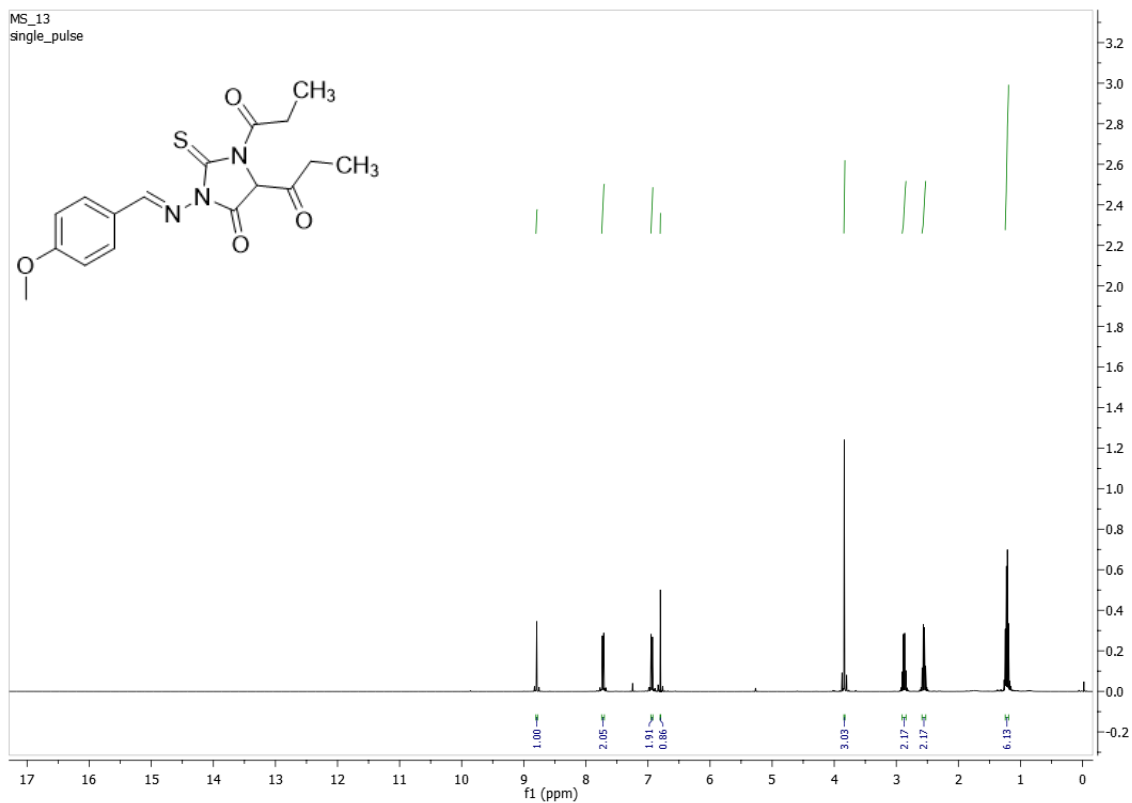


Figure S37: ^1H NMR of (3m)

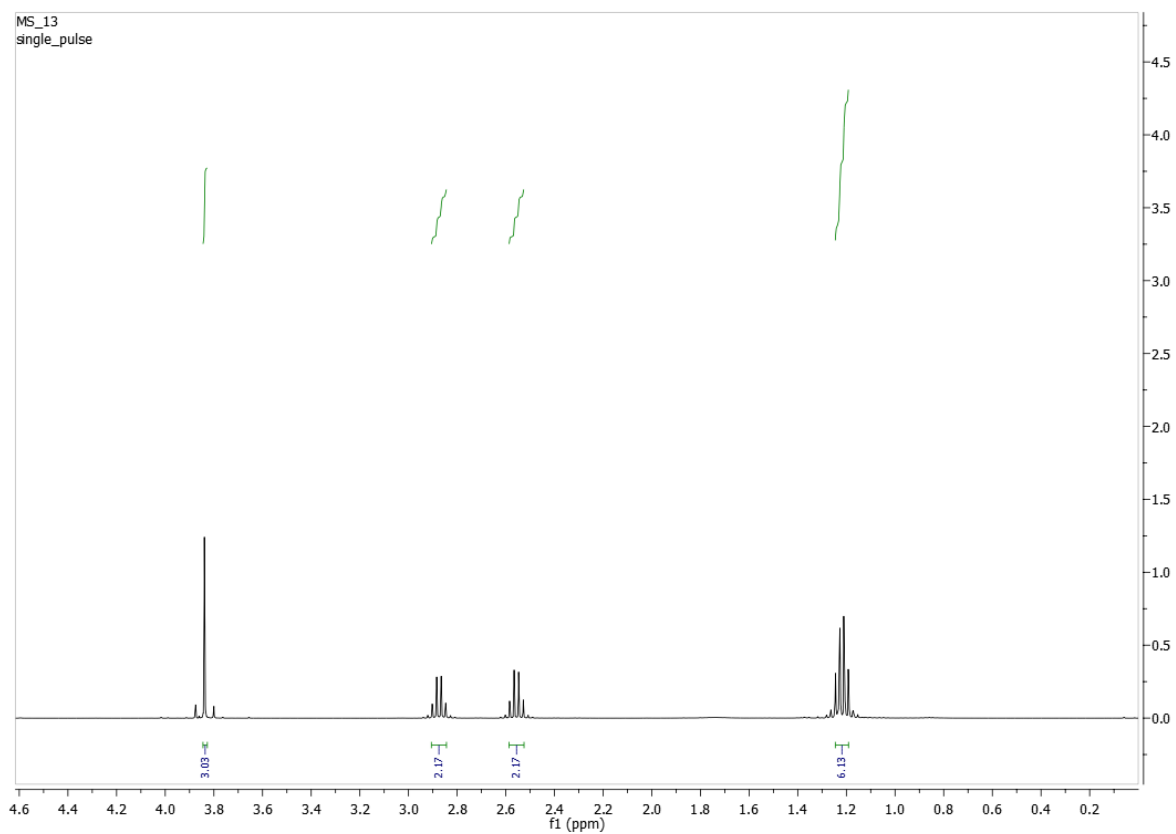


Figure S37: ^1H NMR of (**3m**) (Continued)

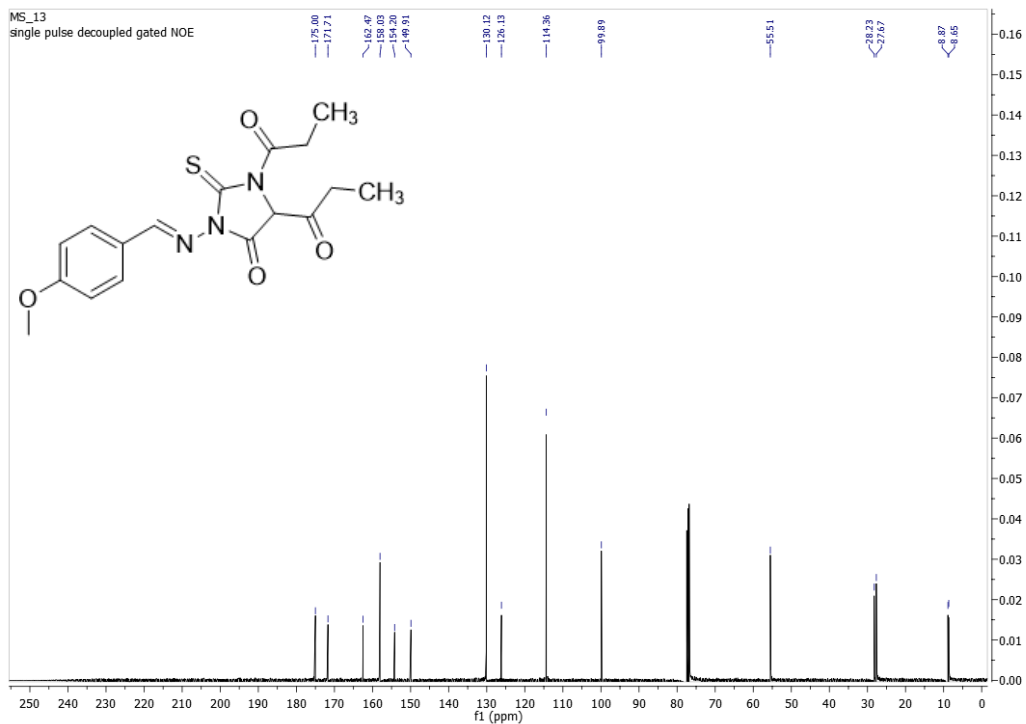


Figure S38: ^{13}C NMR of (3m)

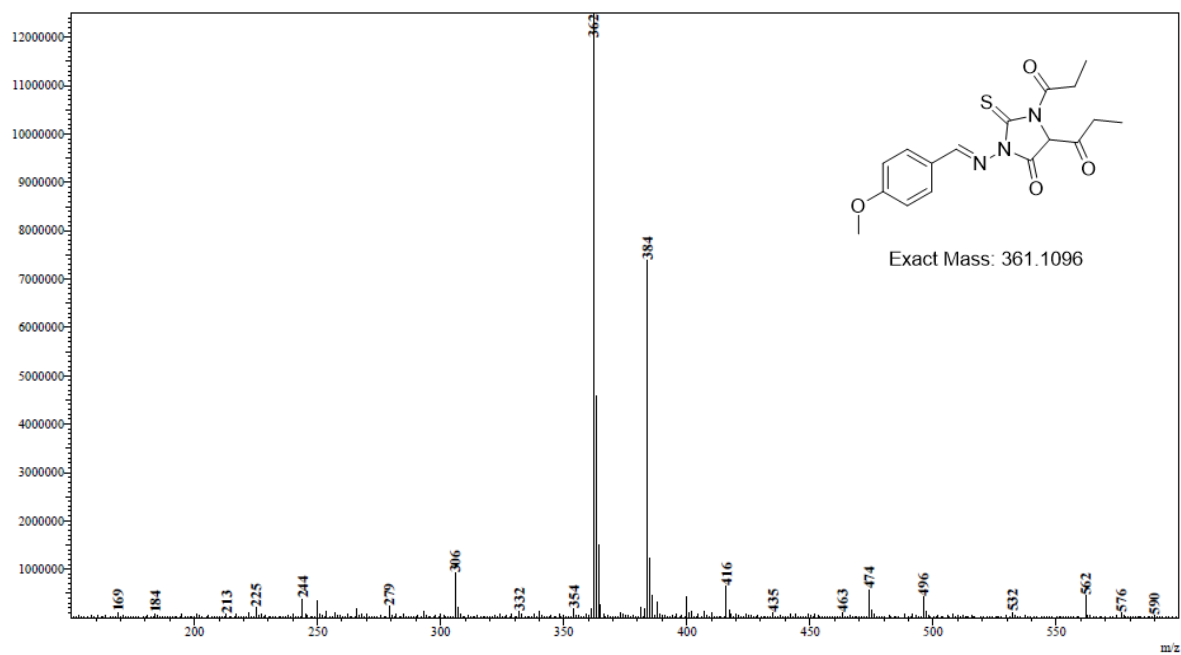


Figure S39: ESI-MS of (3m)

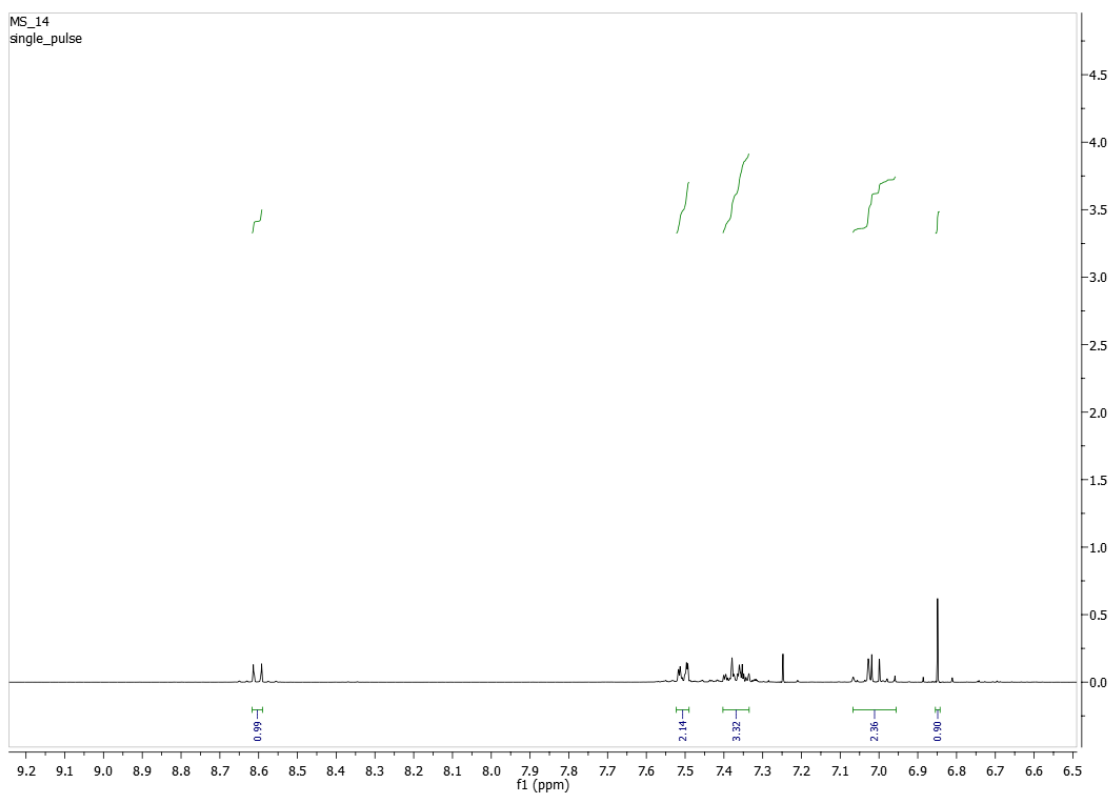
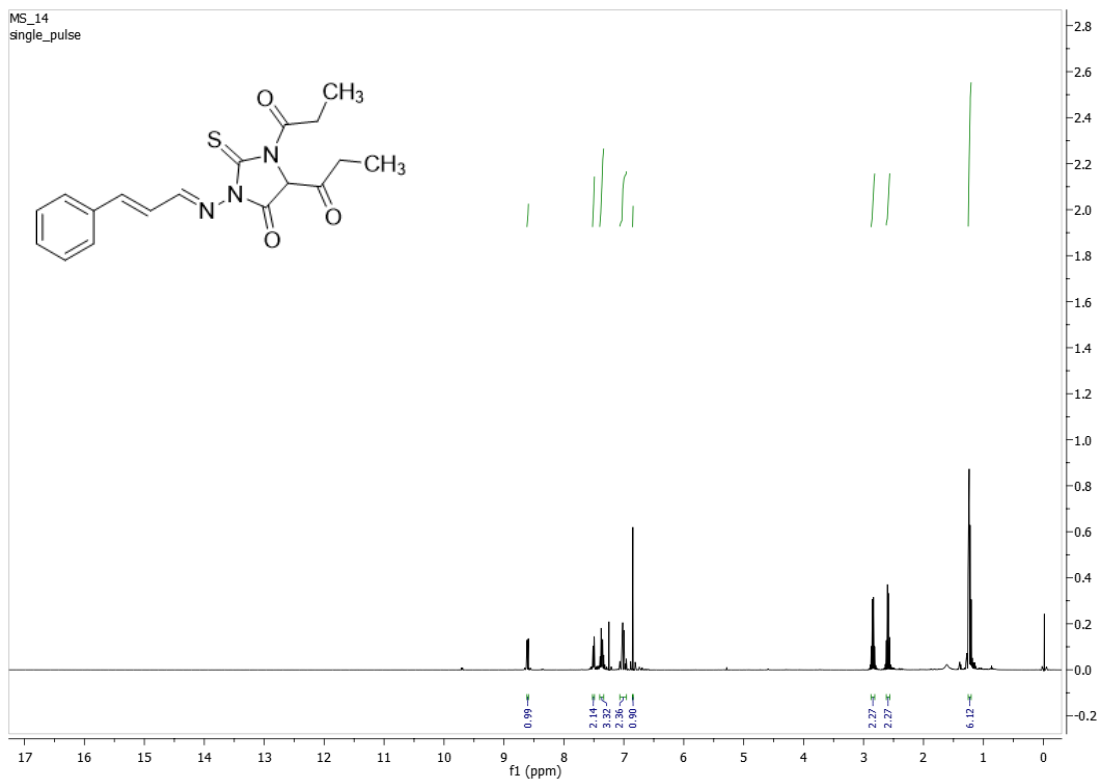


Figure S40: ^1H NMR of (3n)

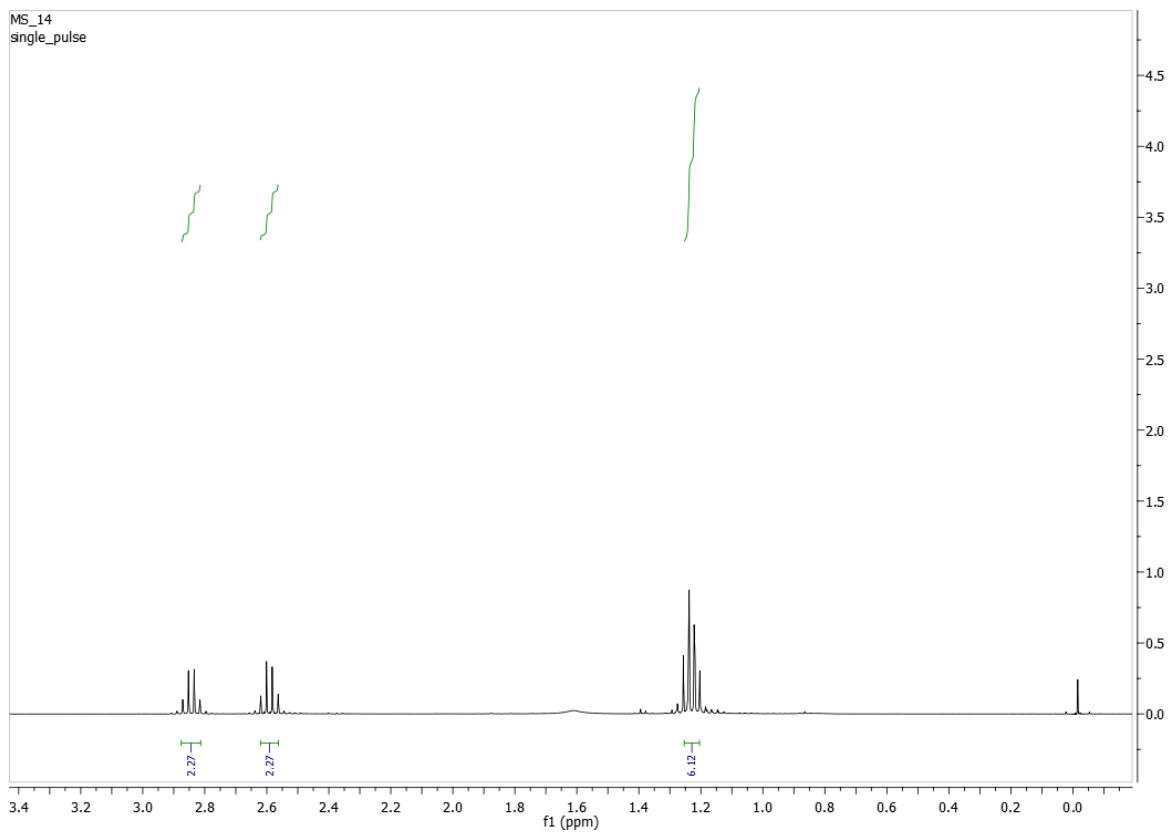


Figure S40: ^1H NMR of (**3n**) (Continued)

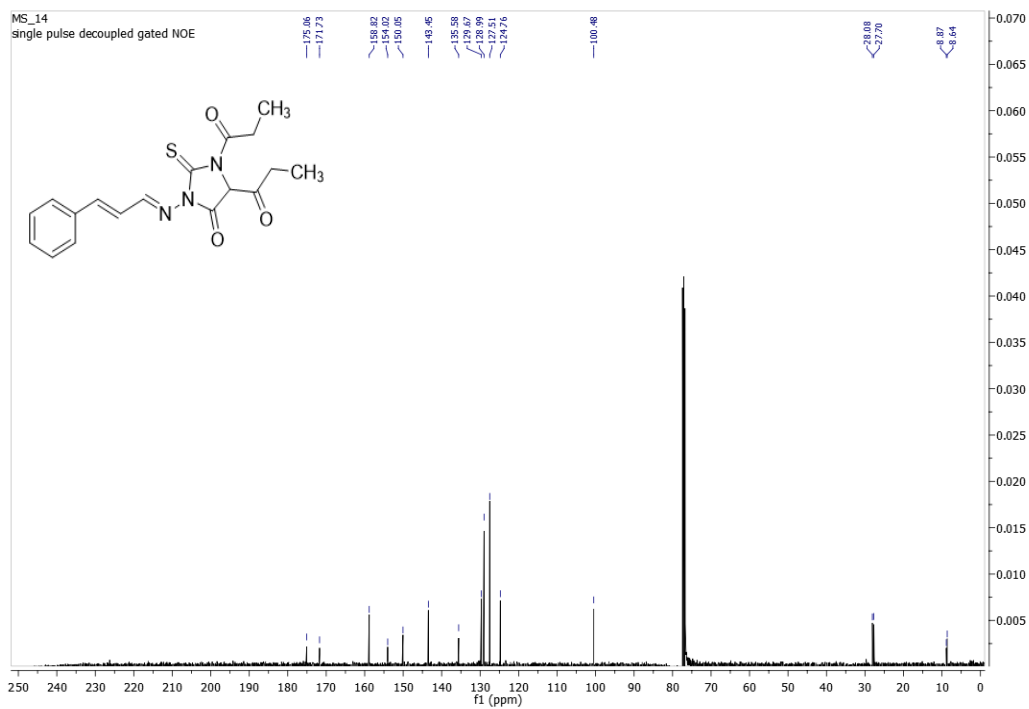


Figure S41: ^{13}C NMR of (3n)

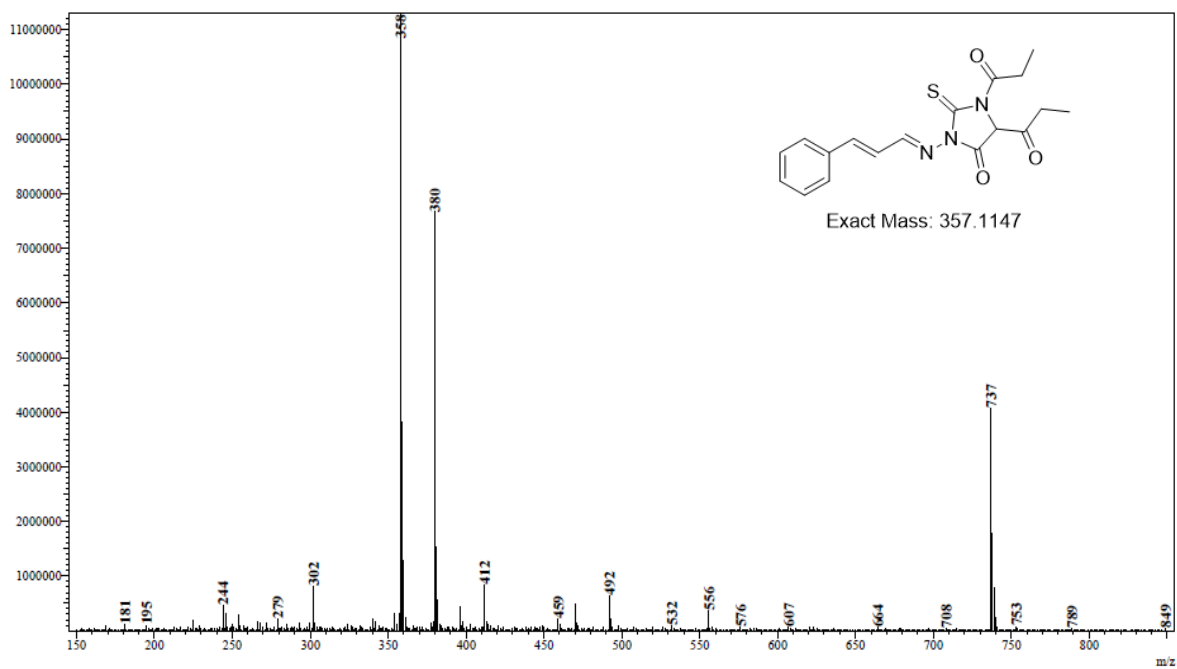


Figure S42: ESI-MS of (3n)

Table S1. *In vitro* antibacterial activity of substituted 2-thioxoimidazolidinone derivatives **3**

Compound	<i>E. faecalis</i> (+ve)			<i>E. coli</i> (-ve)			<i>P. aeruginosa</i> (-ve)			<i>S. aureus</i> (+ve)		
	50 µg/ well	75 µg/ well	100 µg/ well	50 µg/ well	75 µg/ well	100 µg/ well	50 µg/ well	75 µg/ well	100 µg/ well	50 µg/ well	75 µg/ well	100 µg/ well
3a	8±1.1	15±1.6	18±2.2	16±1.9	16±1.9	16±1.9	14±1.6	15±2.1	19±1.7	16±1.9	18±2.7	21±1.9
3b	9±1.6	11±1.7	11±2.7	11±1.6	11±1.6	11±1.6	12±2.8	11±1.9	18±1.8	11±1.6	13±1.4	17±1.5
3c	8±1.2	10±2.6	12±2.2	9±1.1	9±1.1	9±1.1	7±1.1	9±2.6	11±1.6	9±1.1	13±1.5	15±2.1
3d	10±1.4	11±1.6	15±1.9	-	-	-	8±1.3	9±2.4	12±1	-	-	-
3e	10±2.3	11±1.3	15±1.3	7±1	7±1	7±1	11±1	12±2.3	14±1.3	7±1	11±2.1	13±1.3
3f	11±2.2	14±1.5	17±2.5	15±2.7	15±2.7	15±2.7	6±1.4	9±1.6	11±1.6	15±2.7	-	19±2.3
3g	-	-	10±2	9±1.3	9±1.3	9±1.3	-	-	-	9±1.3	11±3.1	13±3
3h	9±1	10±2.1	12±2.2	-	-	-	-	7±1	8±1.4	-	8±1.6	10±1.3
3i	-	-	8±1.8	-	-	-	-	-	11±3	-	-	-
3j	14±1	15±3	17±2	10±1	10±1	10±1	16±1	18±1	9±2	10±1	11±1	13±2
3k	-	-	7±2.1	-	-	-	-	-	8±1.3	-	-	-
3l	8±3	12±1	14±1	7±1	7±1	7±1	9±1	11±2	12±2	7±1	11±3	13±1
3m	13±2	15±2	17±2	9±1	9±1	9±1	15±1	17±2	8±1	9±1	10±1	12±1
3n	-	-	-	-	-	-	6±1	8.6±1	11±1.6	-	-	9±1
	28±2	30±3	33±2	35±2	35±2	35±2	34±2	38±3	33±1	35±2	41±1	44±1
Chloramphenicol	6.3±0.4	6.2±0.2	6.1±0.3	6.2±0.2	6.2±0.2	6.2±0.2	6.3±0.2	6.2±0.1	6.4±0.3	6.2±0.2	6.2±0.4	6.2±0.1
	6.3±0.4	6.2±0.2	6.1±0.3	6.2±0.2	6.2±0.2	6.2±0.2	6.3±0.2	6.2±0.1	6.4±0.3	6.2±0.2	6.2±0.4	6.2±0.1