

Electronic Supplementary Information

3-*O*-Carbamoyl-5,7,20-*O*-trimethylsilybins: Synthesis and preliminary antiproliferative evaluation

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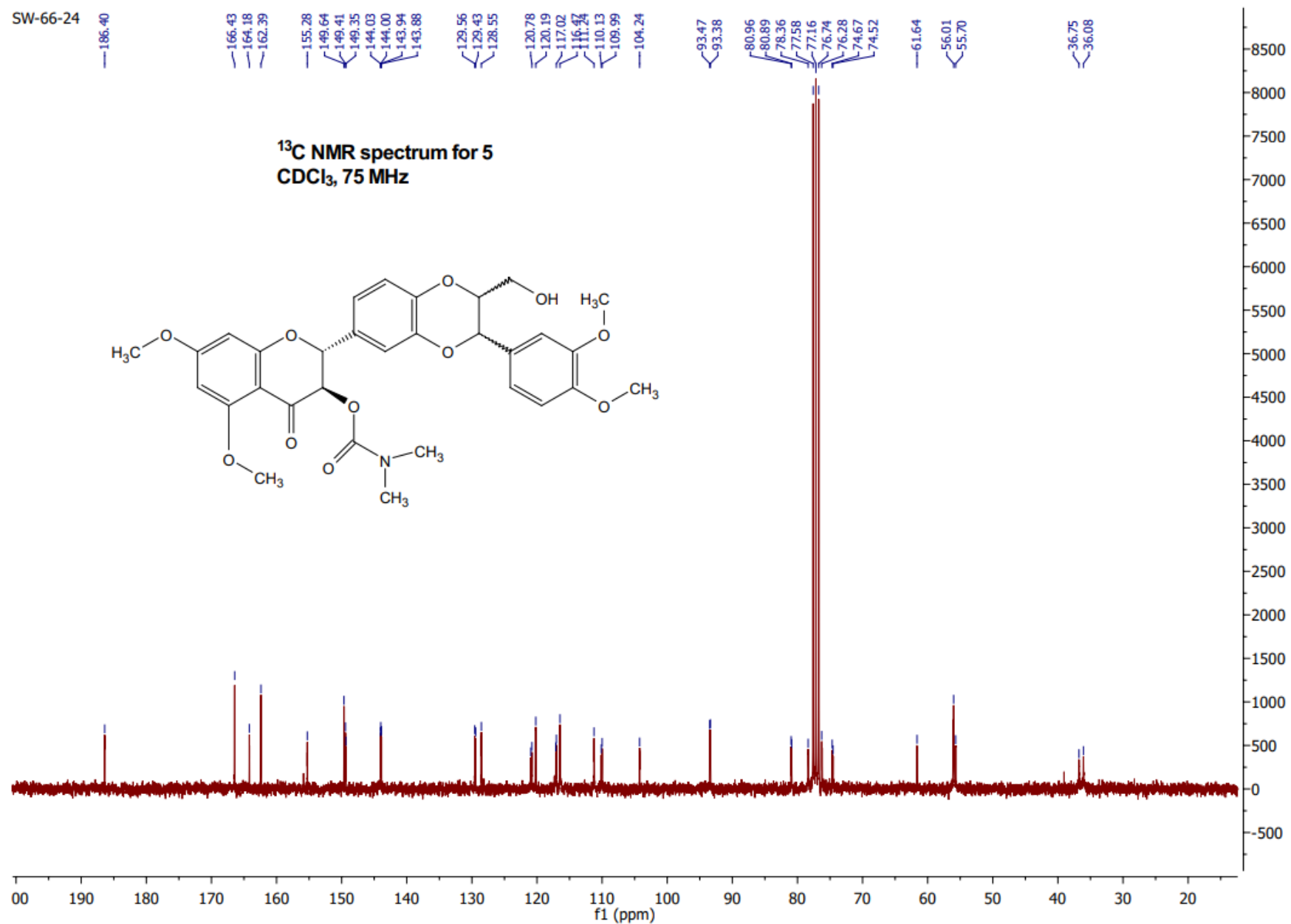


Figure S2: ^{13}C NMR spectrum of **5** in CDCl_3

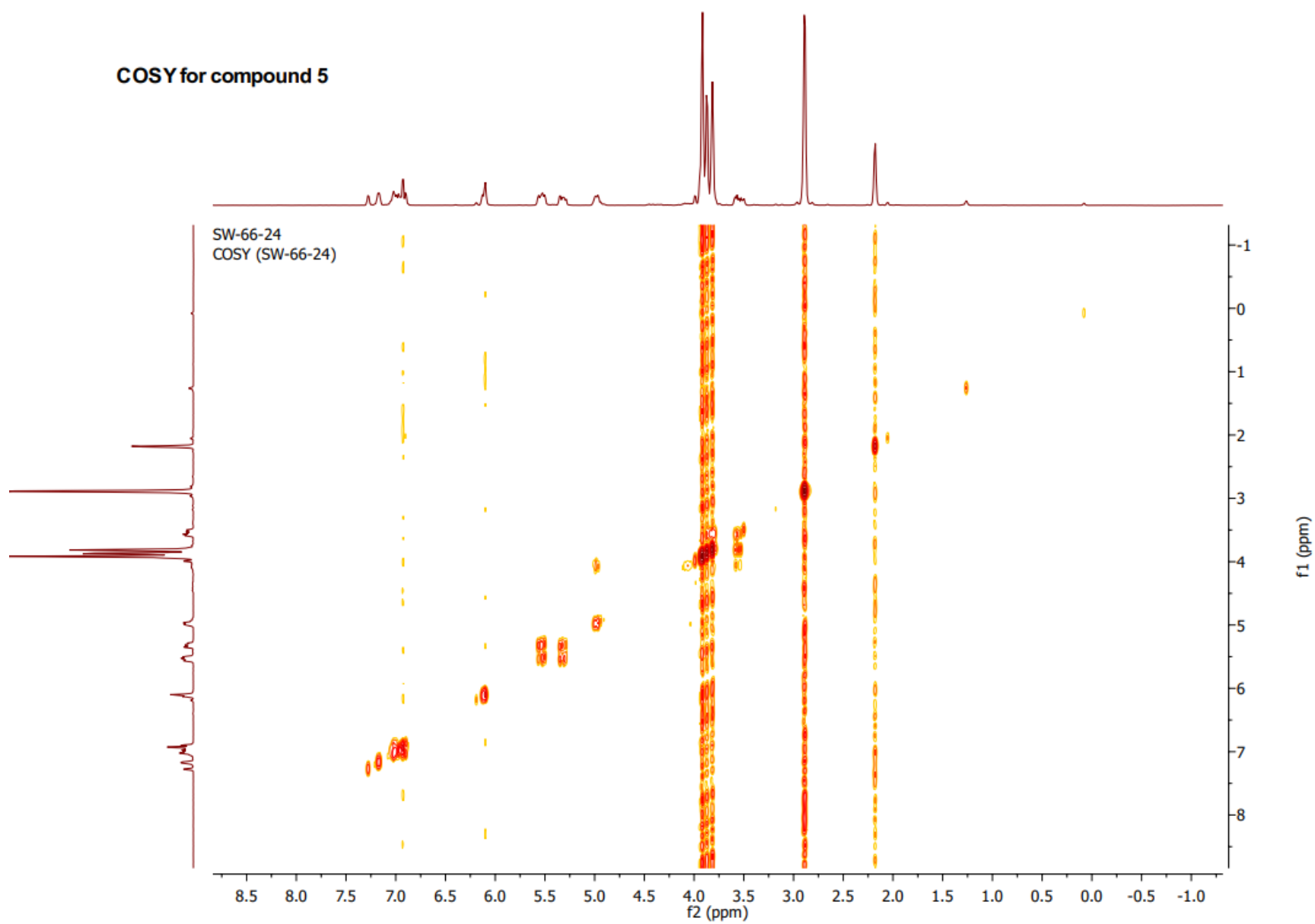


Figure S3: COSY spectrum of **5** in CDCl_3

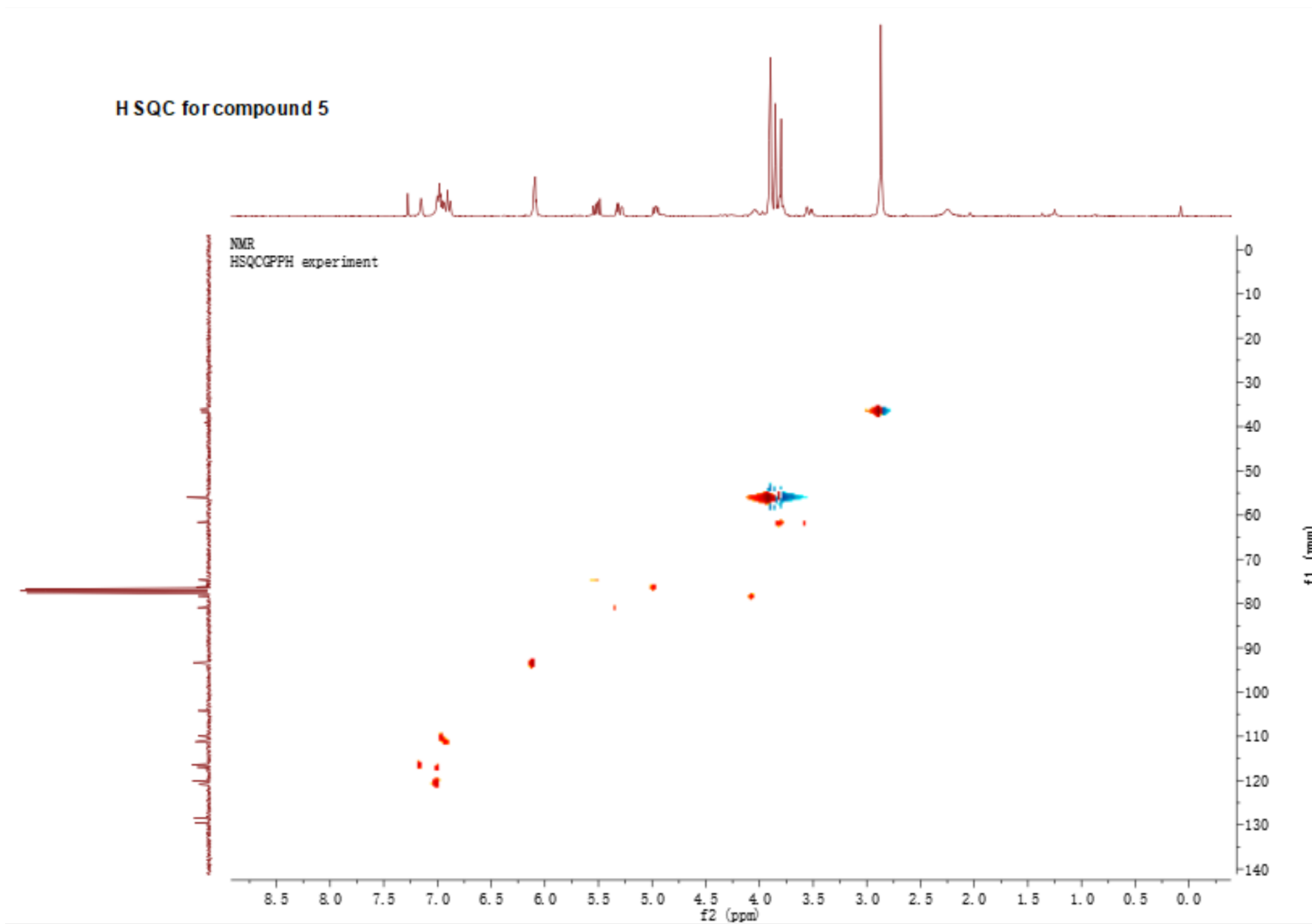


Figure S4: HSQC spectrum of **5** in CDCl_3

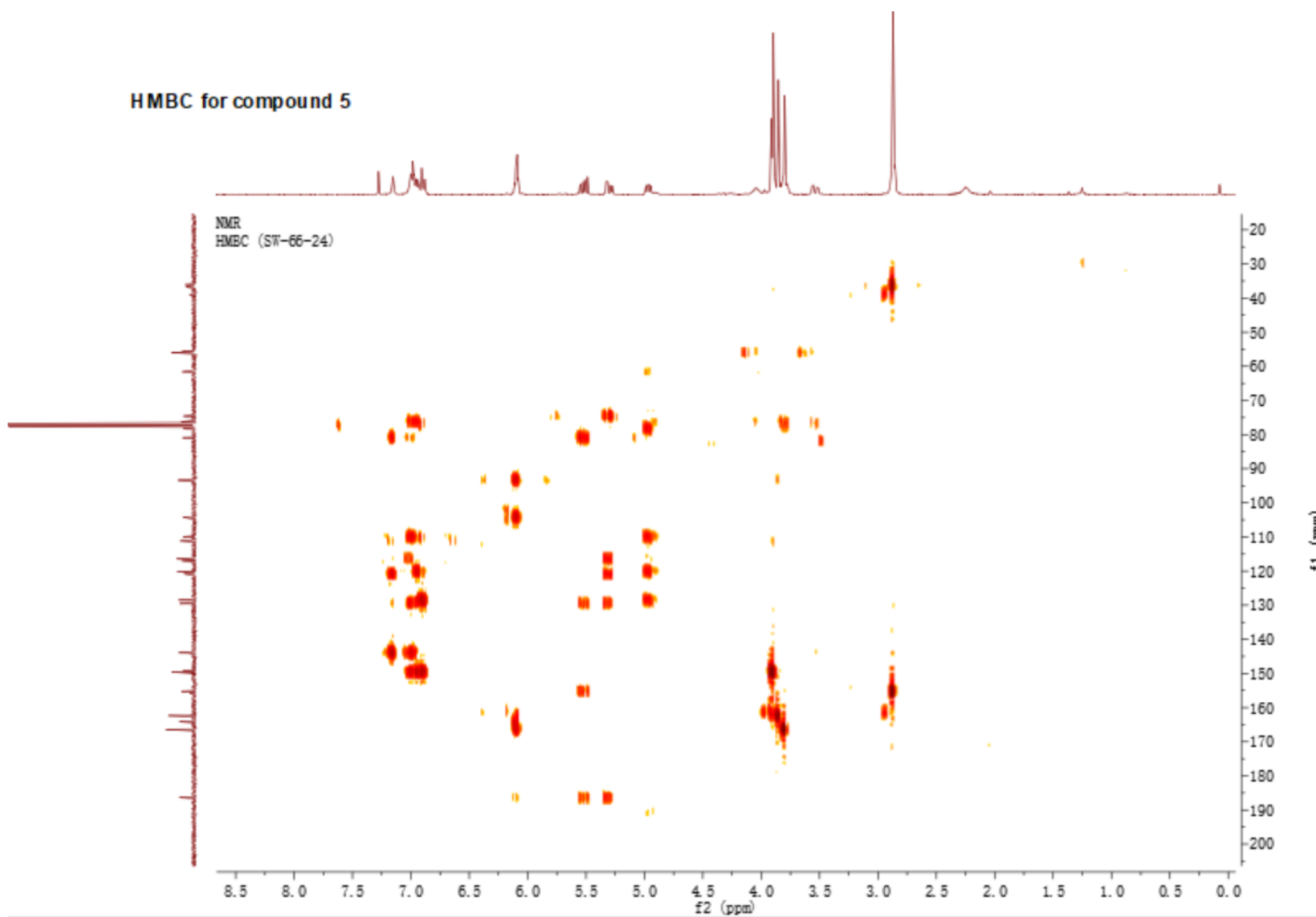


Figure S5: HMBC spectrum of **5** in CDCl_3

compds	Mol. Formula	Exact Mass	M+H	Observed	delta	ppm
QGC-68-136	C ₃₁ H ₃₃ NO ₁₁	595.2054	596.2132	596.2128	-0.0004	-0.69

qgc-68-136 #2178-3544 RT: 12.82-19.90 AV: 1367 NL: 3.63E8
T: FTMS + c NSI Full ms [150.0000-1000.0000]

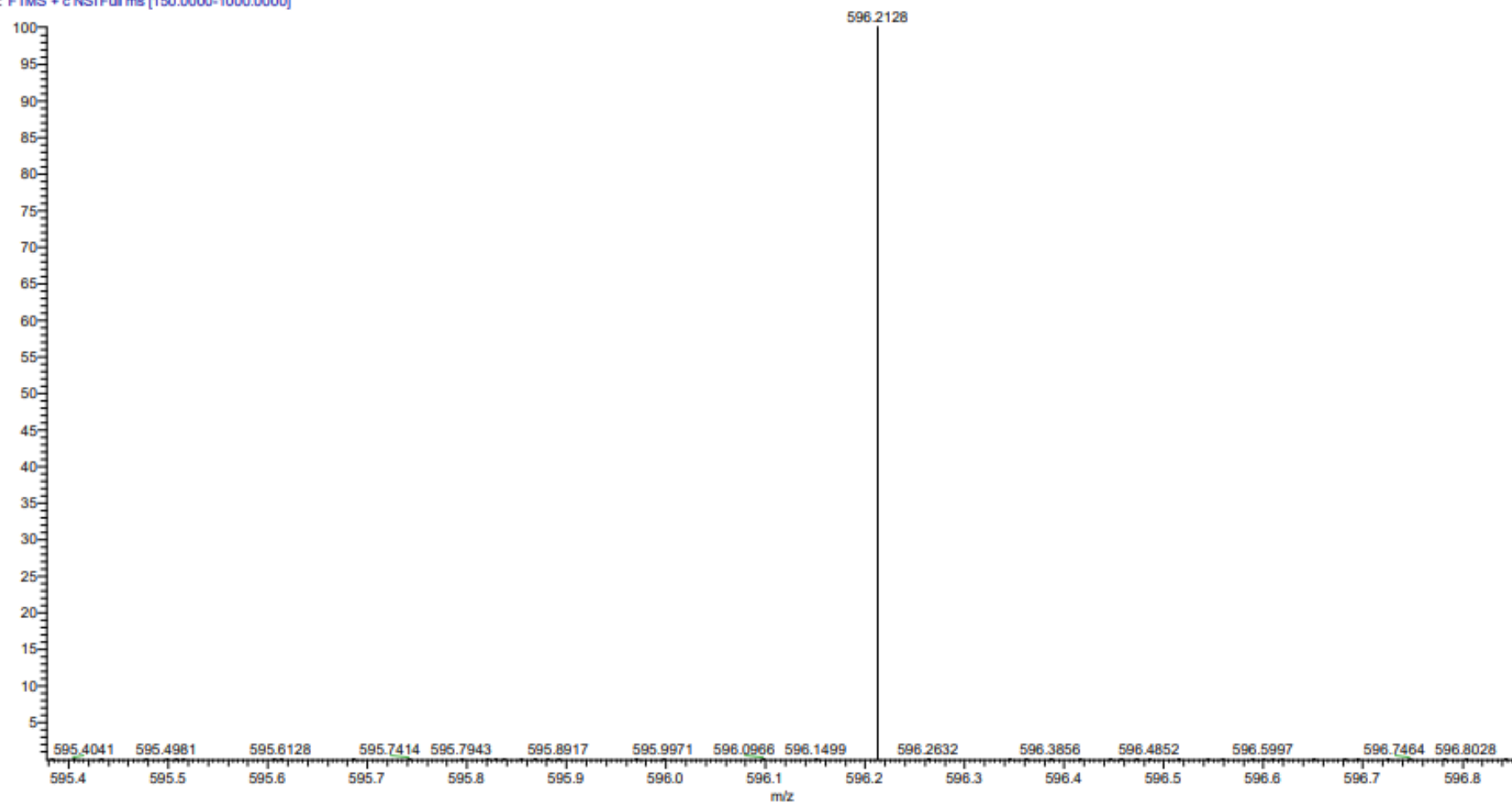
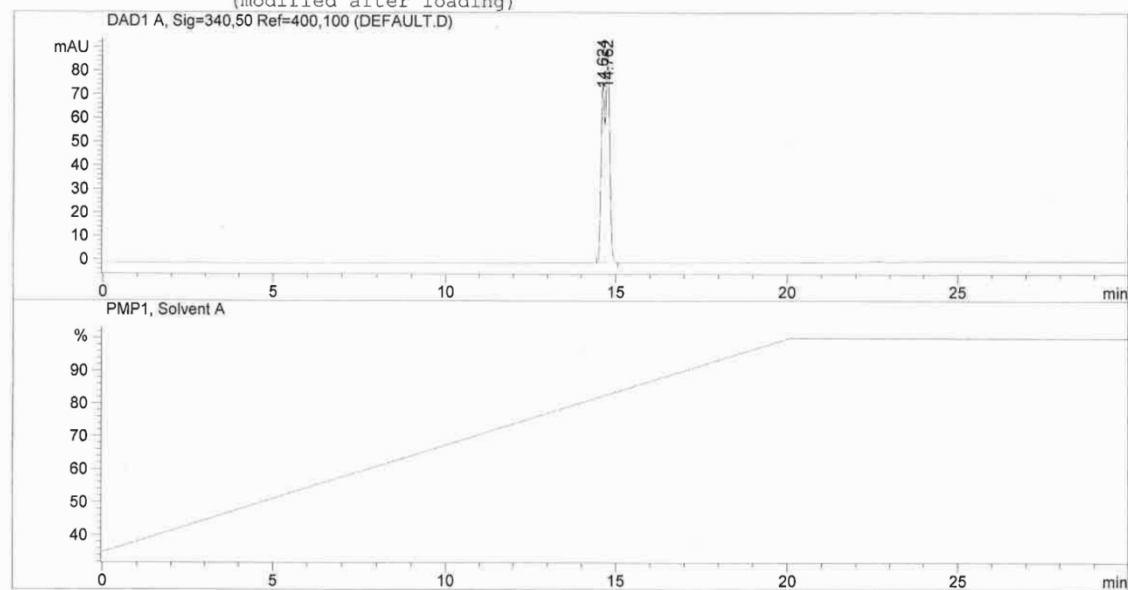


Figure S6: High resolution mass spectrum of **5**

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Signal 1: DAD1 A, Sig=340,50 Ref=400,100

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2	14.762	VB	0.1216	724.78864	90.29533	57.3214

Totals : 1264.42865 166.52280

Results obtained with enhanced integrator!

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*** End of Report ***

Figure S7: HPLC chromatogram of 5

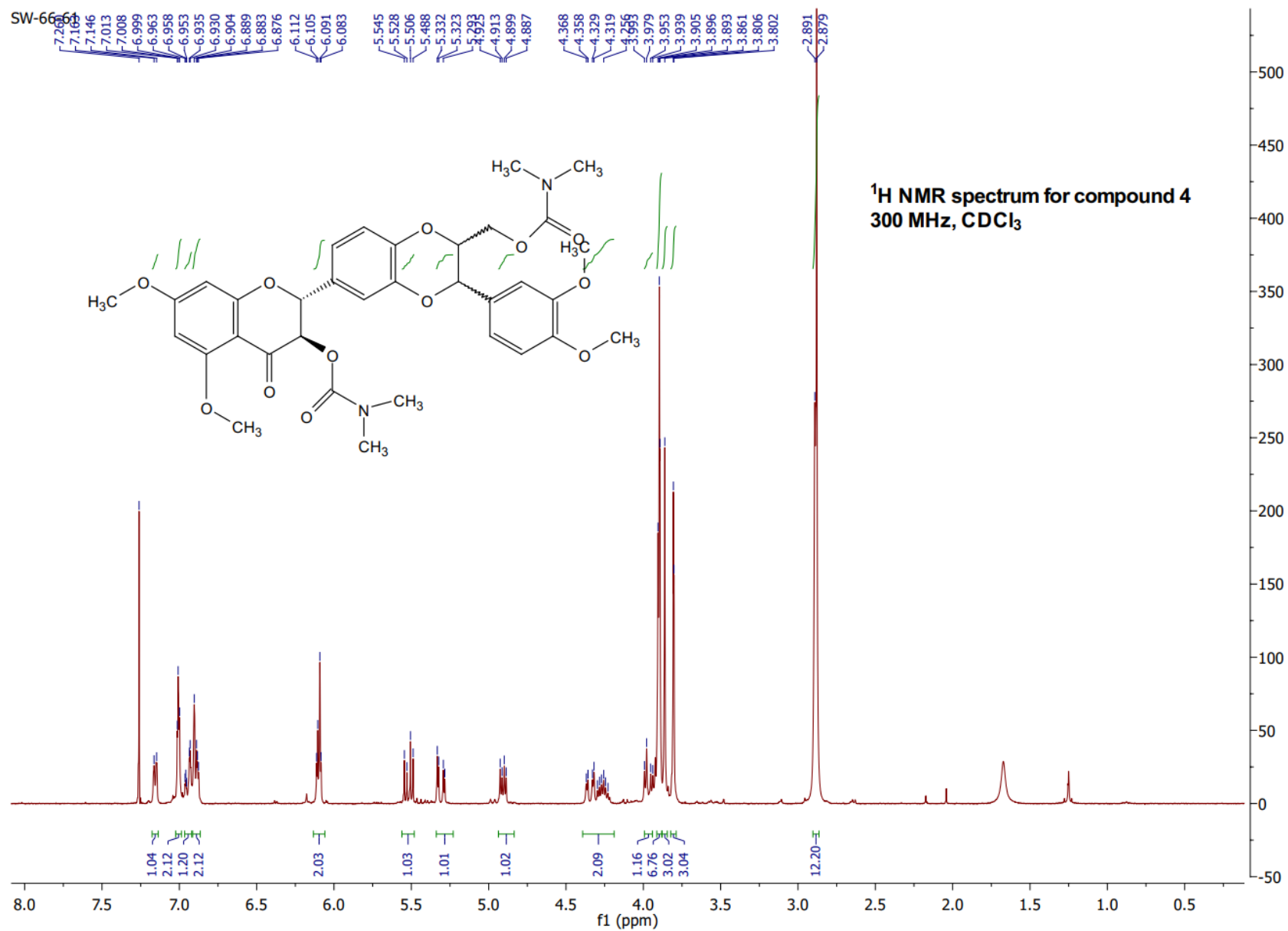


Figure S8: ¹H NMR spectrum of **4** in CDCl₃

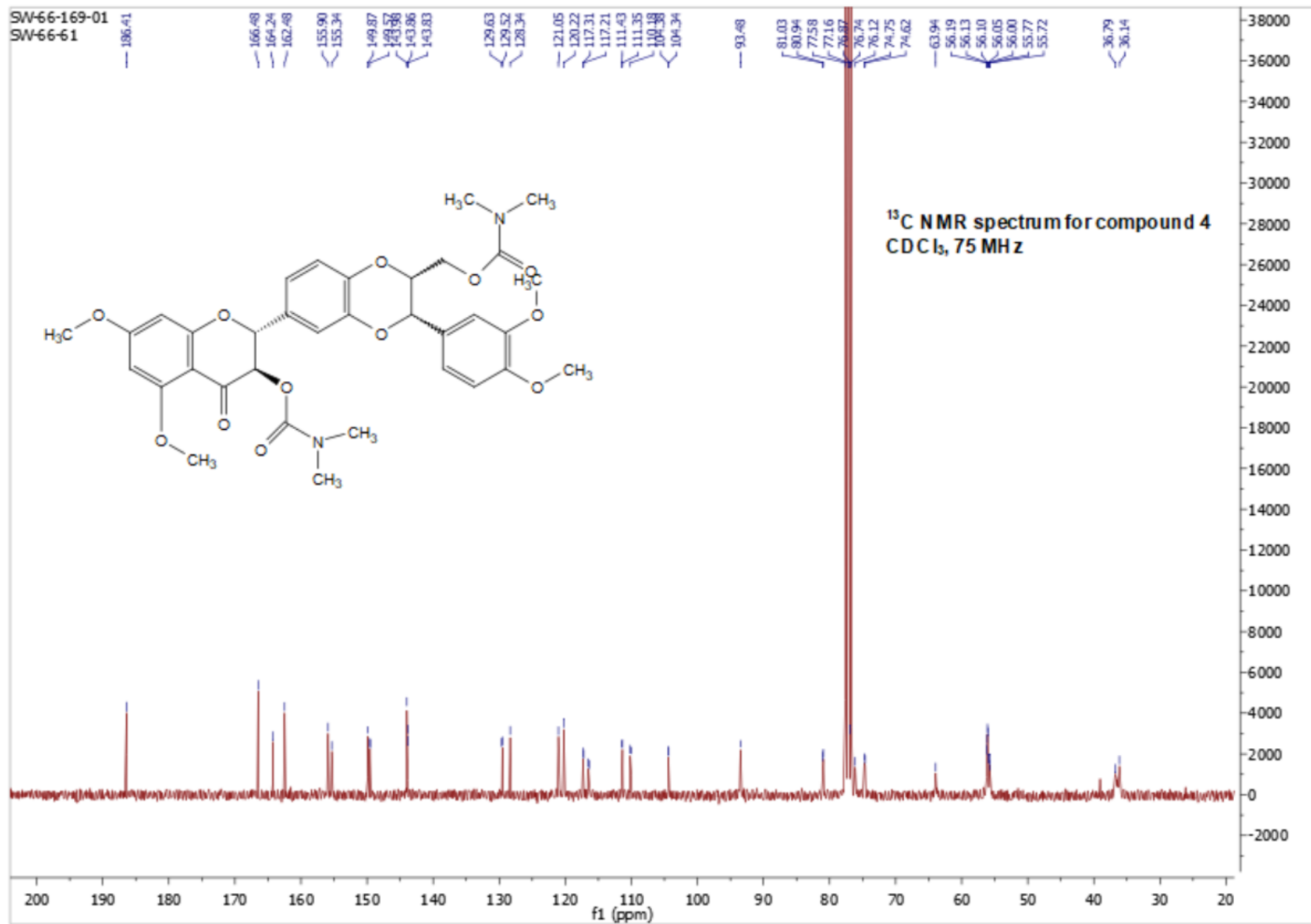


Figure S9: ¹³C NMR spectrum of 4 in CDCl₃

compds	Mol. Formula	Exact Mass	M+H	Observed	delta	ppm
SW-66-61	C ₃₄ H ₃₈ N ₂ O ₁₂	666.2425	667.2503	667.2498	-0.0005	-0.81

SW-66-61 #2203-2839 RT: 11.59-14.92 AV: 637 NL: 2.36E8
T: FTMS + c NSI Full ms [150.0000-1000.0000]

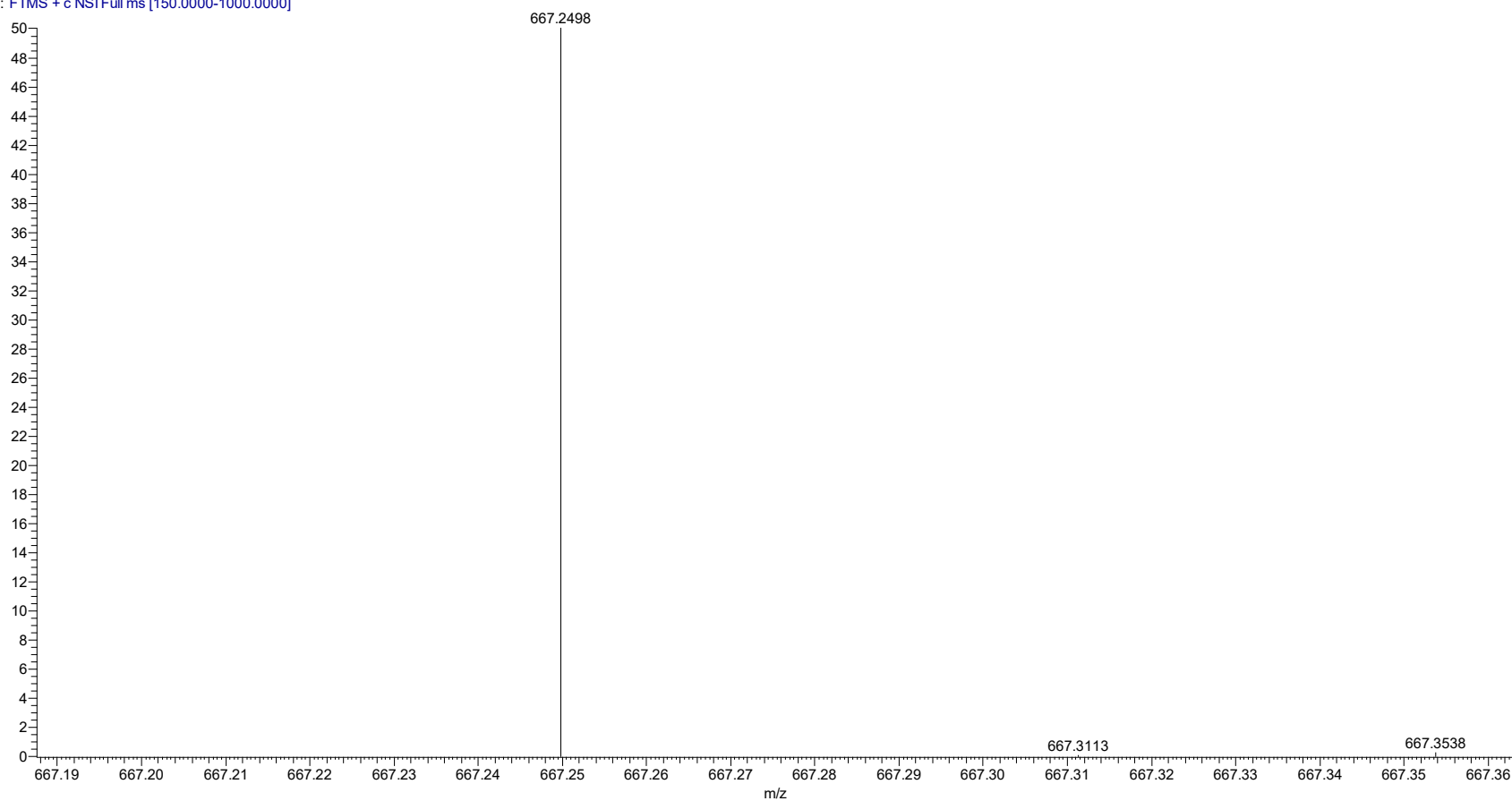
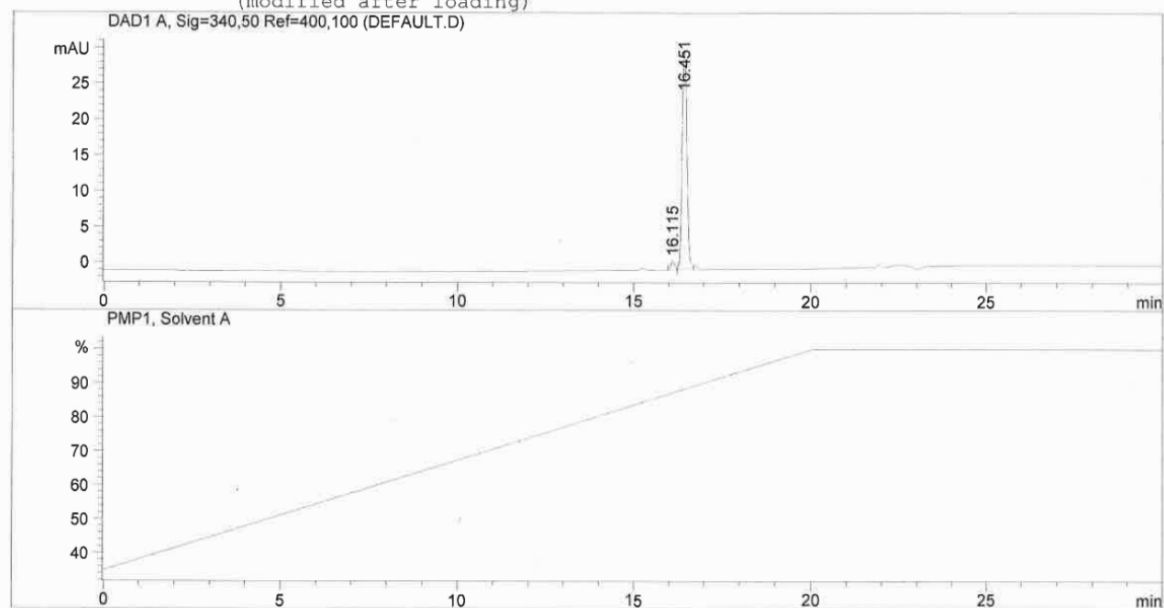


Figure S10: High resolution mass spectrum of **4**


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Signal 1: DAD1 A, Sig=340,50 Ref=400,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	16.115	PV	0.1108	9.05094	1.27589	3.0535
2	16.451	VB	0.1501	287.36374	30.44066	96.9465

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Totals :                296.41468  31.71655
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Results obtained with enhanced integrator!

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Figure S11: HPLC chromatogram of 4

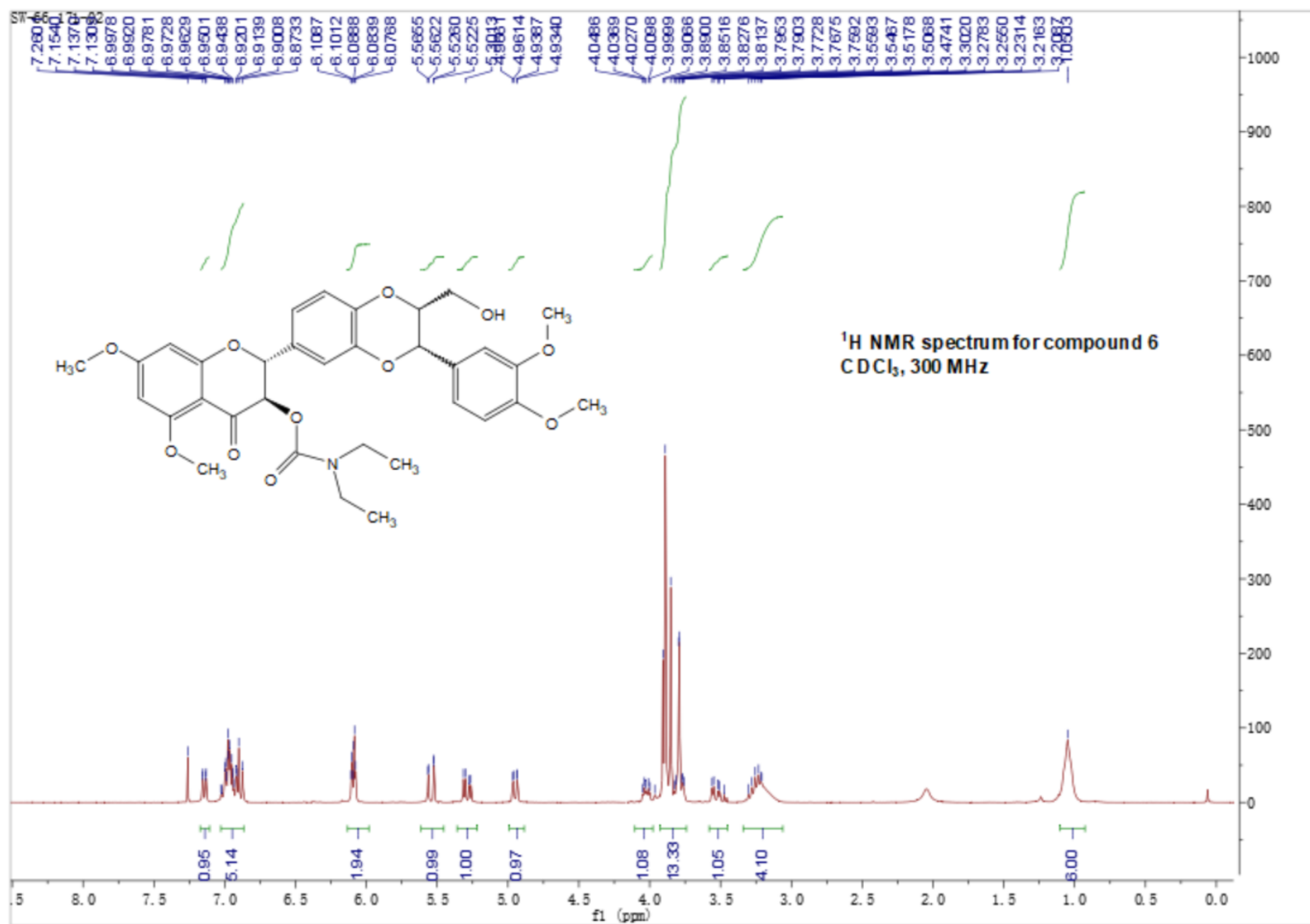


Figure S12: ¹H NMR spectrum of **6** in CDCl₃

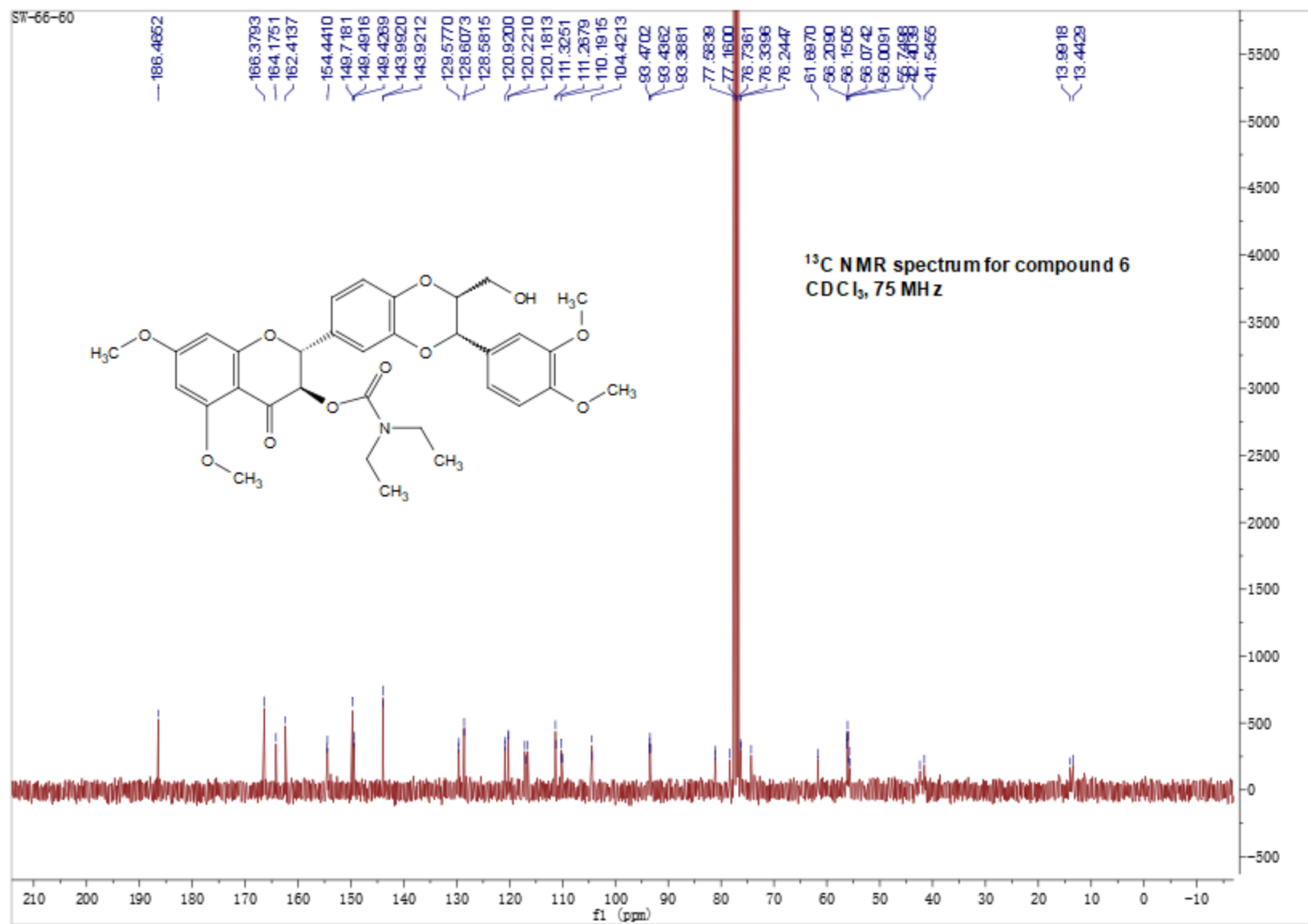


Figure S13: ¹³C NMR spectrum of 6 in CDCl₃

compds	Mol. Formula	Exact Mass	M+H	Observed	delta	ppm
SW-66-60	C33H37NO11	623.2367	624.2445	624.2443	-0.0002	-0.34

SW-66-60 #2101-2856 RT: 11.05-15.01 AV: 756 NL: 2.46E8
T: FTMS + c NSI Full ms [150.0000-1000.0000]

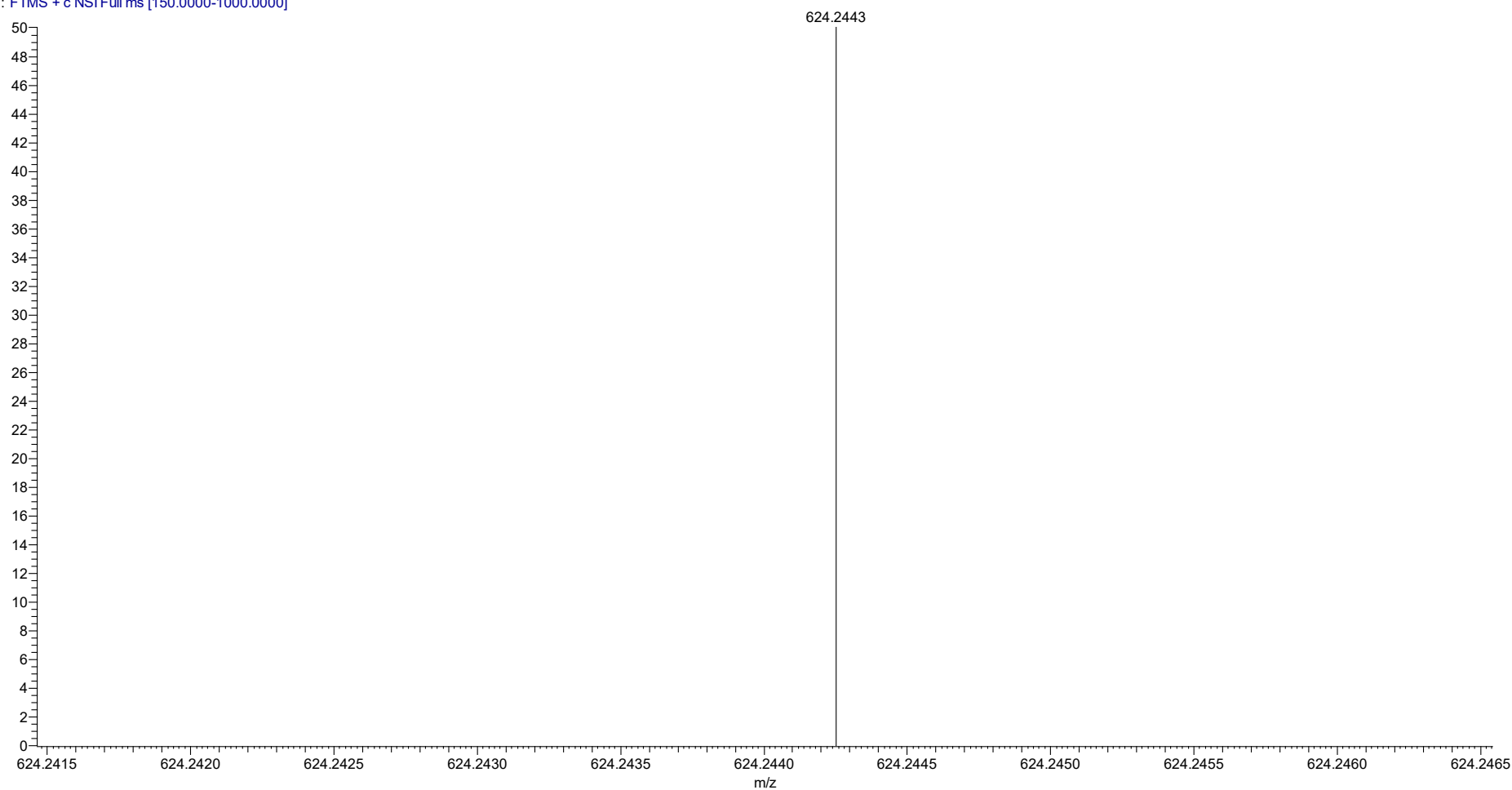
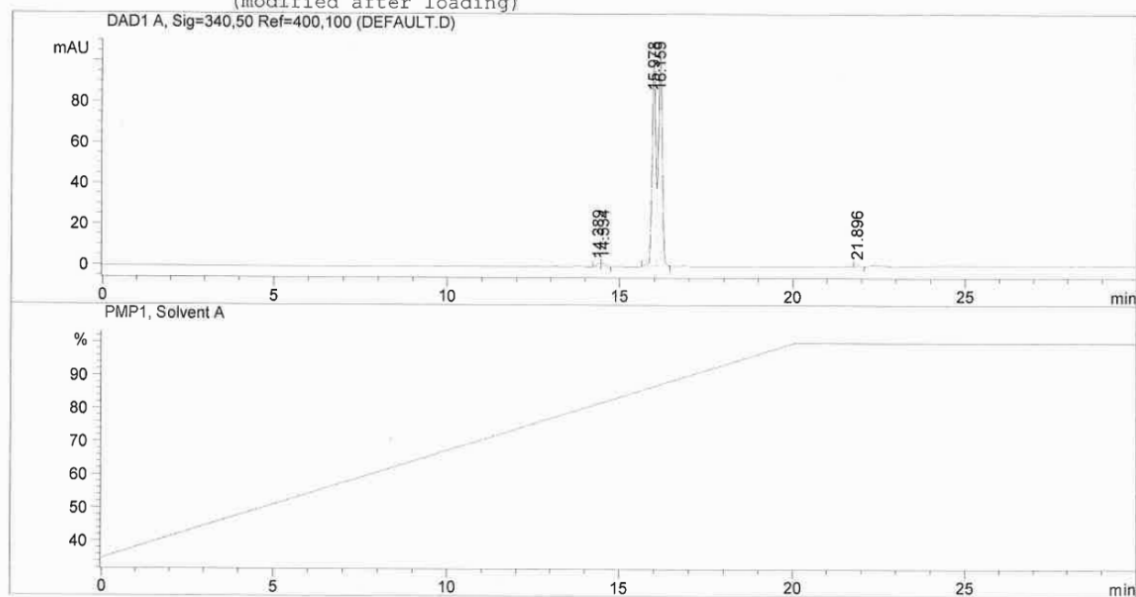


Figure S14: High resolution mass spectrum of **6**

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Area Percent Report
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Signal 1: DAD1 A, Sig=340,50 Ref=400,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	14.389	PV	0.1156	12.35465	1.64579	0.7808
2	14.534	VB	0.1193	13.75756	1.72044	0.8695
3	15.978	BV	0.1128	744.94830	100.14996	47.0812
4	16.159	VB	0.1149	802.74286	105.38542	50.7339
5	21.896	BP	0.0996	8.45884	1.34011	0.5346

Totals : 1582.26220 210.24171

Results obtained with enhanced integrator!

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*** End of Report ***

Figure S15: HPLC chromatogram of 6

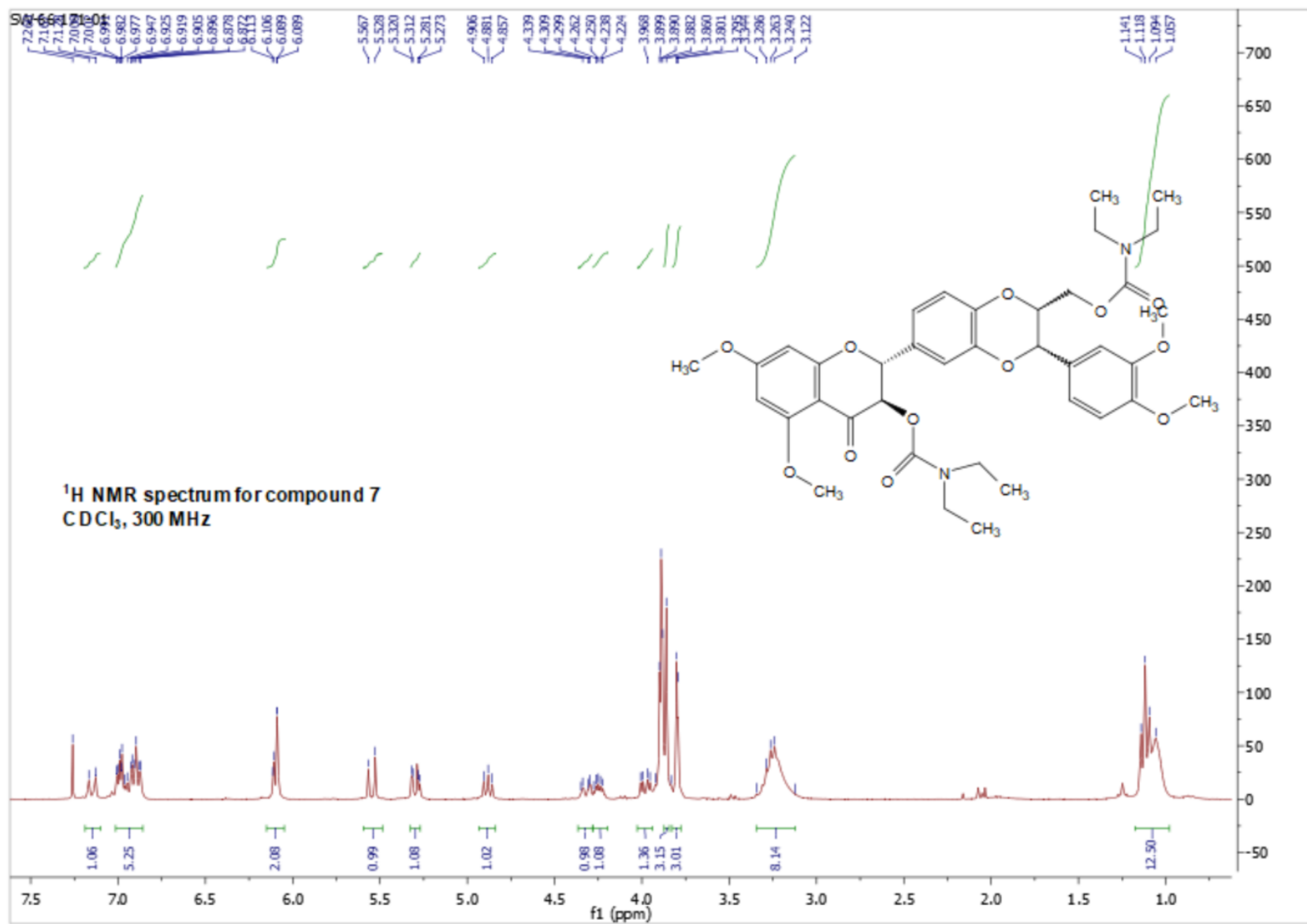


Figure S16: ¹H NMR spectrum of 7 in CDCl₃

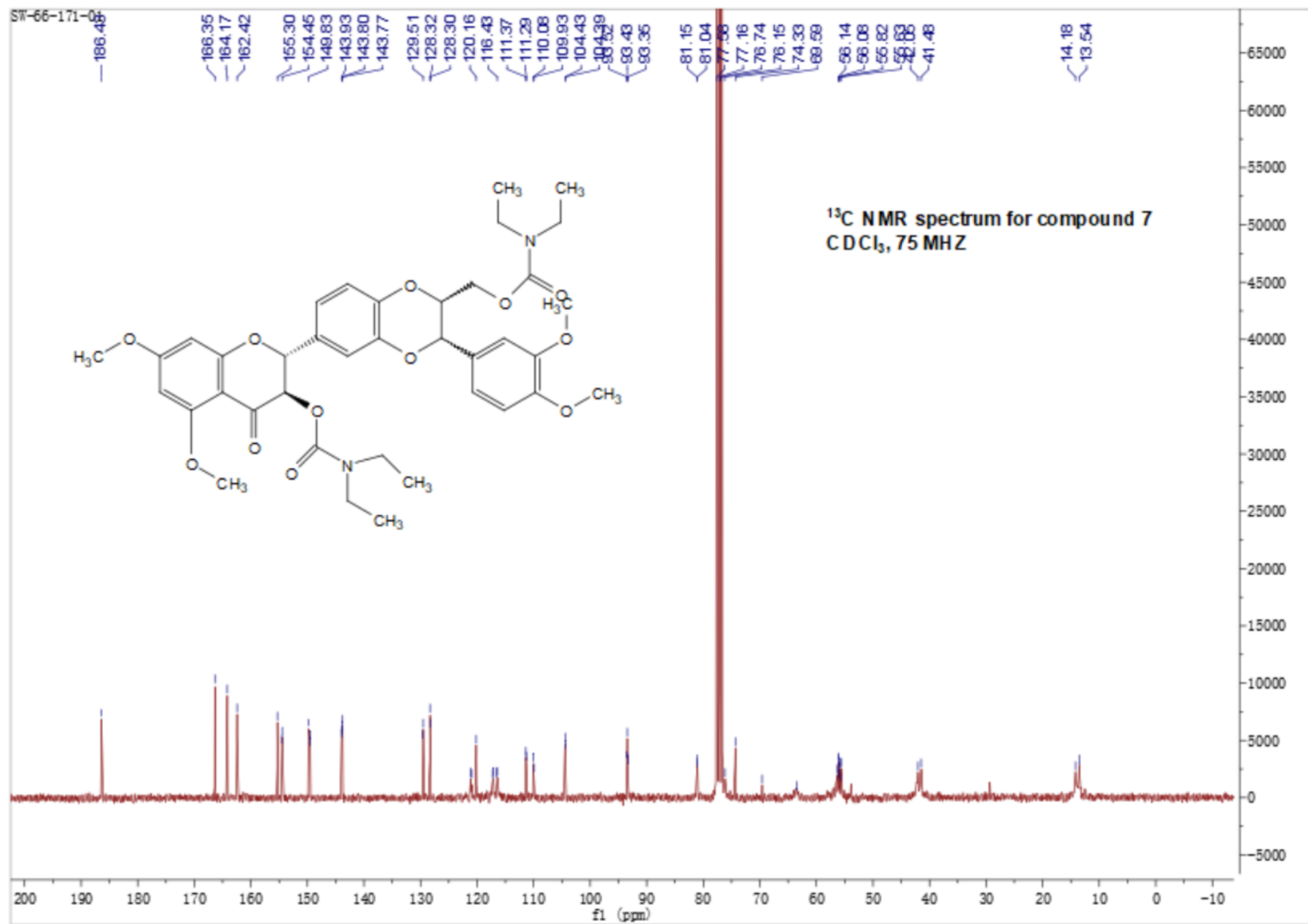


Figure S17: ¹³C NMR spectrum of 7 in CDCl₃

Sample Name	Mol Fomula	MW	M+H	observed	delta	ppm
SW-66-171-01	C38H46N2O12	722.3051	723.3129	723.3129	0.0000	0.00

SW-66-171-01 #2474-2537 RT: 13.37-13.69 AV: 64 NL: 1.28E8
T: FTMS + c NSI Full ms [300.0000-1000.0000]

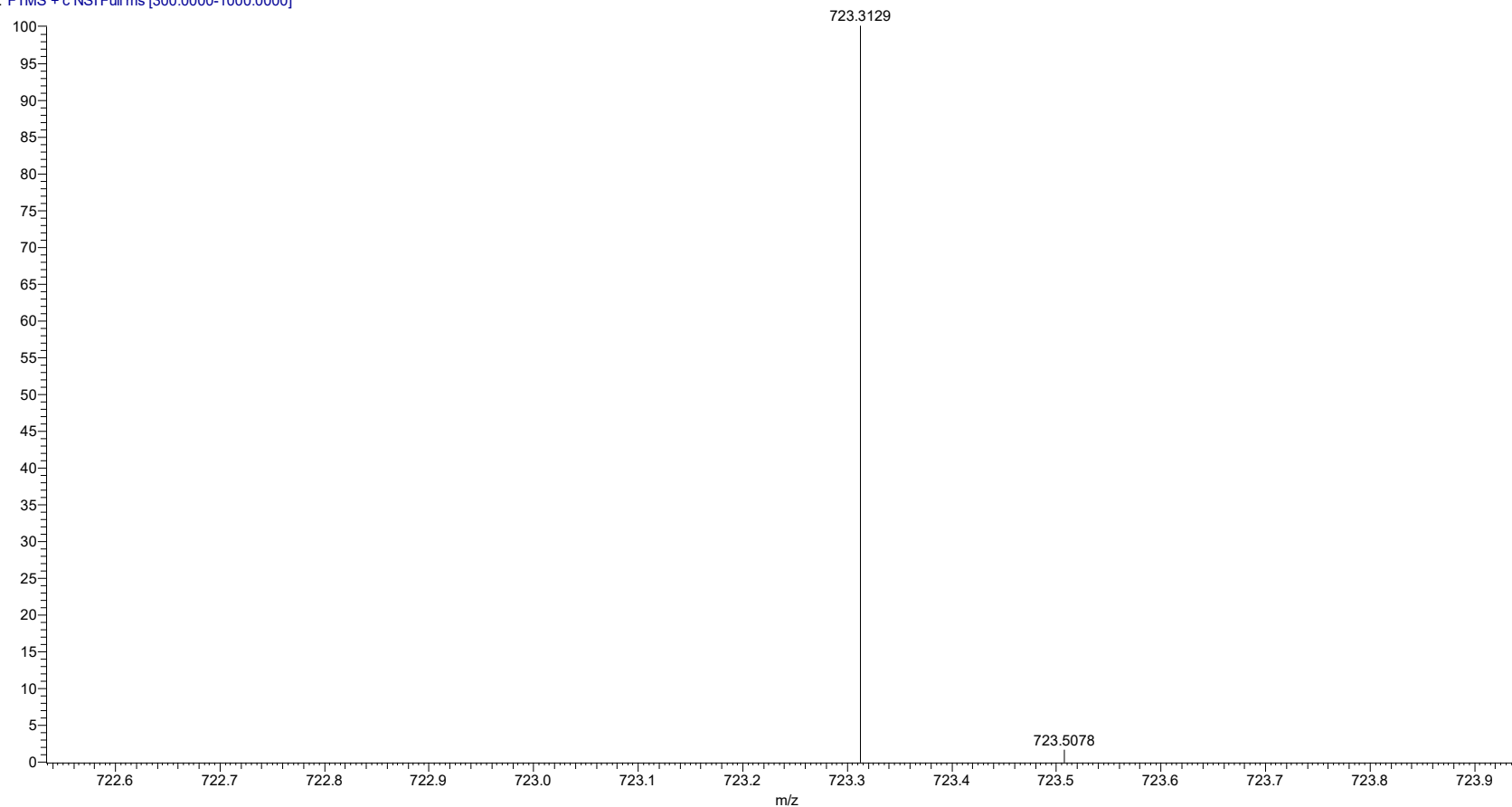
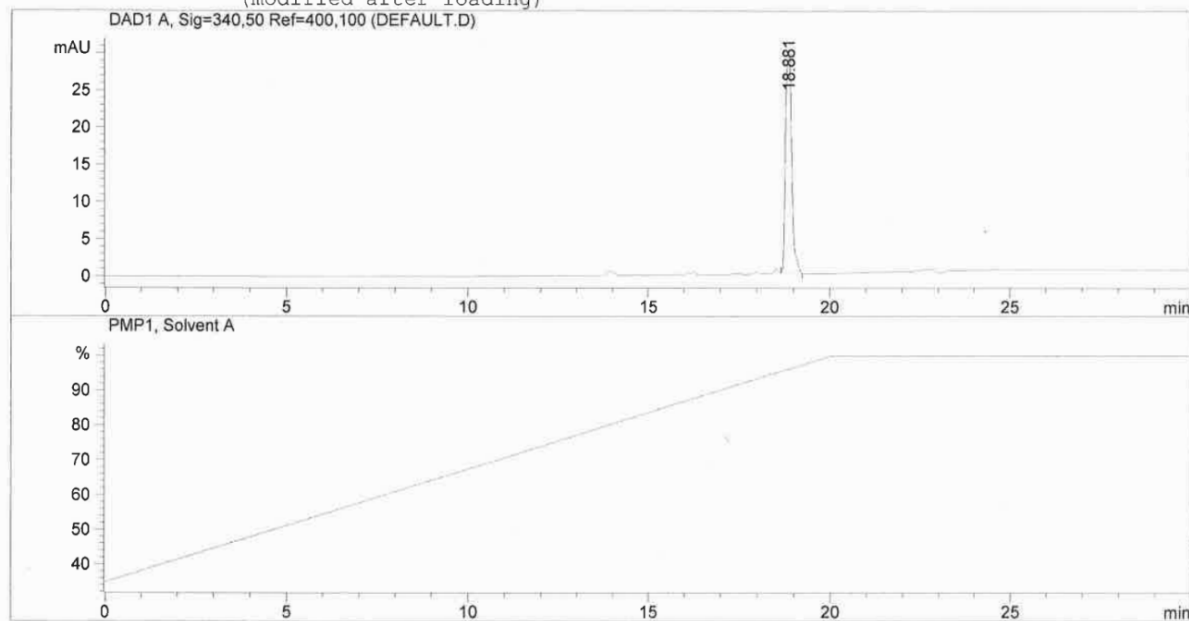


Figure S18: High resolution mass spectrum of **7**


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Dilution        : 1.0000
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Signal 1: DAD1 A, Sig=340,50 Ref=400,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	18.881	VB	0.1887	352.03210	30.04979	100.0000

Totals : 352.03210 30.04979

Results obtained with enhanced integrator!

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Figure S19: HPLC chromatogram of 7

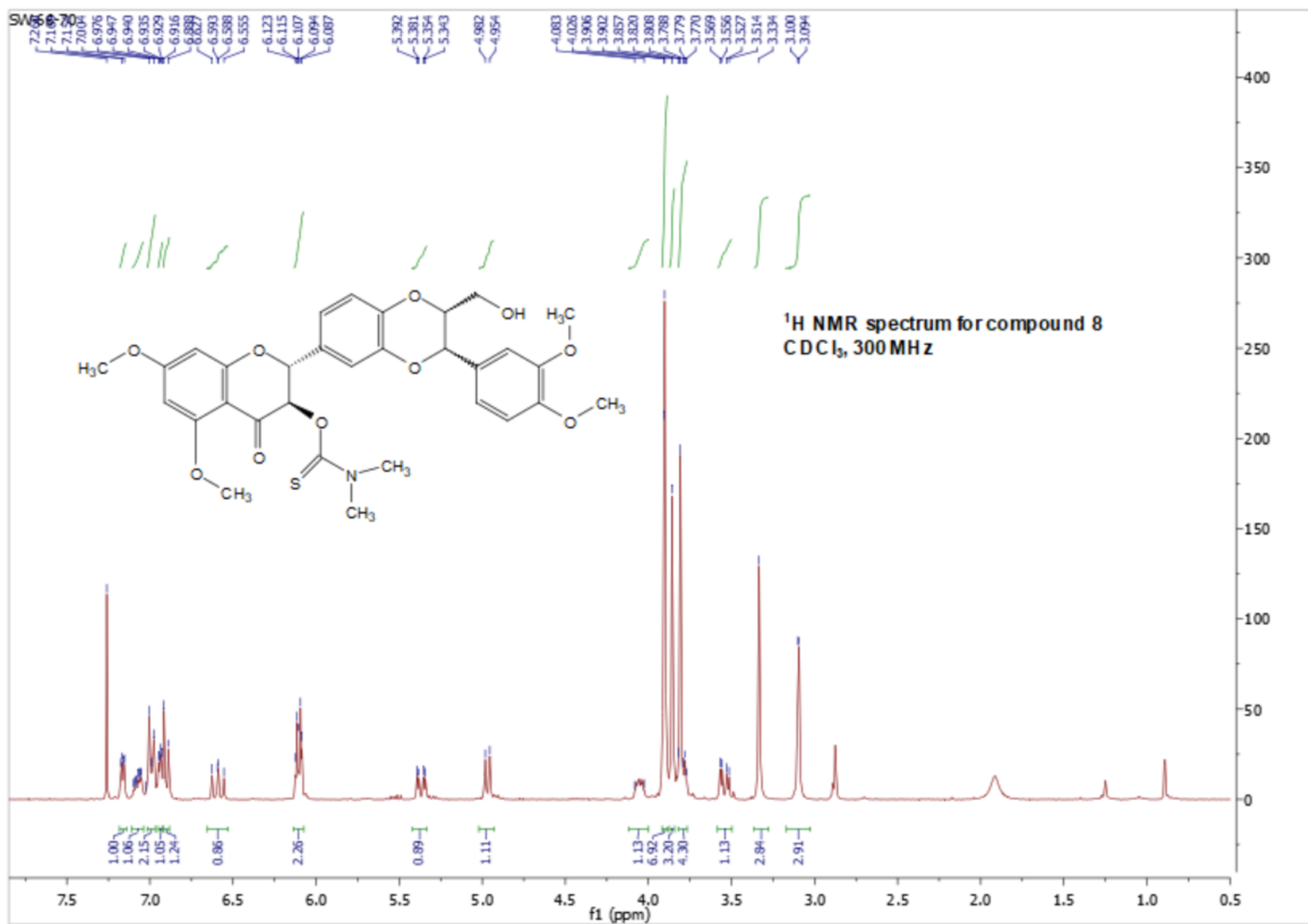


Figure S20: ¹H NMR spectrum of **8** in CDCl₃

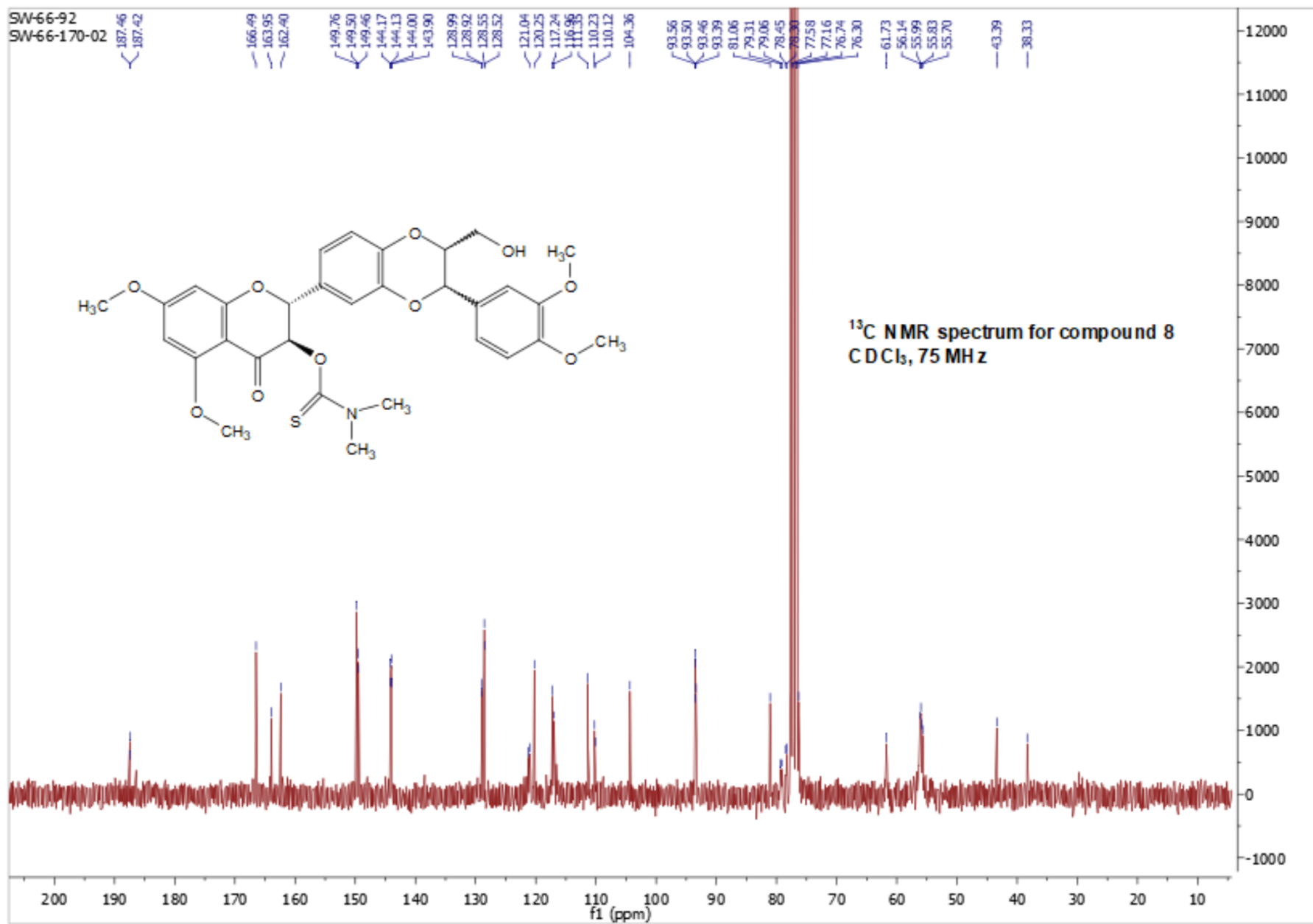


Figure S21: ¹³C NMR spectrum of **8** in CDCl₃

compds	Mol. Formula	Exact Mass	M+H	Observed	delta	ppm
SW-66-70	C31H33NO10S	611.1826	612.1904	612.1920	0.0016	2.68

SW-66-70 #4861-4923 RT: 26.28-26.61 AV: 63 NL: 3.26E8
T: FTMS + c NSI Full ms [150.0000-1000.0000]

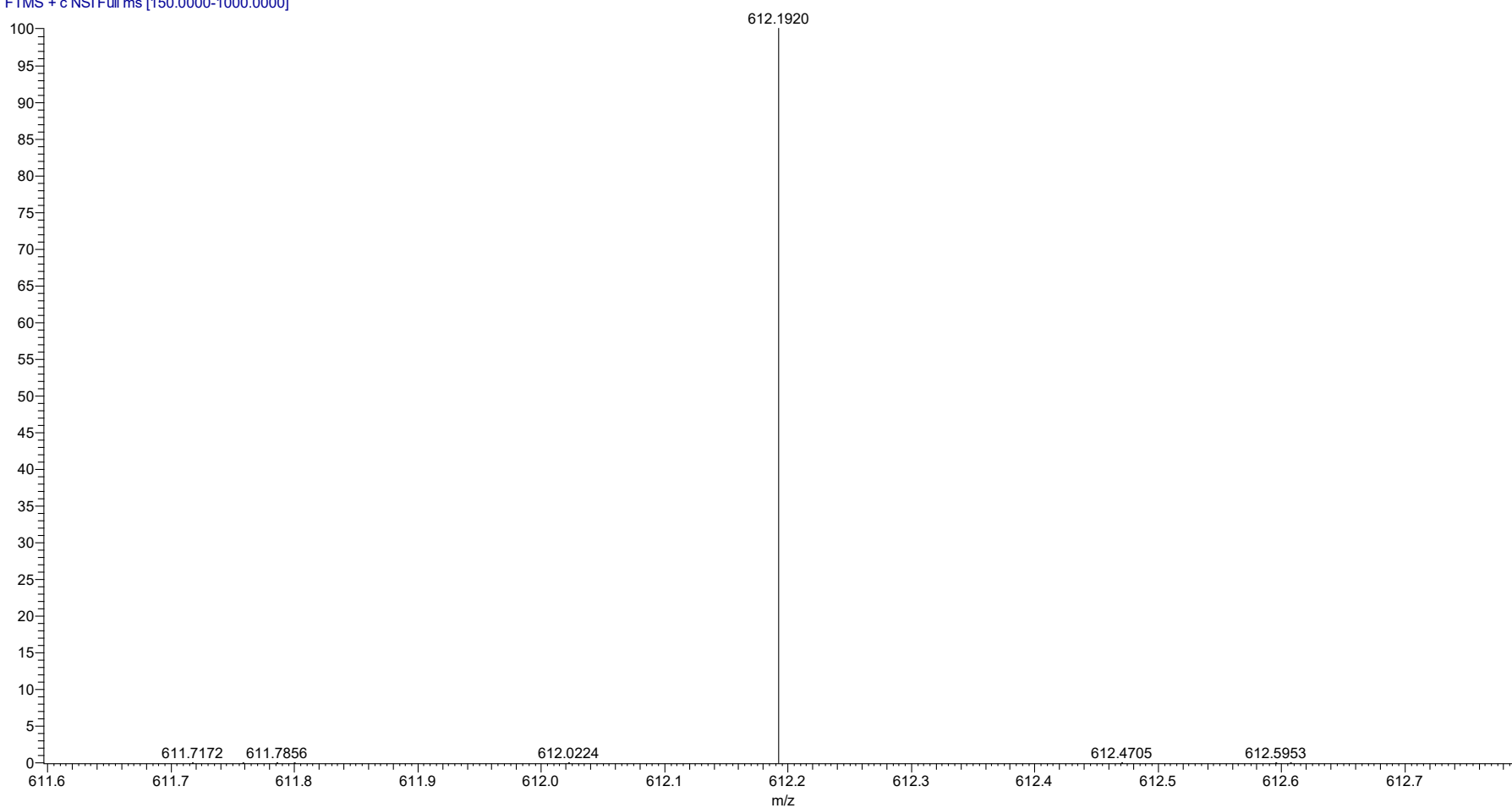
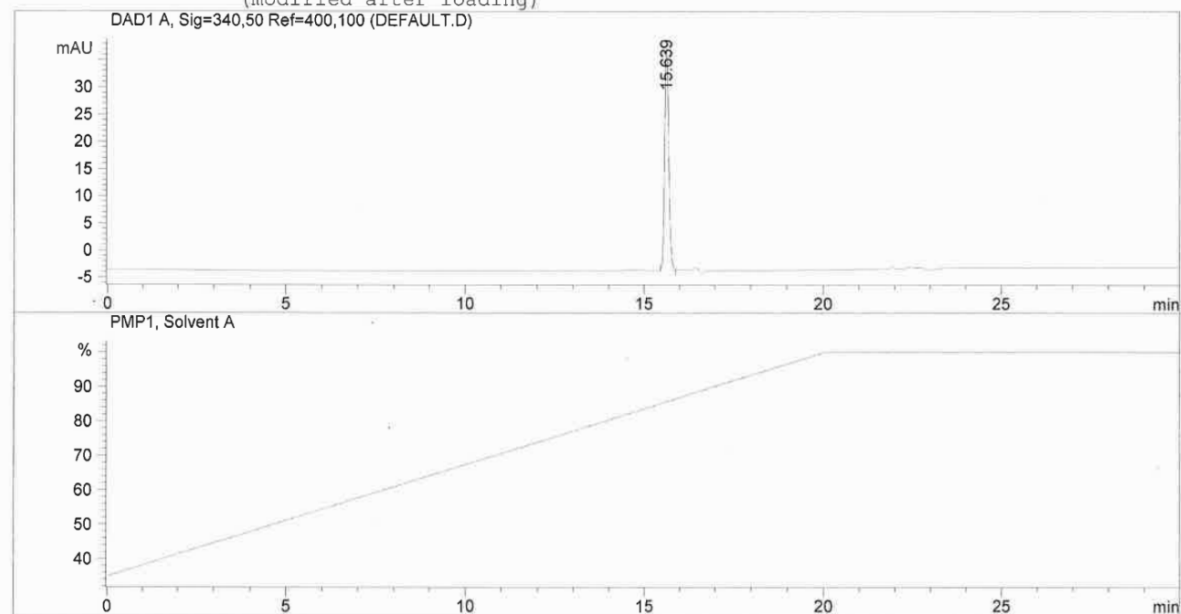


Figure S22: High resolution mass spectrum of **8**

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Signal 1: DAD1 A, Sig=340,50 Ref=400,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	15.639	BB	0.1241	326.80460	40.52058	100.0000

Totals : 326.80460 40.52058

Results obtained with enhanced integrator!

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Figure S23: HPLC chromatogram of 8

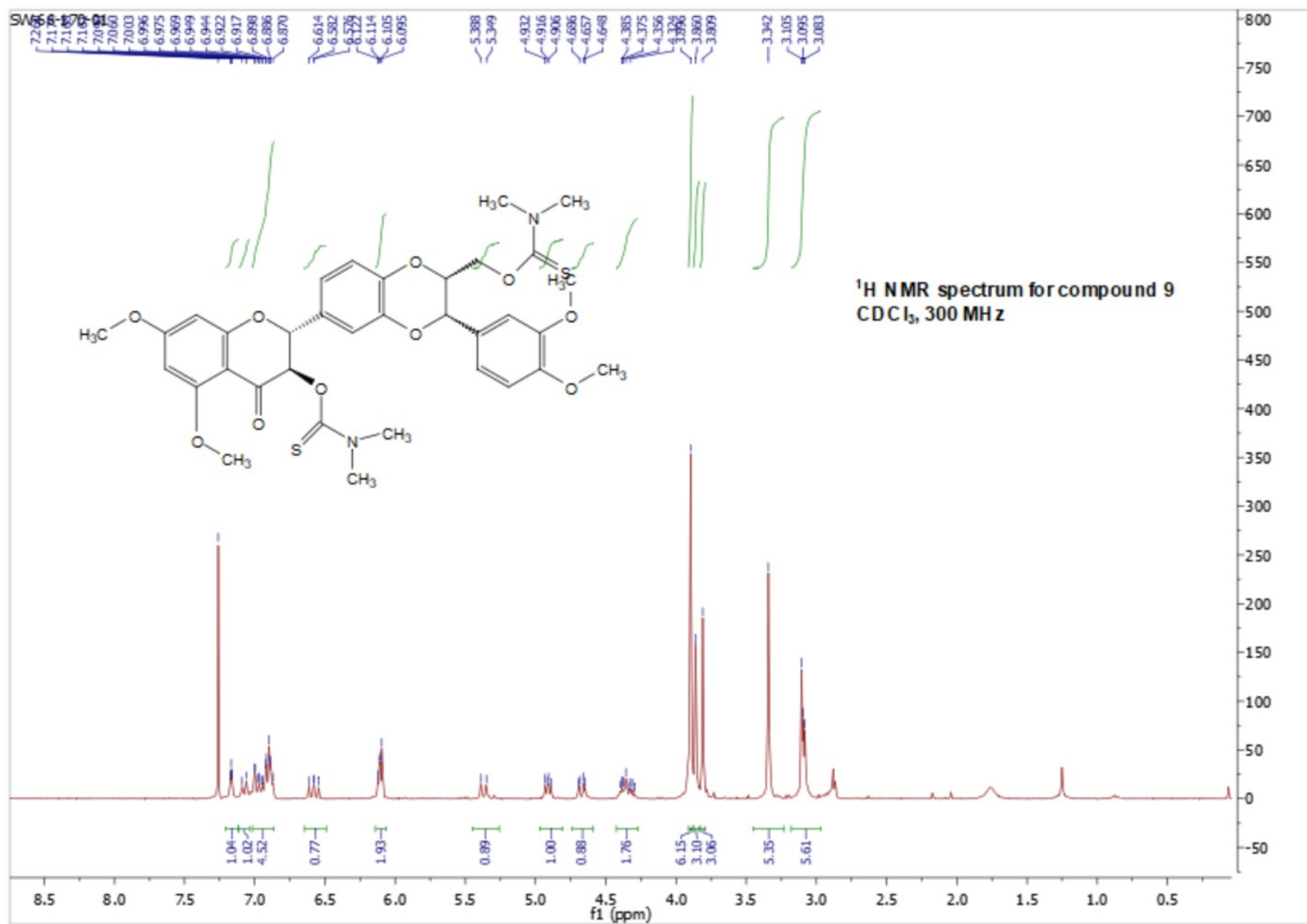


Figure S24: ¹H NMR spectrum of **9** in CDCl₃

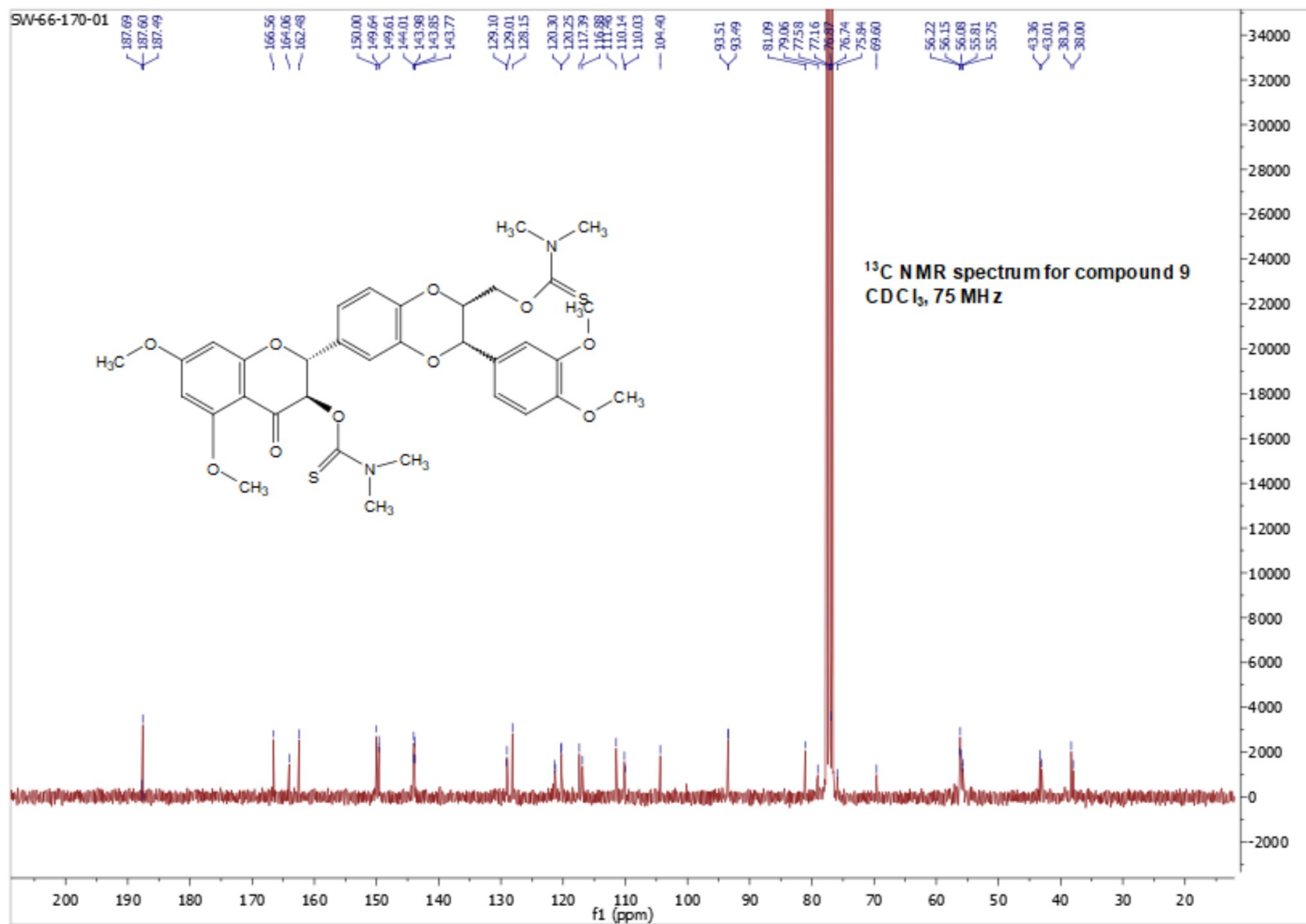


Figure S25: ¹³C NMR spectrum of **9** in CDCl₃

Sample Name	Mol Fomula	MW	M+H	observed	delta	ppm
SW-66-170-01	C34H38N2O10S2	698.1968	699.2046	699.2050	0.0004	0.51

SW-66-170-01 #2436-2464 RT: 13.17-13.32 AV: 29 NL: 2.05E8
T: FTMS + c NSI Full ms [300.0000-1000.0000]

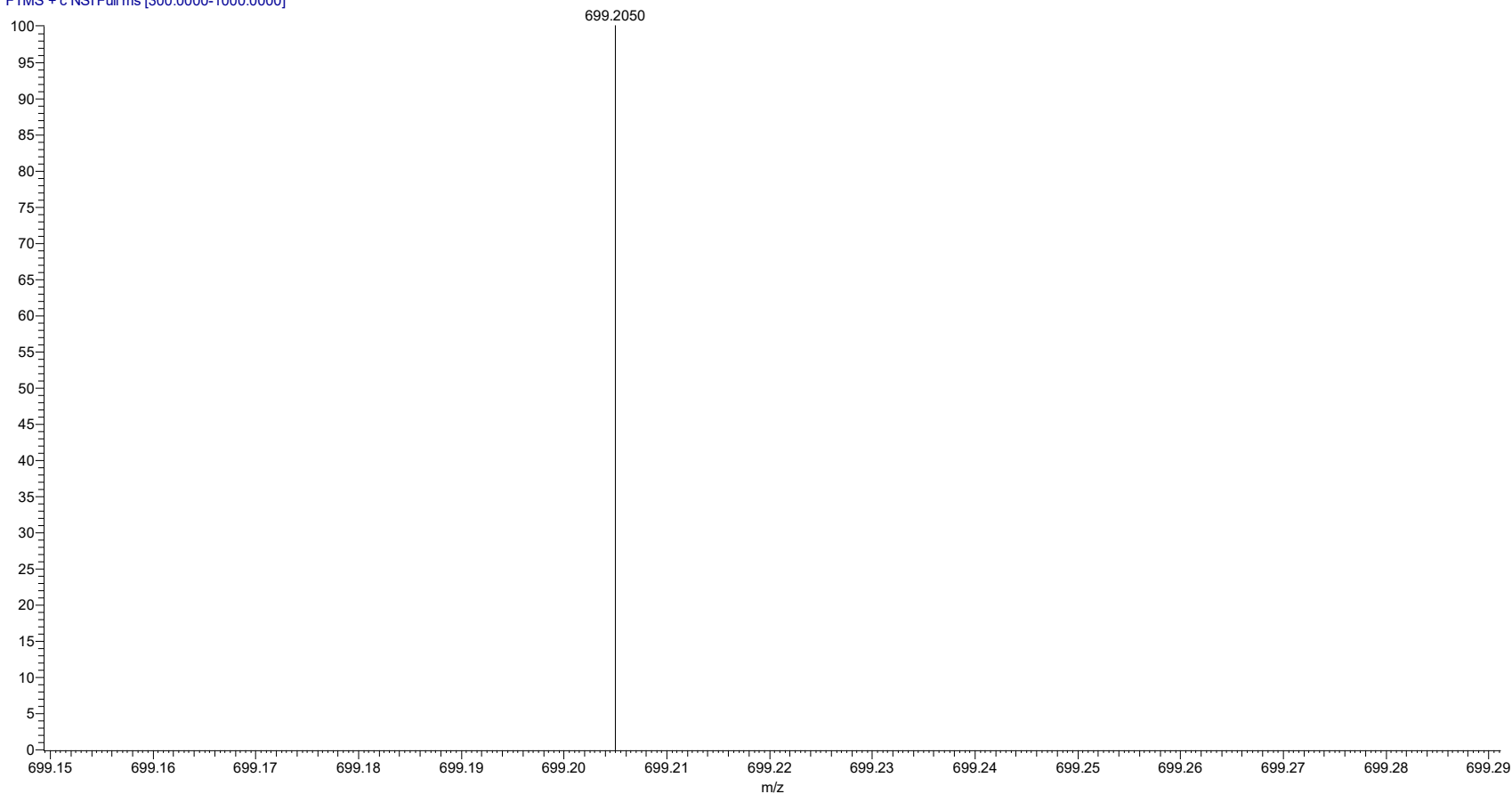
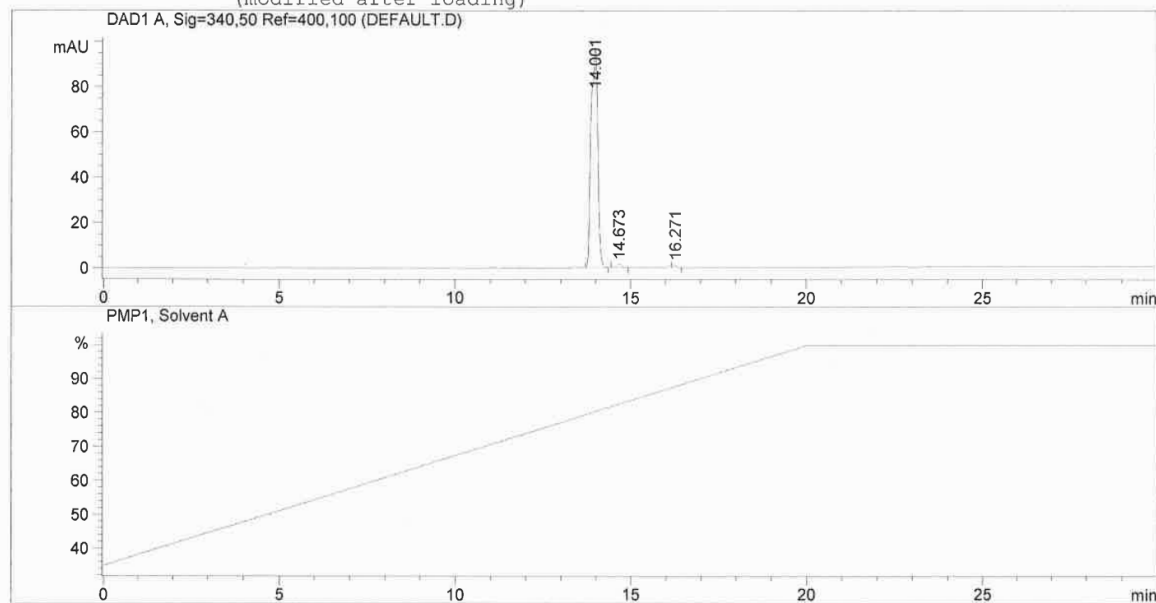


Figure S26: High resolution mass spectrum of **9**


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Signal 1: DAD1 A, Sig=340,50 Ref=400,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	14.001	BB	0.1829	1281.49658	96.52377	97.8661
2	14.673	BP	0.1679	19.23740	1.67563	1.4691
3	16.271	VP	0.1173	8.70405	1.13770	0.6647

Totals : 1309.43803 99.33710

Results obtained with enhanced integrator!

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Figure S27: HPLC chromatogram of 9

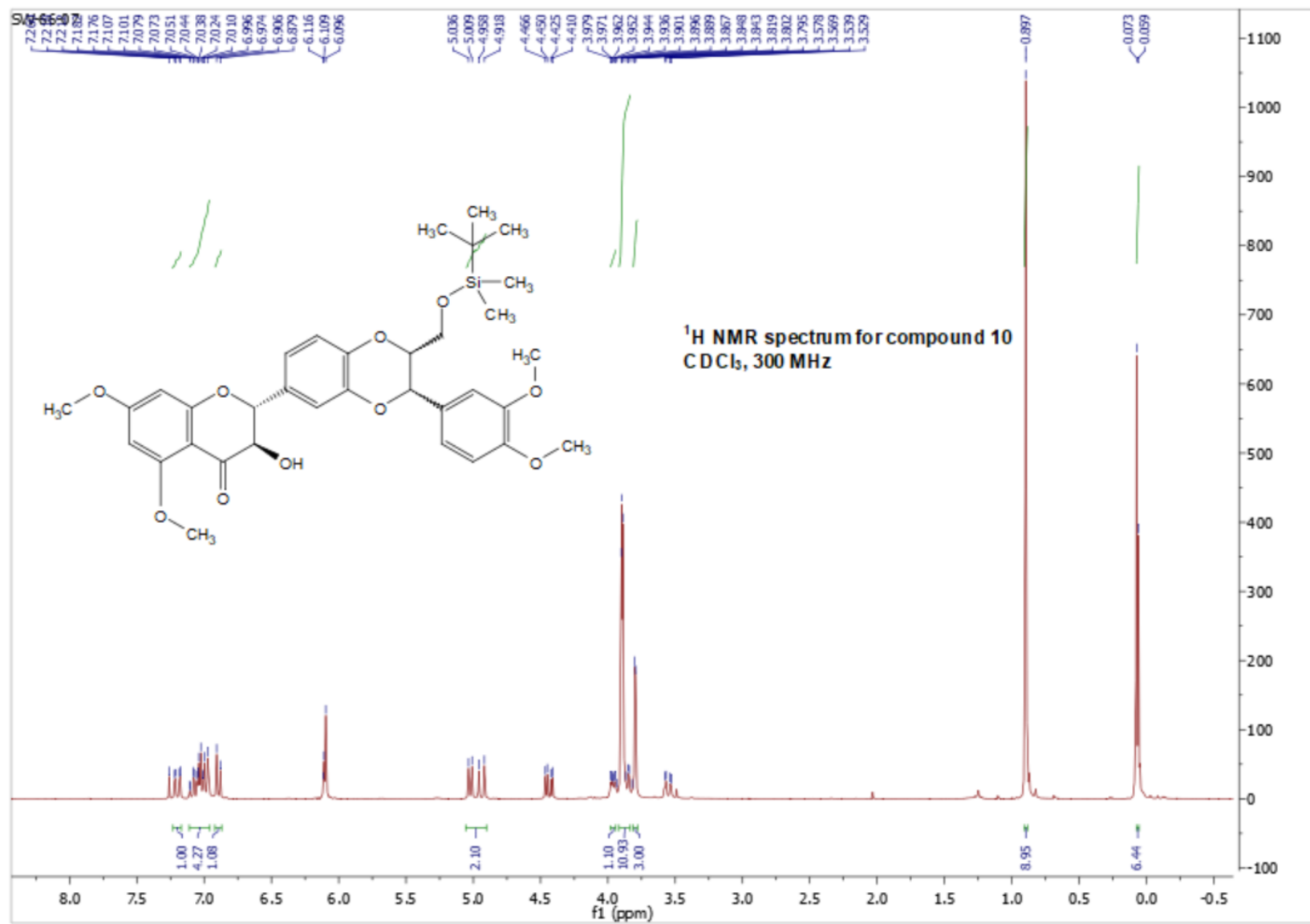


Figure S28: ¹H NMR spectrum of **10** in CDCl₃

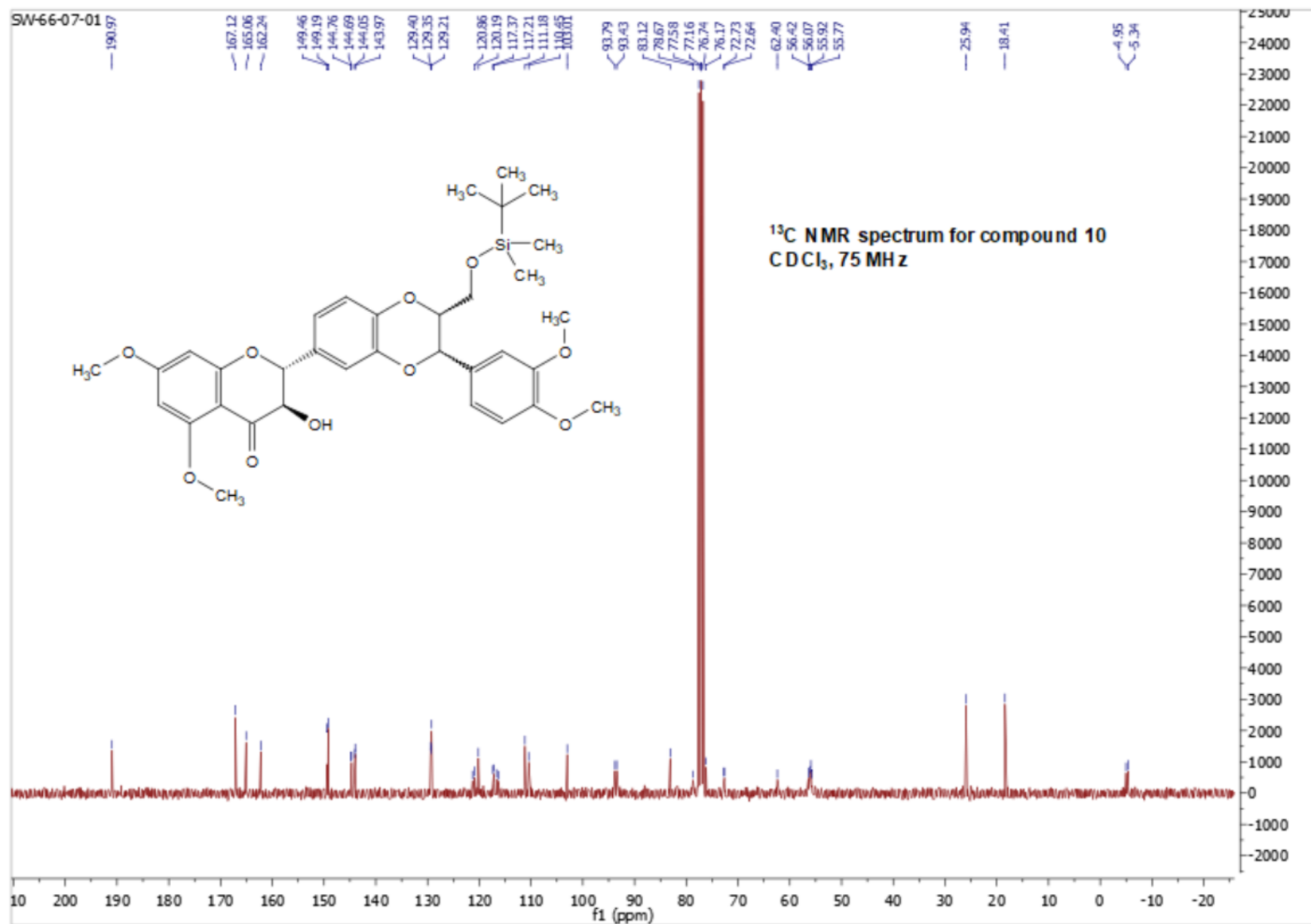


Figure S29: ^{13}C NMR spectrum of **10** in CDCl_3

compds	Mol. Formula	Exact Mass	M+H	Observed	delta	ppm
SW-66-07	C ₂₄ H ₄₂ O ₁₀ Si	638.2548	639.2626	639.2623	-0.0003	-0.44

SW-66-07 #3249-3816 RT: 17.93-20.88 AV: 568 NL: 9.92E6
T: FTMS + c NSI Full ms [150.0000-1000.0000]

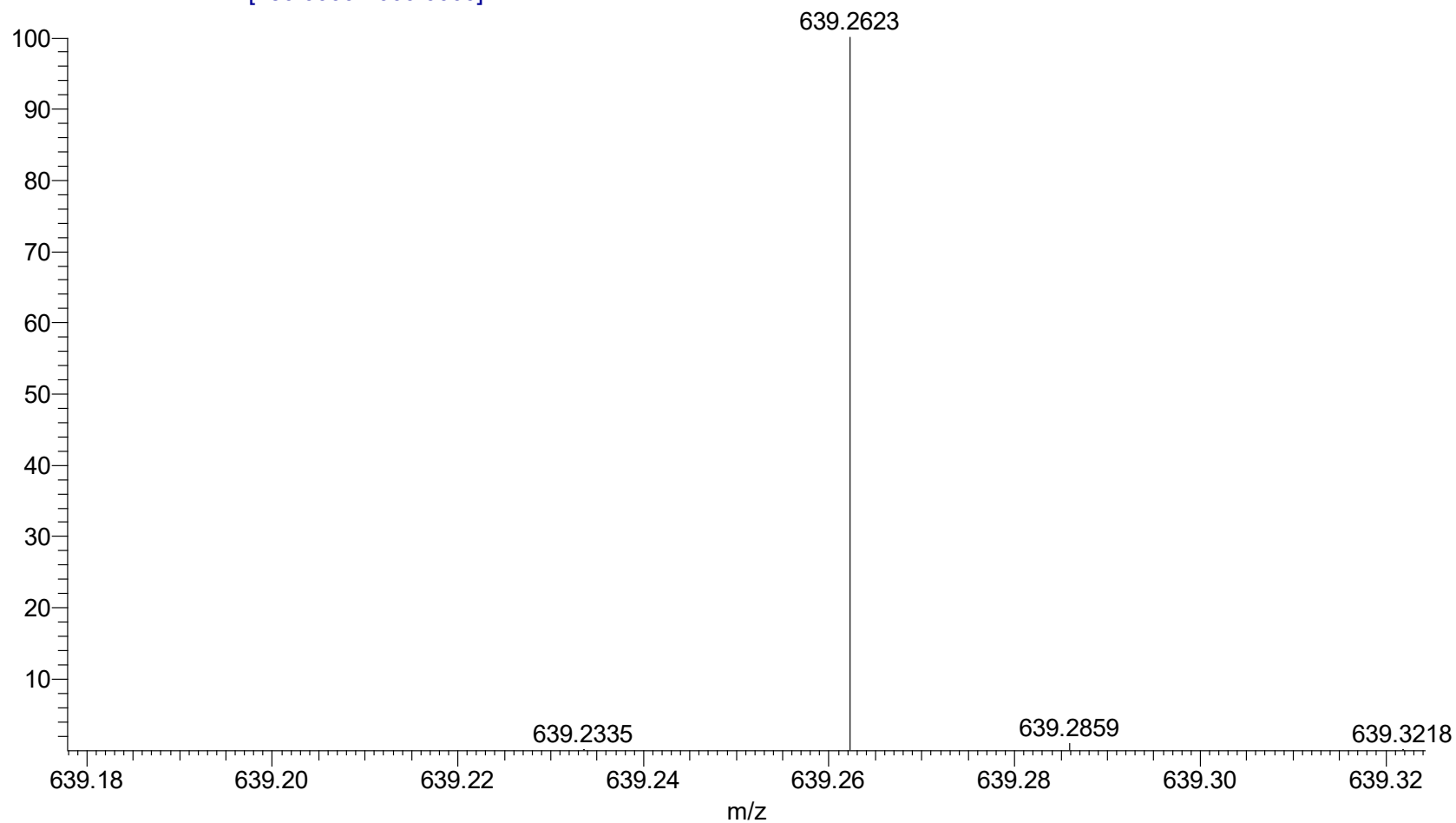


Figure S30: High resolution mass spectrum of **10**

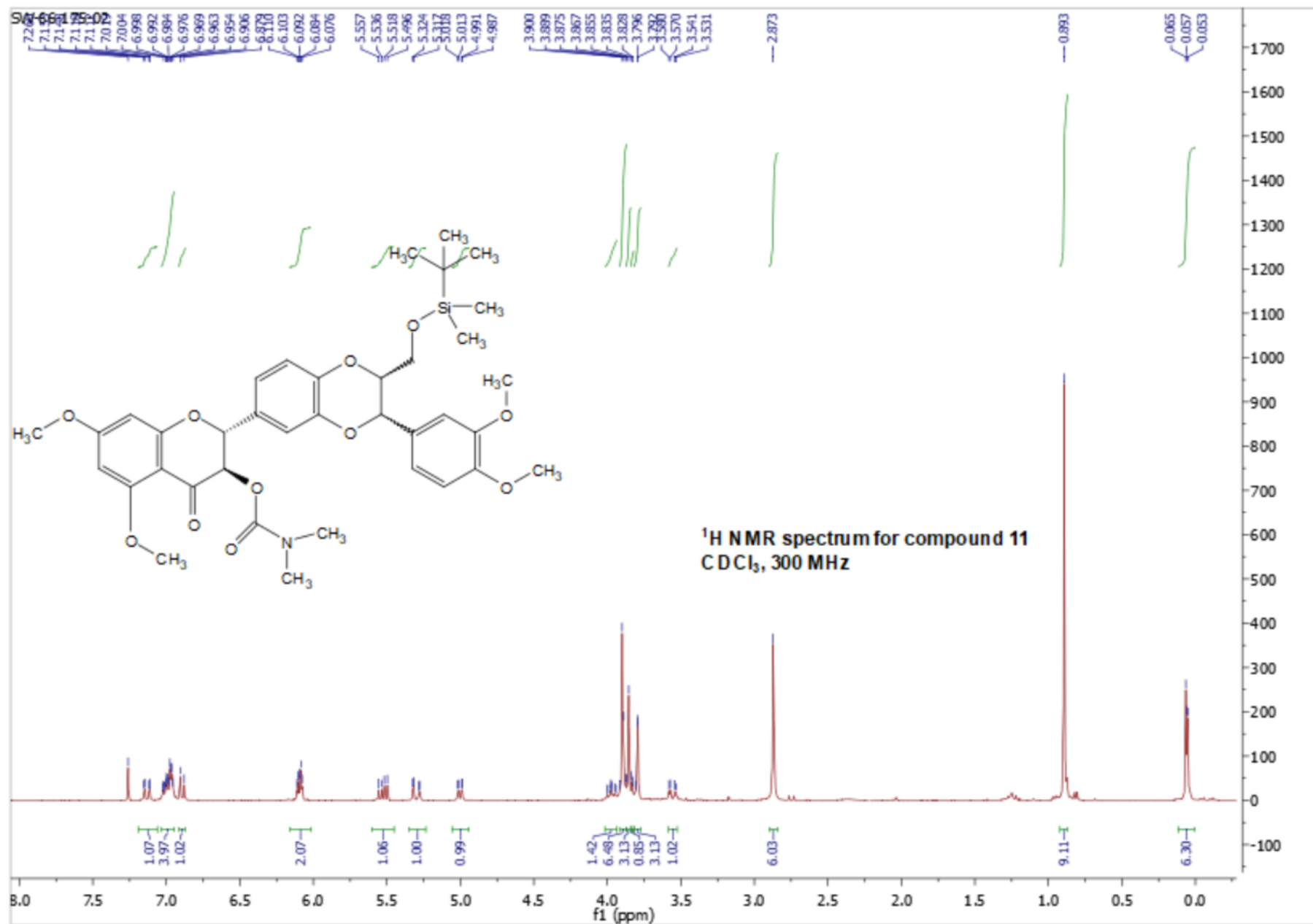


Figure S31: ¹H NMR spectrum of **11** in CDCl₃

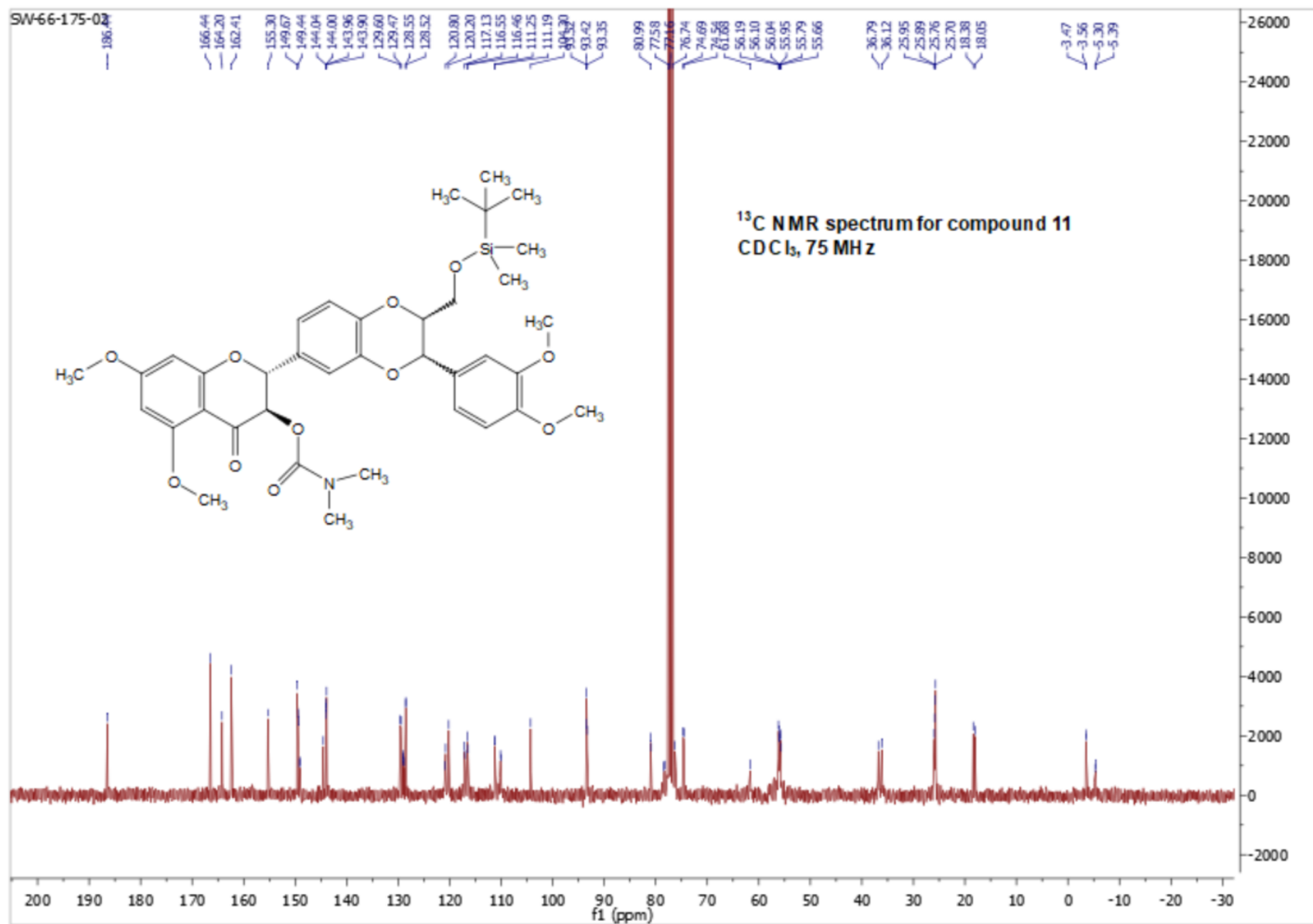


Figure S32: ¹³C NMR spectrum of **11** in CDCl₃

Sample Name	Mol Fomula	MW	M+H	observed	delta	ppm
SW-66-175-02	C ₃₇ H ₄₇ NO ₁₁ Si	709.2919	710.2997	710.3006	0.0009	1.27

SW-66-175-02 #3050-3236 RT: 16.38-17.39 AV: 187 NL: 1.96E7
T: FTMS + c NSI Full ms [300.0000-1000.0000]

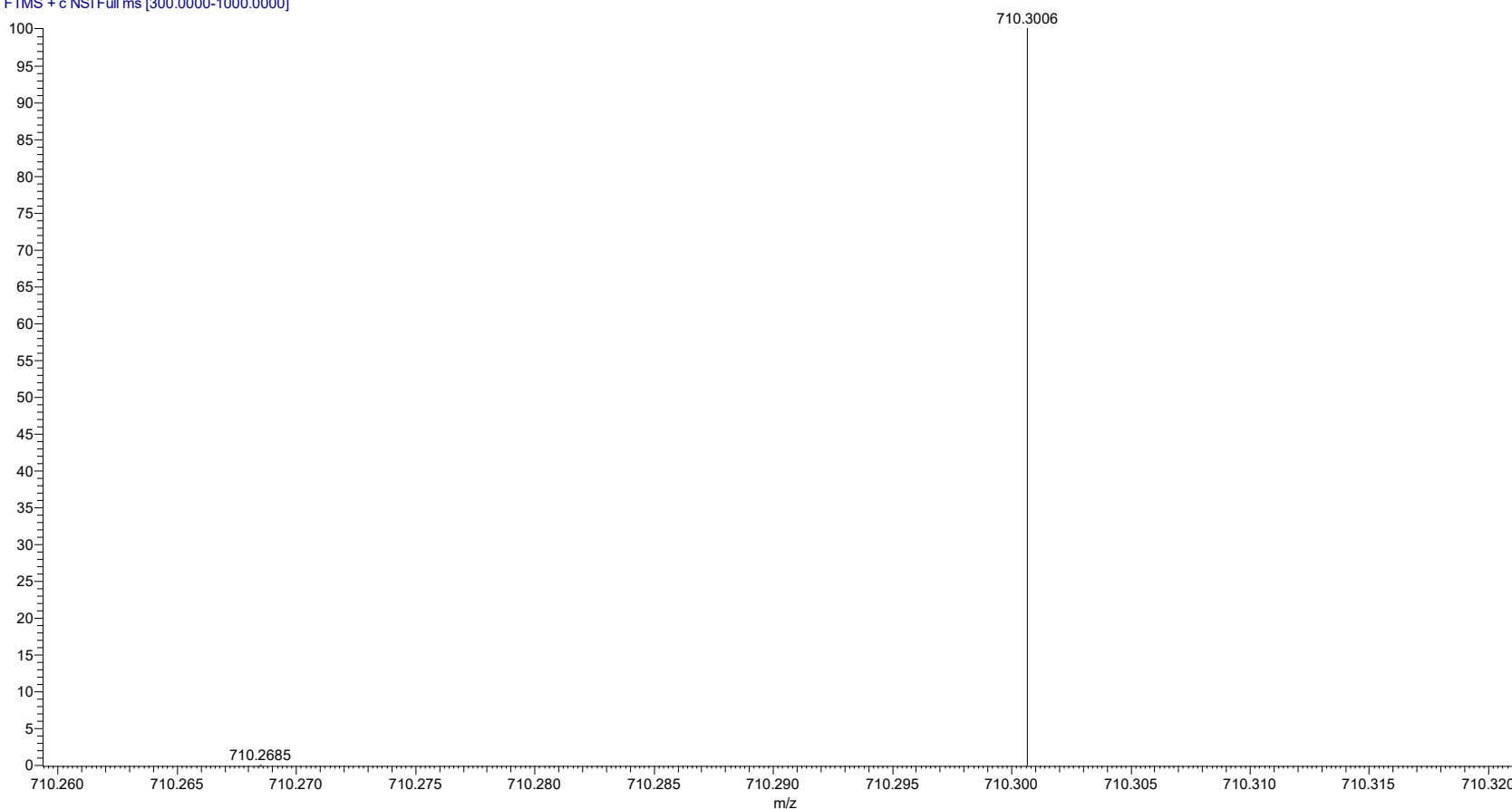
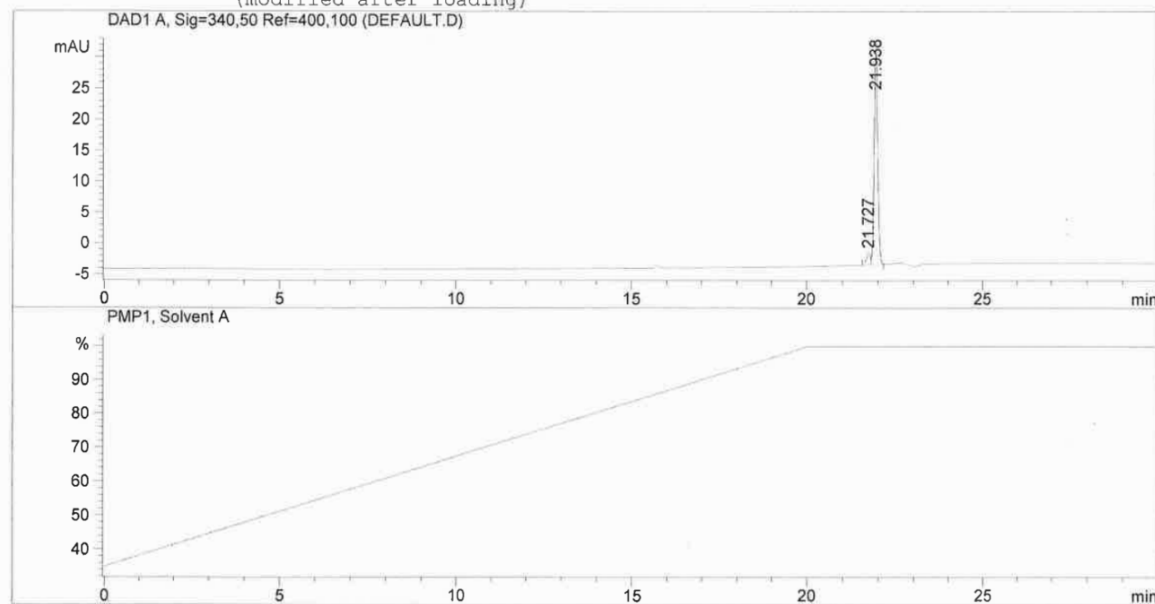


Figure S33: High resolution mass spectrum of **11**

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1	21.727	BV	0.1121	14.86666	1.96797	5.8414
2	21.938	VB	0.1067	239.63838	34.64161	94.1586

Totals : 254.50505 36.60958

Results obtained with enhanced integrator!

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Figure S33: HPLC chromatogram of 11

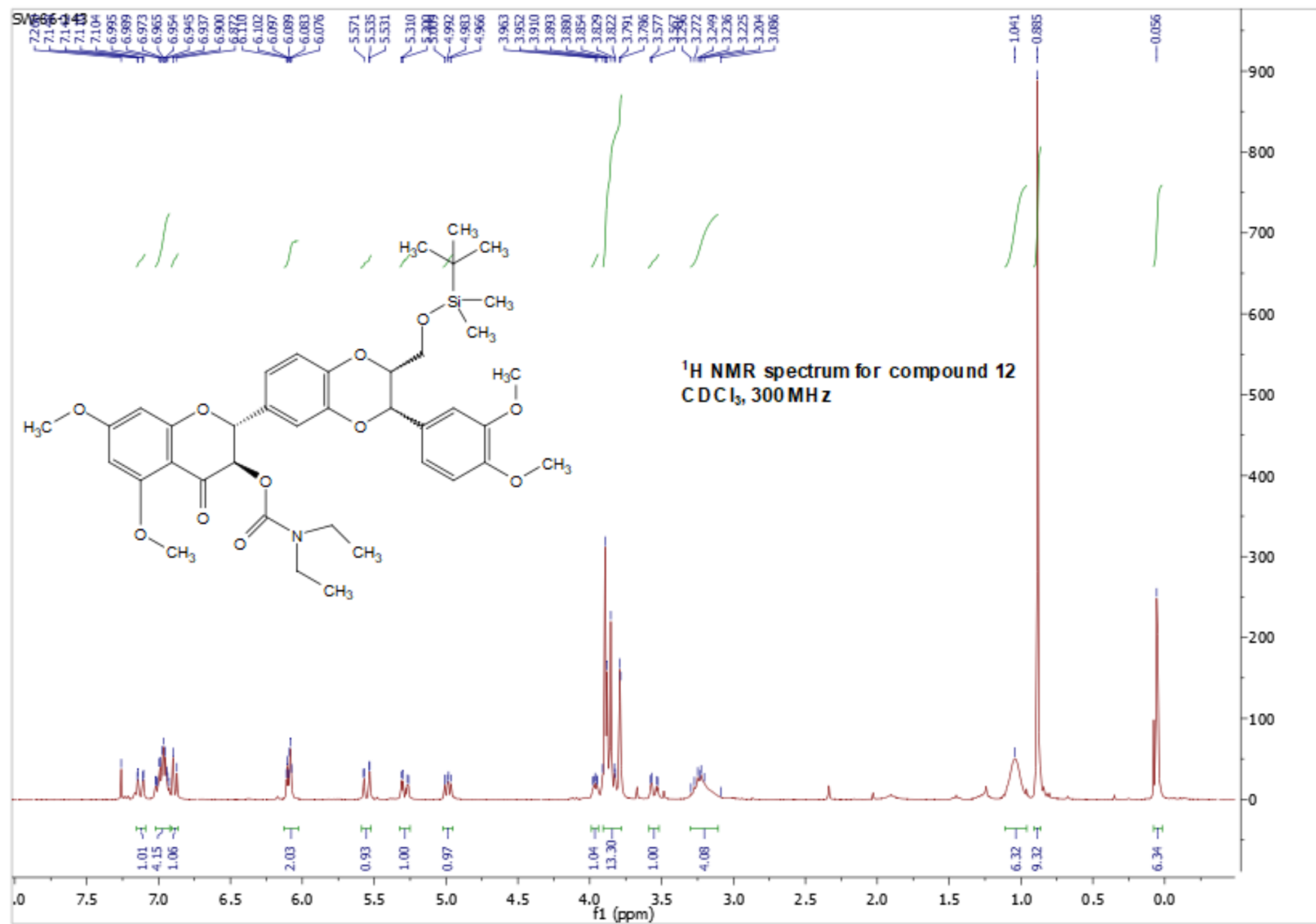


Figure S34: ¹H NMR spectrum of **12** in CDCl₃

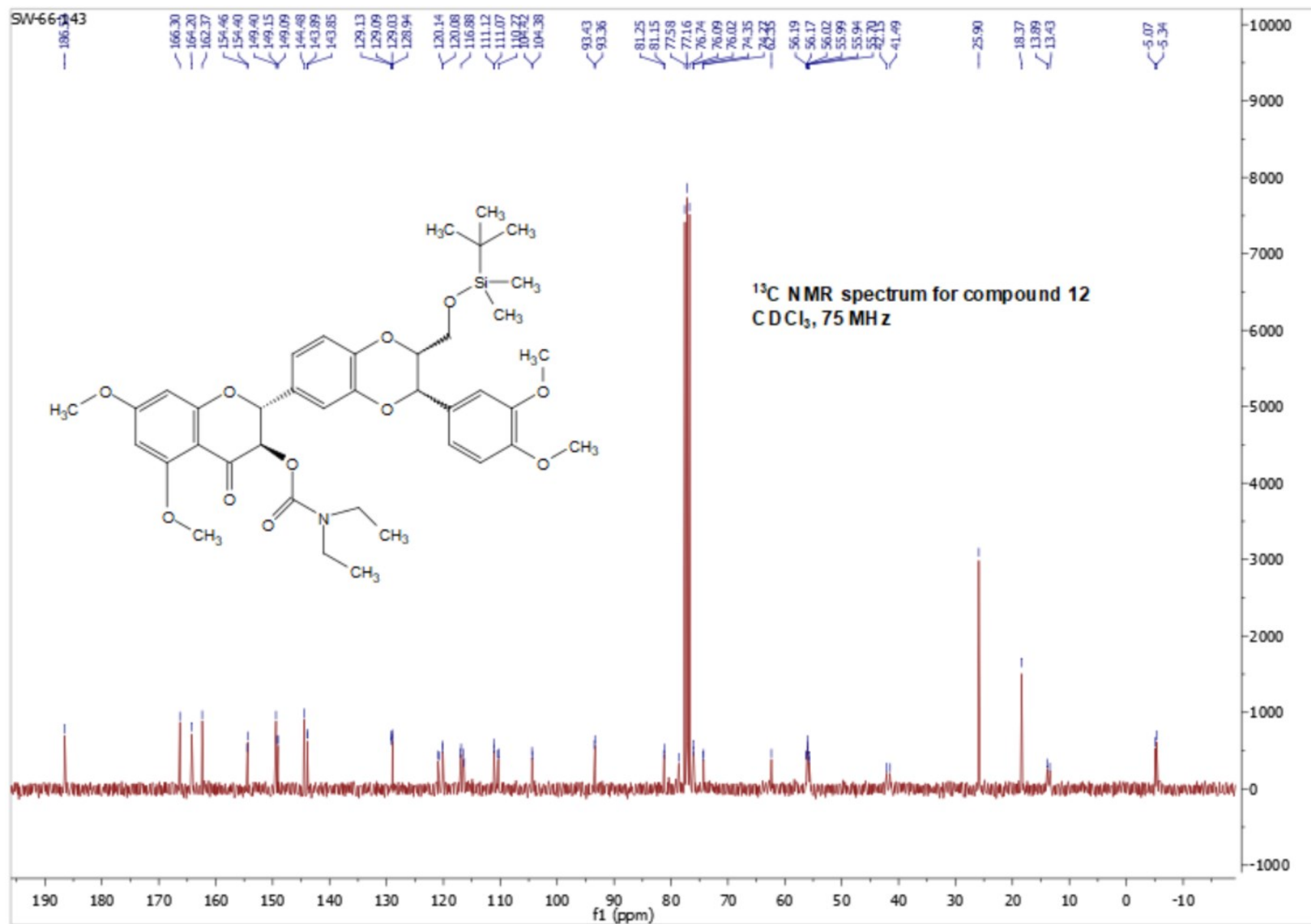


Figure S35: ¹³C NMR spectrum of 12 in CDCl₃

compds	Mol. Formula	Exact Mass	M+H	Observed	delta	ppm
SW-66-143	C39H51NO11Si	737.3232	738.3310	738.3329	0.0019	2.57

SW-66-143 #2970-3159 RT: 15.56-16.59 AV: 190 NL: 5.40E8
T: FTMS + c NSI Full ms [150.0000-1000.0000]

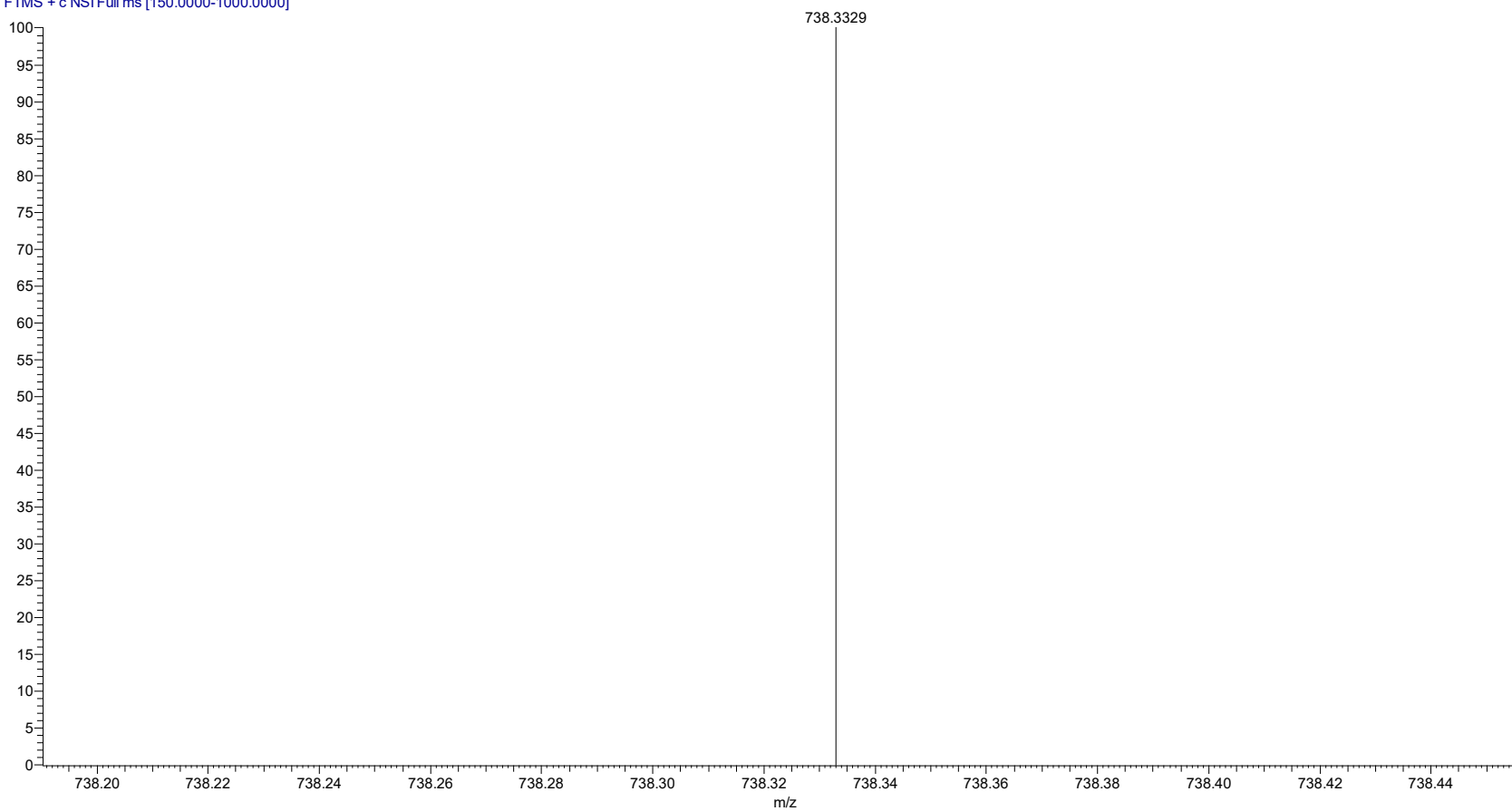
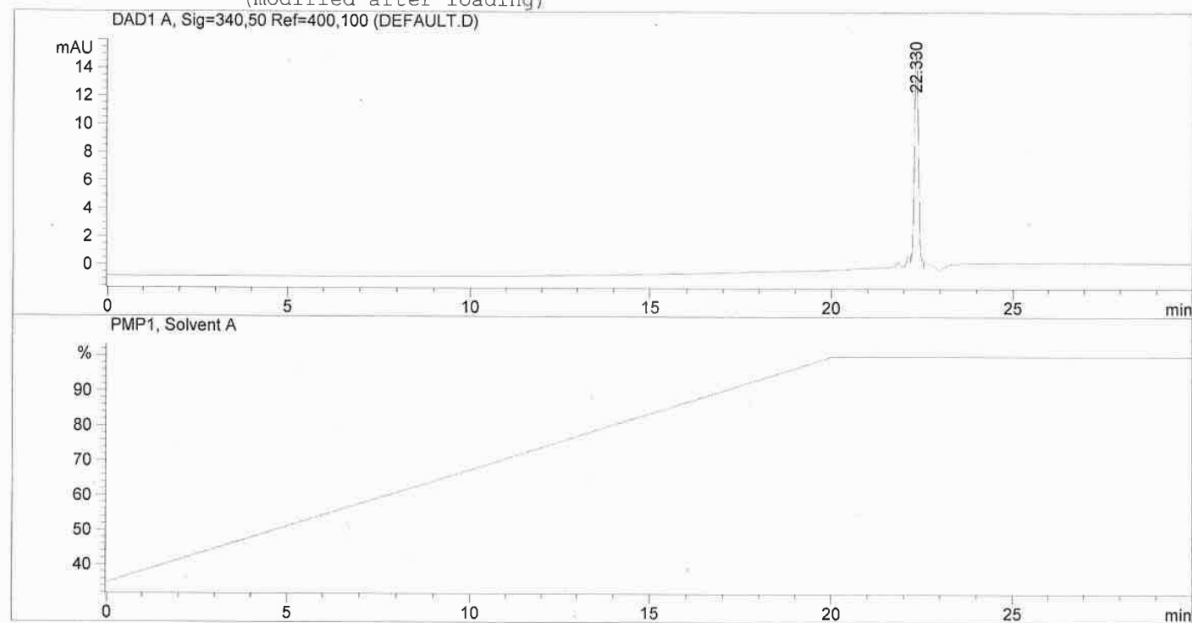


Figure S36: High resolution mass spectrum of **12**

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Sorted By      : Signal
Multiplier     : 1.0000
Dilution       : 1.0000
```

Signal 1: DAD1 A, Sig=340,50 Ref=400,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	22.330	VB	0.1206	115.30704	15.17783	100.0000

```
Totals :                      115.30704  15.17783
```

Results obtained with enhanced integrator!

```
=====
*** End of Report ***
=====
```

Figure S37: HPLC chromatogram of 12

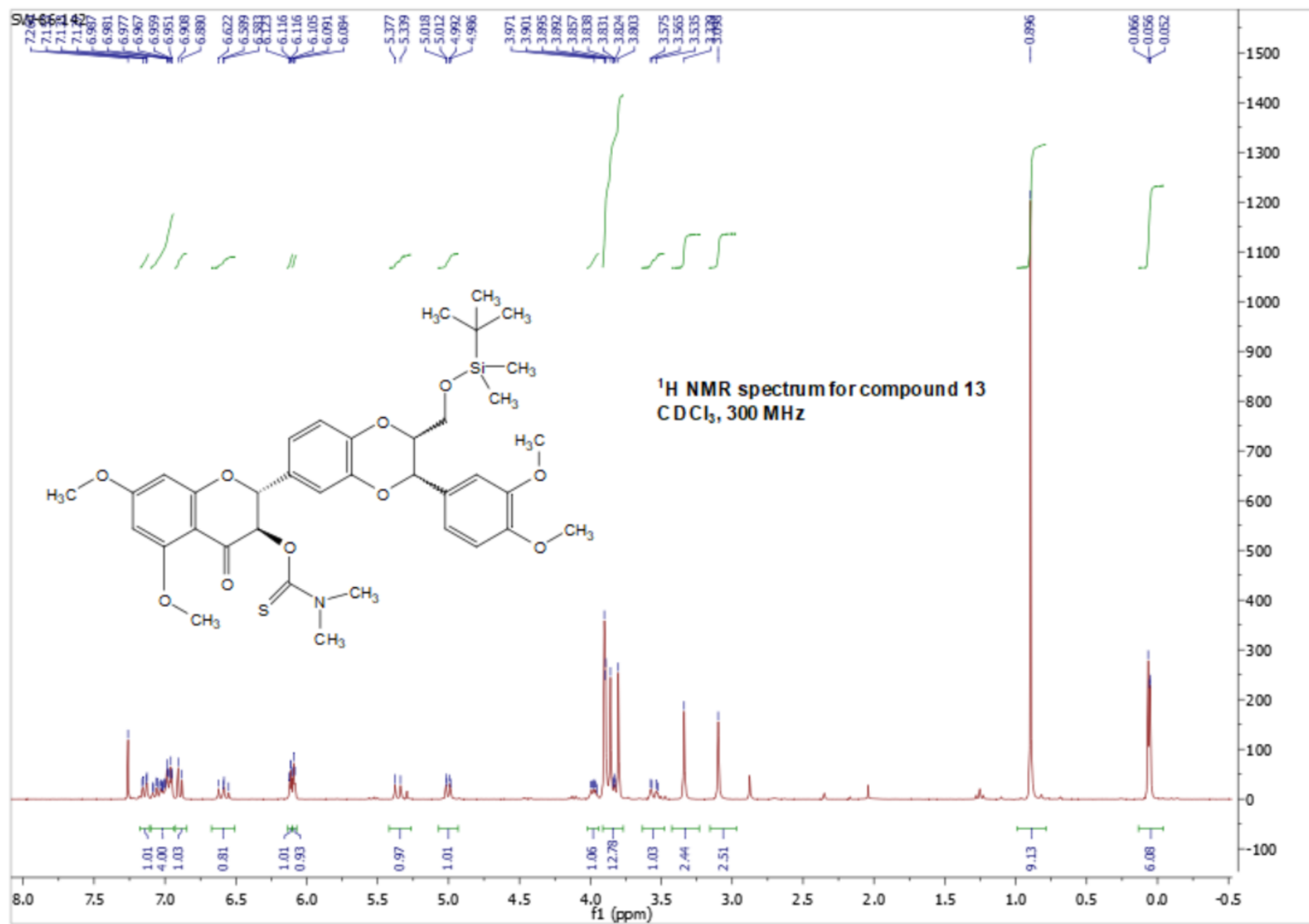


Figure S38: ¹H NMR spectrum of **13** in CDCl₃

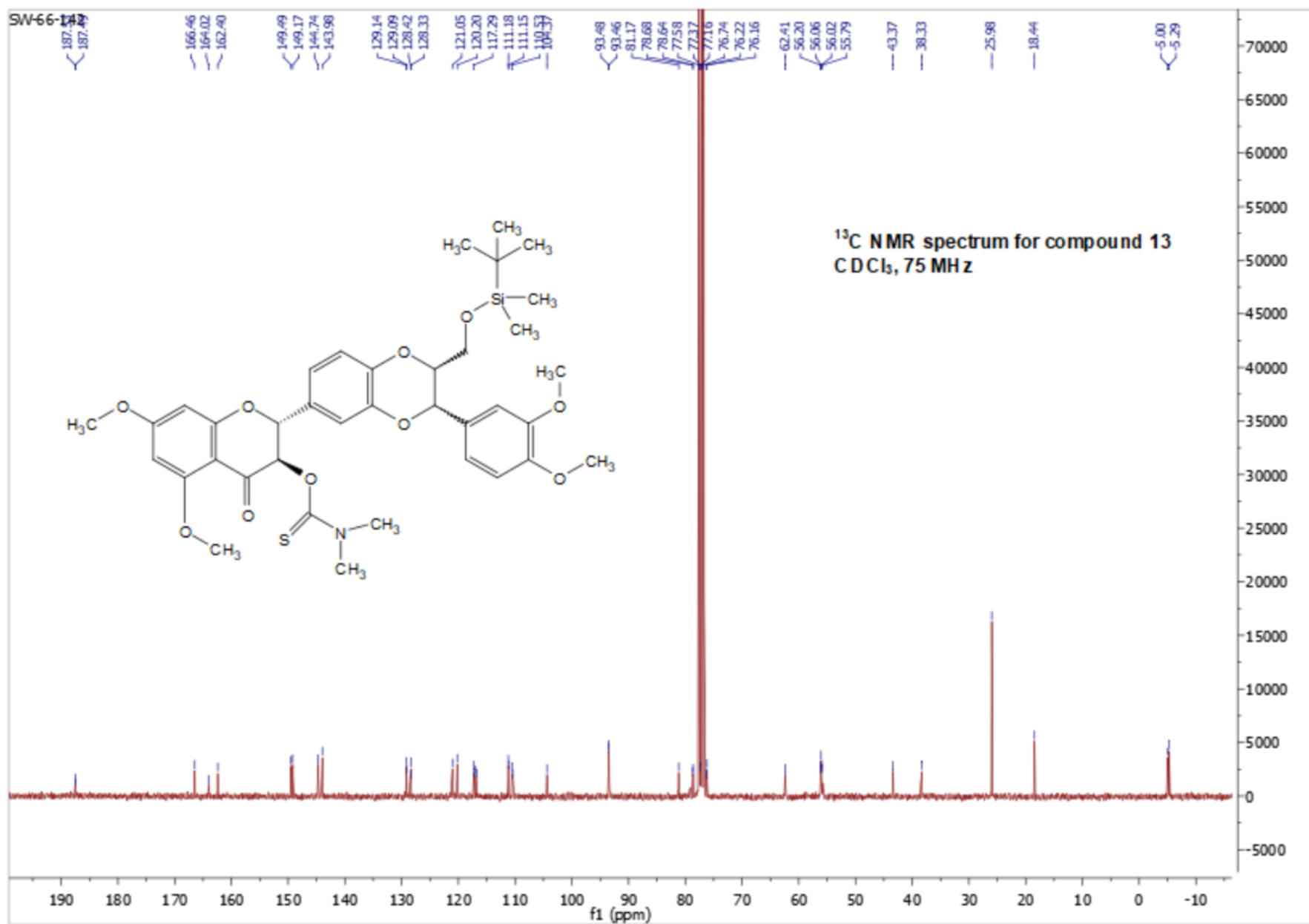


Figure S39: ¹³C NMR spectrum of **13** in CDCl₃

comps	Mol. Formula	Exact Mass	M+H	Observed	delta	ppm
SW-66-142	C37H47NO10SSi	725.2691	726.2769	726.2796	0.0027	3.79

SW-66-142 #4940-5072 RT: 26.70-27.40 AV: 133 NL: 8.33E7
T: FTMS + c NSI Full ms [150.0000-1000.0000]

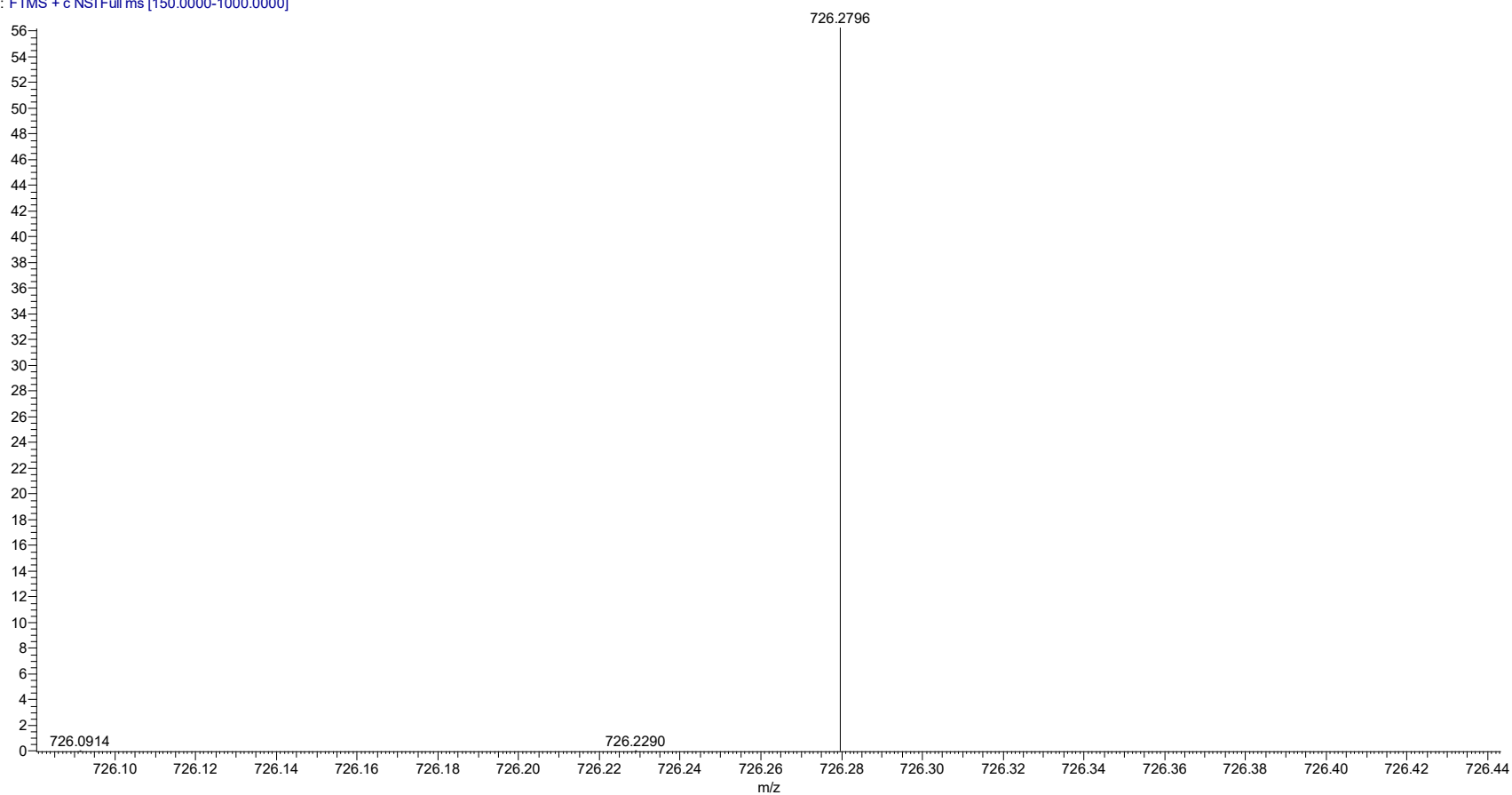
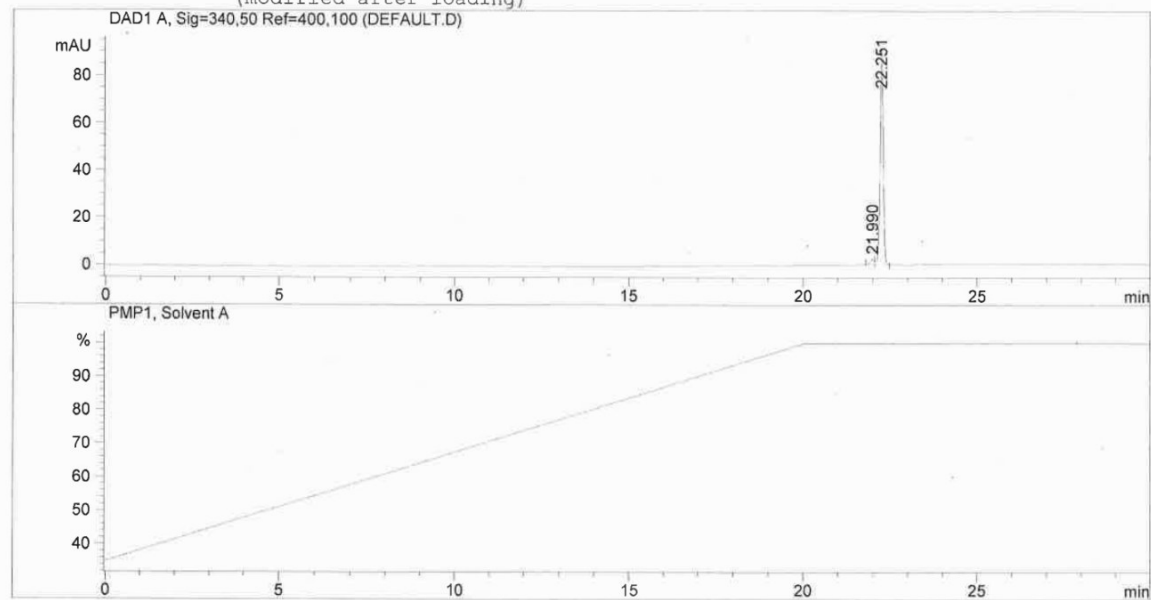


Figure S40: High resolution mass spectrum of **13**

```

=====
Injection Date   : 9/13/2021 11:55:21 AM
Sample Name      : SW-66-94                      Location : Vial 1
Acq. Operator    :
Method           : C:\HPCHEM\1\METHODS\JNP2015.M
Last changed     : 9/13/2021 11:53:45 AM
                  (modified after loading)
=====

```



```

=====
Area Percent Report
=====

```

```

Sorted By      : Signal
Multiplier     : 1.0000
Dilution       : 1.0000

```

Signal 1: DAD1 A, Sig=340,50 Ref=400,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	21.990	BV	0.1080	19.44175	2.57780	3.3204
2	22.251	VB	0.0966	566.07684	91.02409	96.6796

```
Totals :                      585.51859  93.60189
```

Results obtained with enhanced integrator!

```

=====
*** End of Report ***
=====

```

Figure S41: HPLC chromatogram of 13

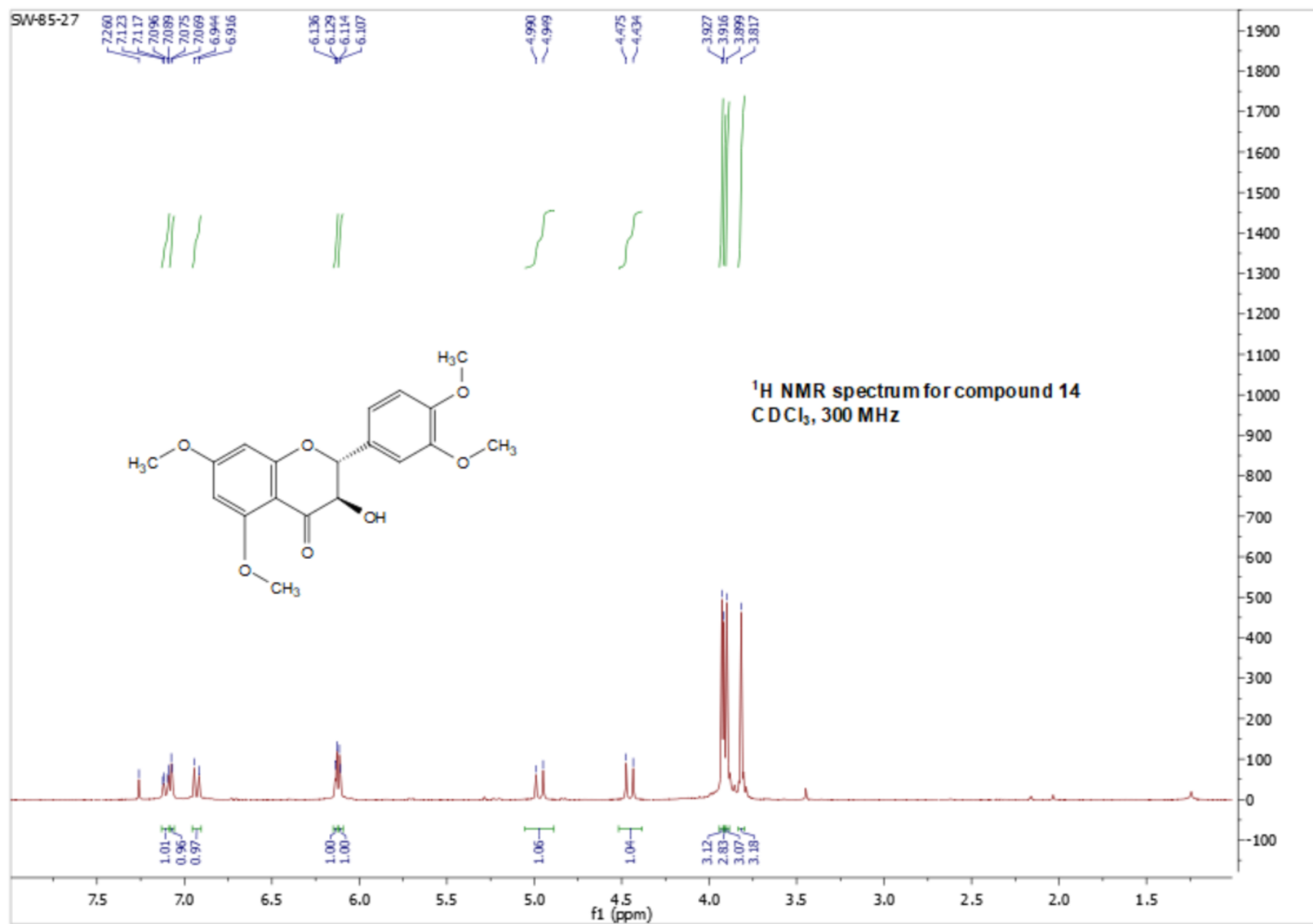


Figure S42: ¹H NMR spectrum of **14** in CDCl₃

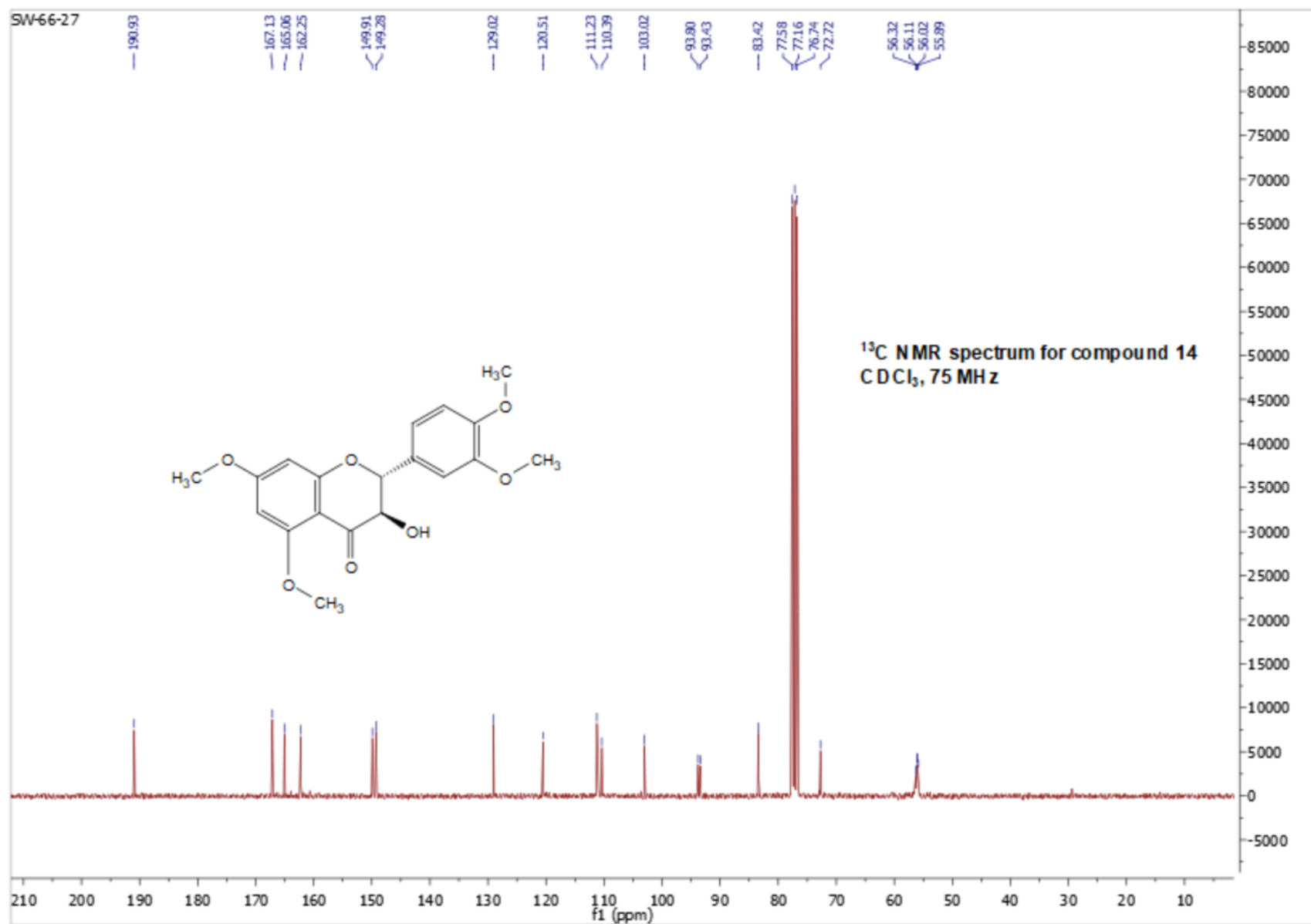


Figure S43: ¹³C NMR spectrum of **14** in CDCl₃

Sample Name	Mol Fomula	MW	M+H	observed	delta	ppm
SW-85-27	C19H20O7	360.1209	361.1287	361.1281	-0.0006	-1.77

SW-85-27 #1554-1728 RT: 8.67-9.55 AV: 175 NL: 2.86E9
T: FTMS + c NSI Full ms [300.0000-1000.0000]

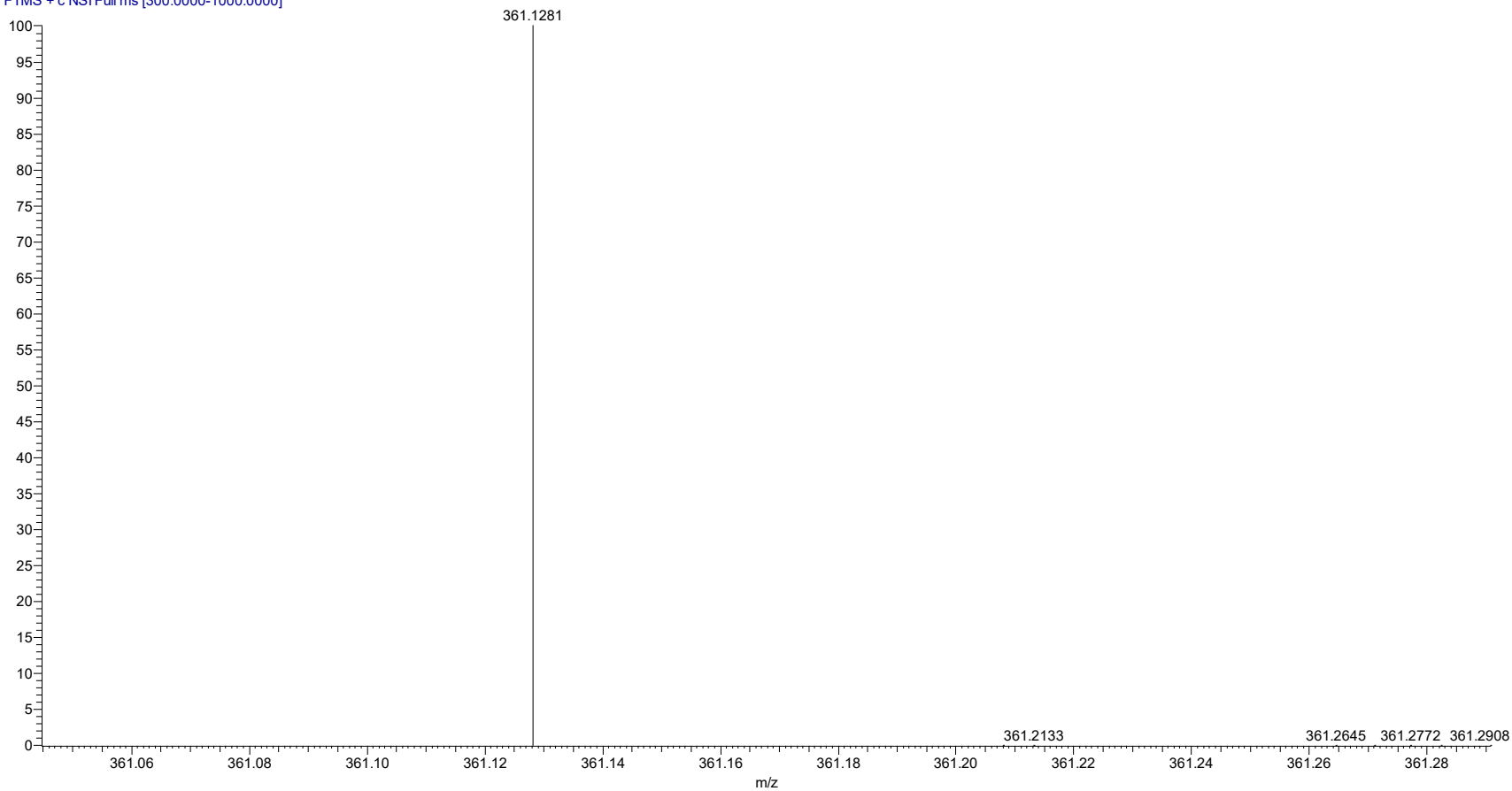


Figure S44: High resolution mass spectrum of **14**

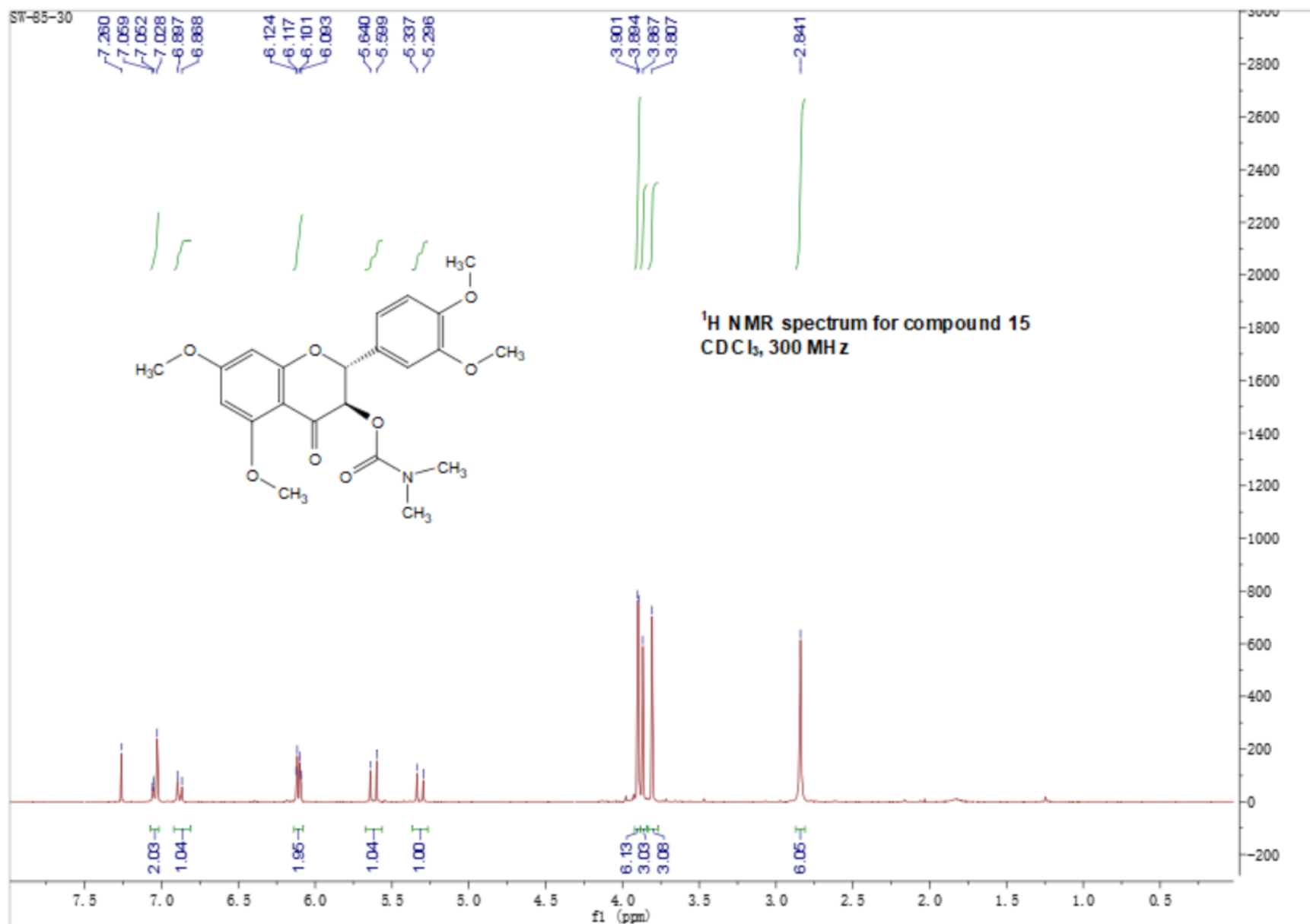


Figure S45: ¹H NMR spectrum of **15** in CDCl₃

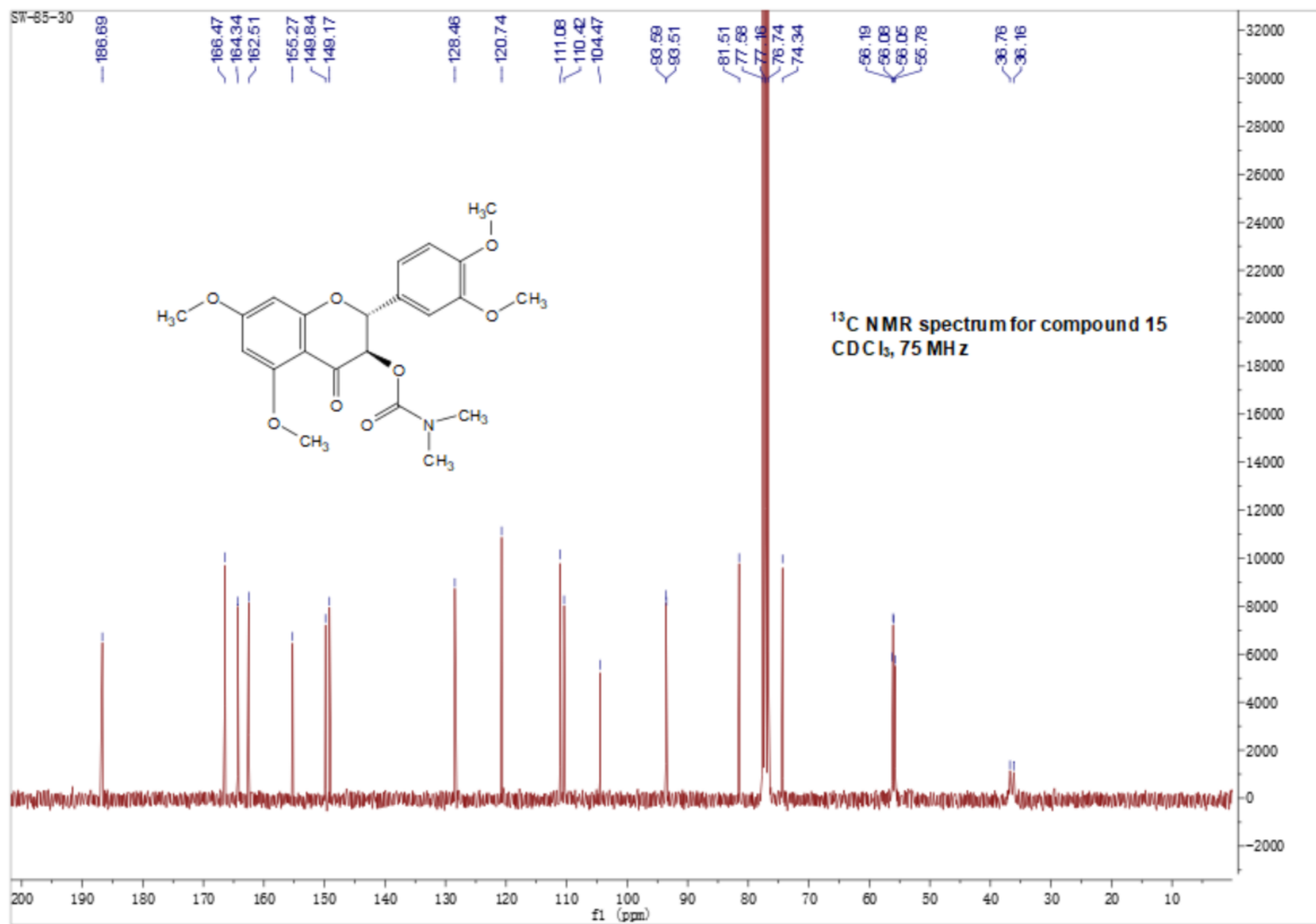


Figure S46: ^{13}C NMR spectrum of **15** in CDCl₃

Sample Name	Mol Fomula	MW	M+H	observed	delta	ppm
SW-85-30	C22H25NO8	431.1581	432.1659	432.1657	-0.0002	-0.37

SW-85-30 #1788-1933 RT: 9.86-10.60 AV: 146 NL: 1.78E9
T: FTMS + c NSI Full ms [300.0000-1000.0000]

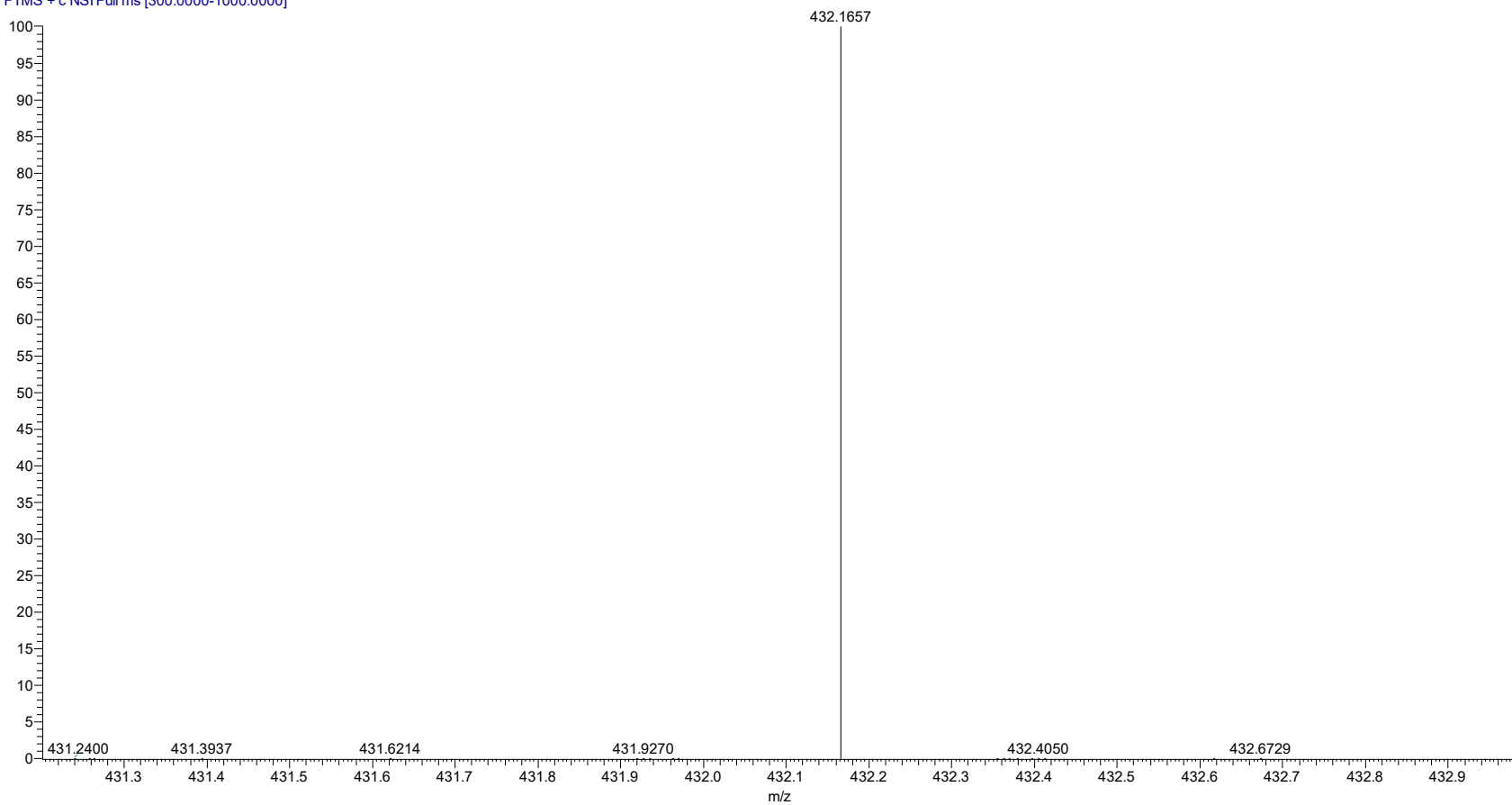


Figure S47: High resolution mass spectrum of **15**

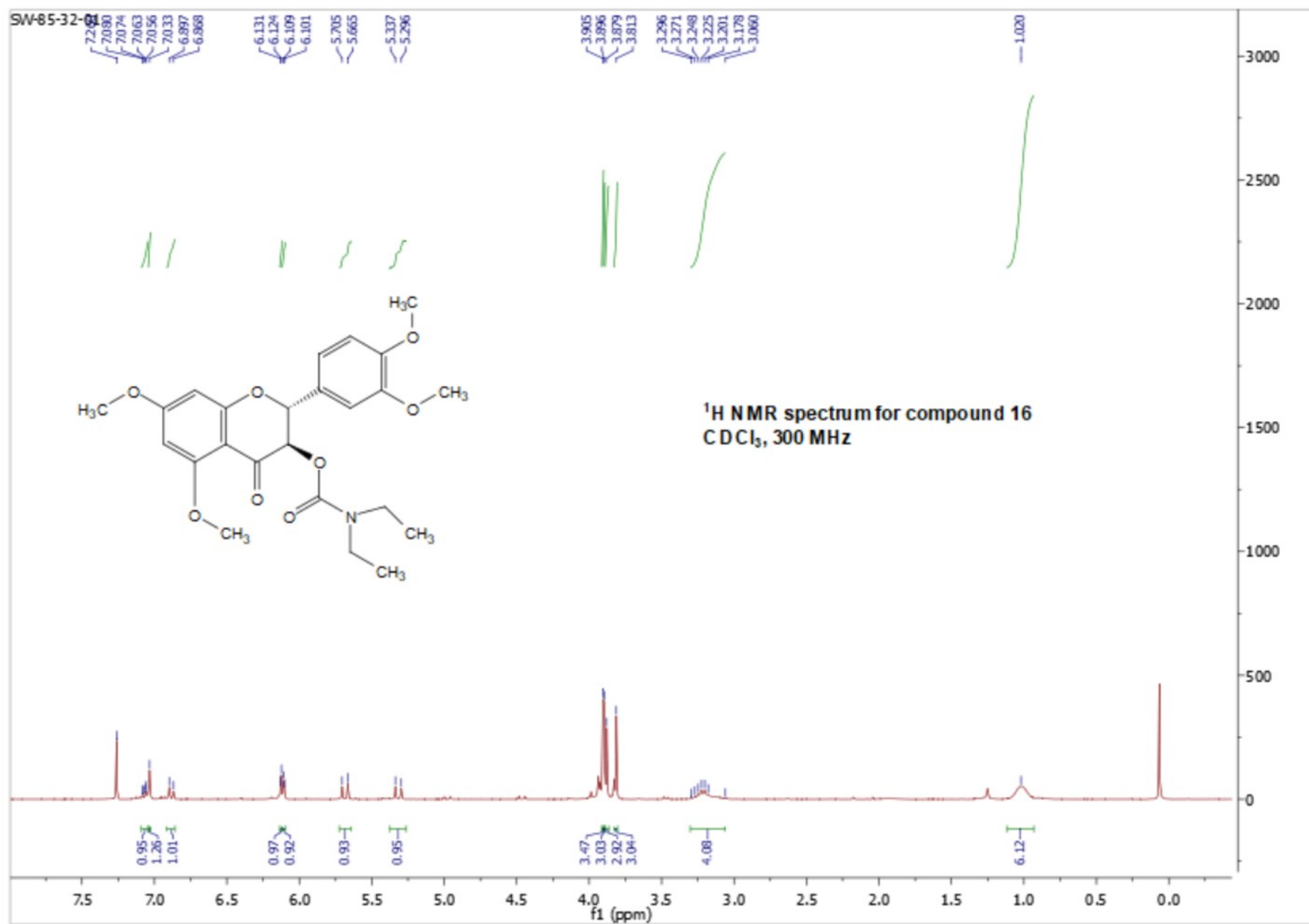


Figure S48: ¹H NMR spectrum of **16** in CDCl₃

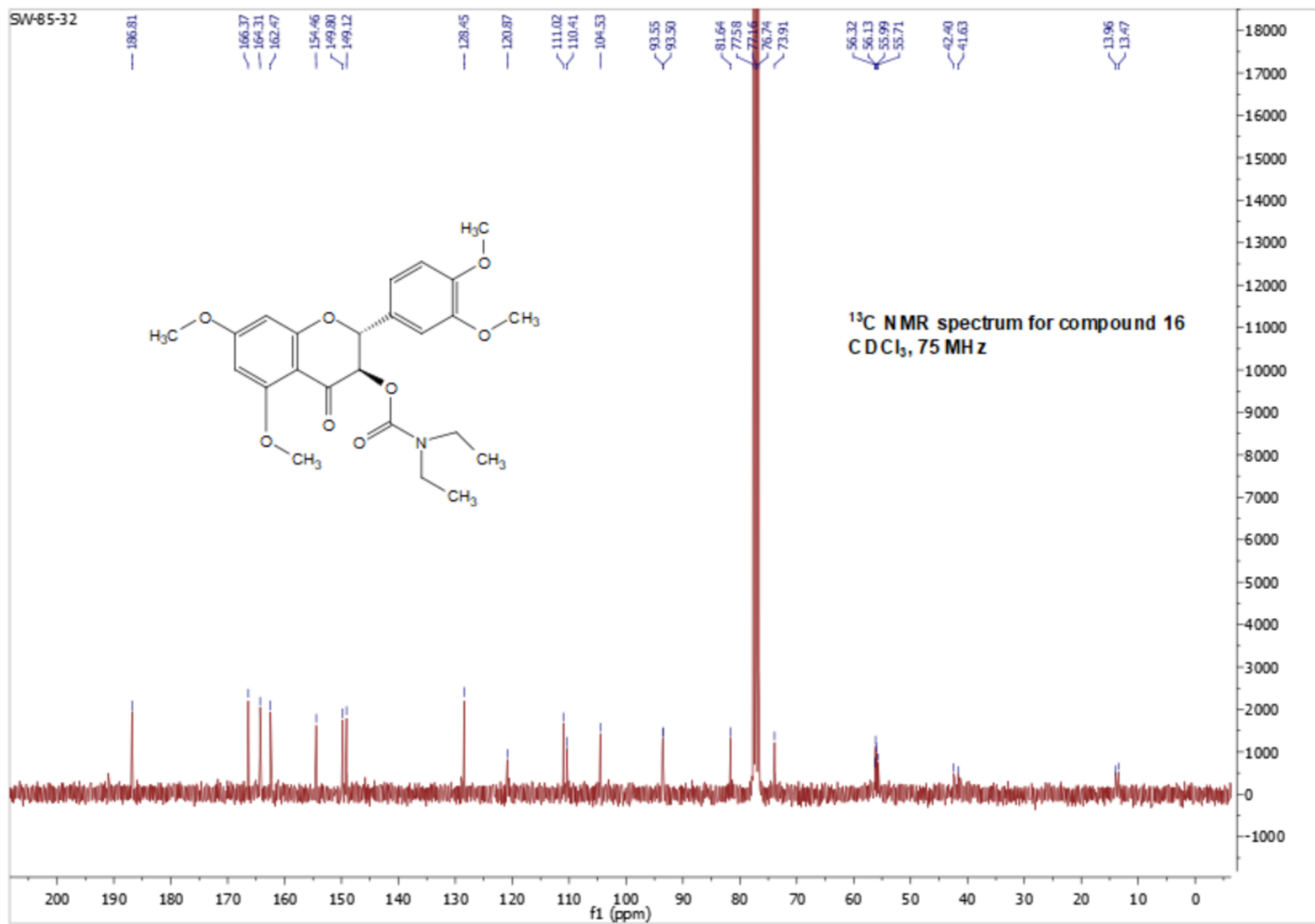


Figure S49: ¹³C NMR spectrum of **16** in CDCl₃

Sample Name	Mol Fomula	MW	M+H	observed	delta	ppm
SW-85-32	C ₂₄ H ₂₉ NO ₈	459.1894	460.1972	460.1970	-0.0002	-0.35

SW-85-32 #1912-2071 RT: 10.49-11.30 AV: 160 NL: 9.20E8
T: FTMS + c NSI Full ms [300.0000-1000.0000]

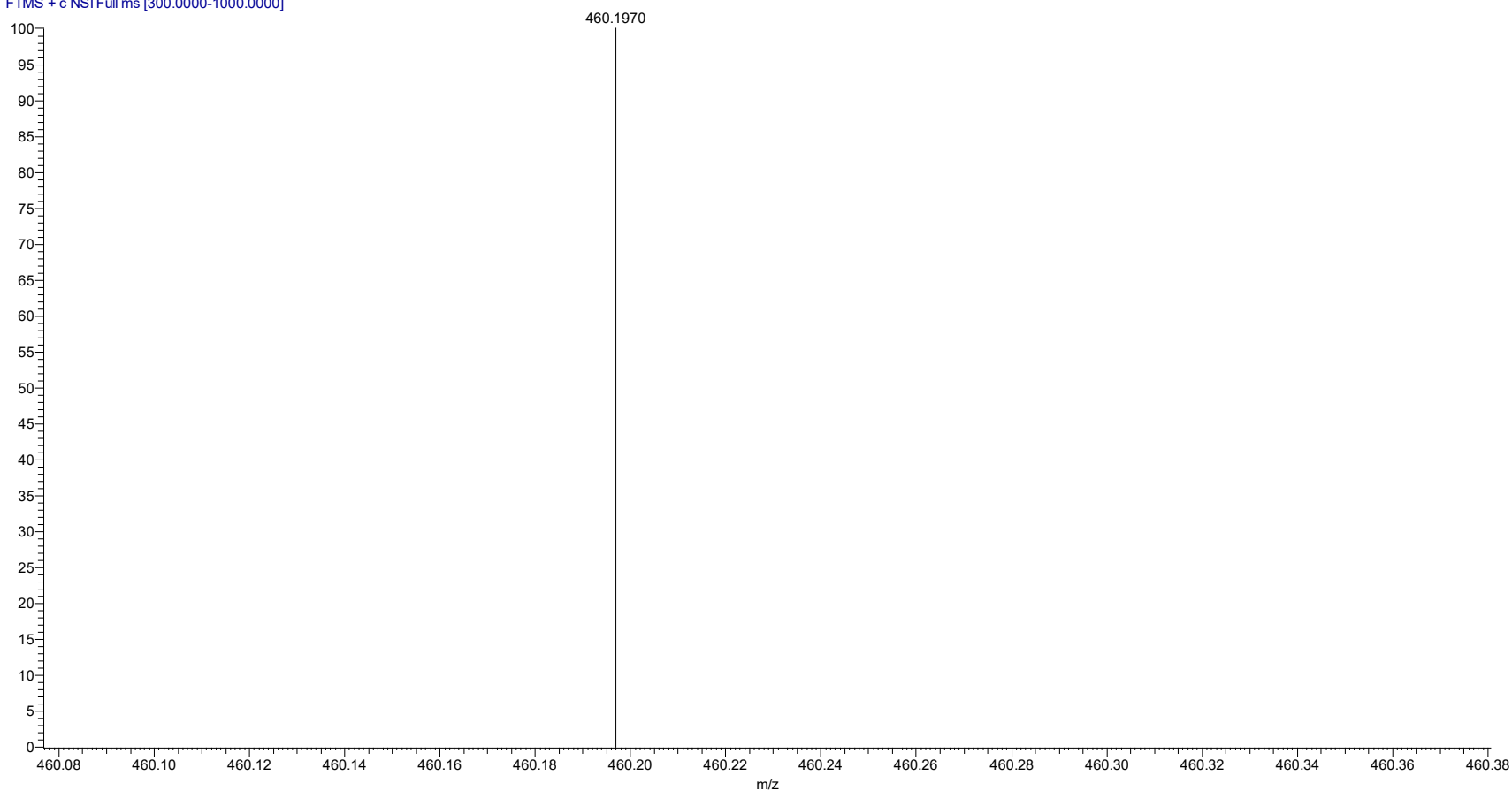


Figure S50: High resolution mass spectrum of **16**

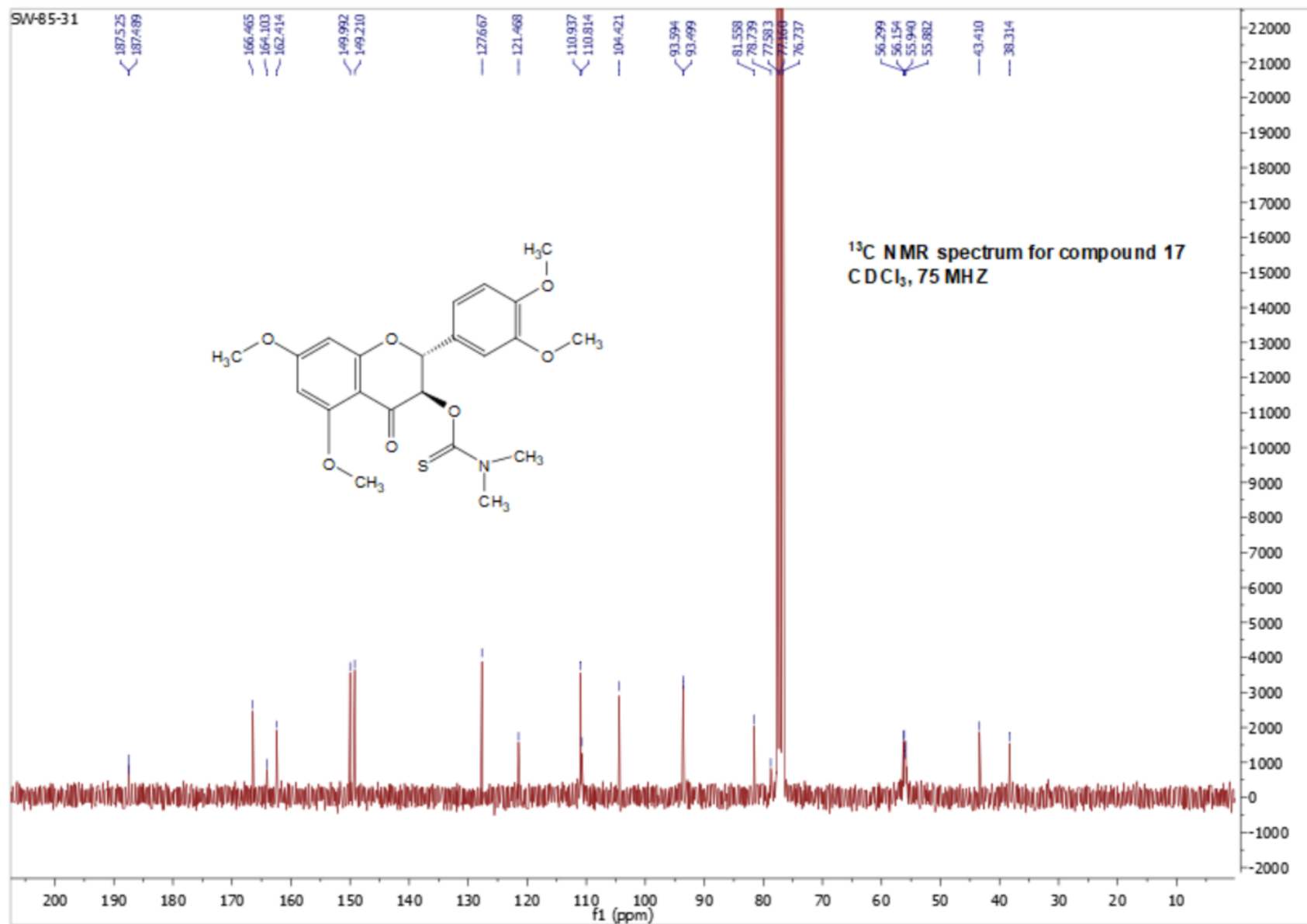


Figure S52: ¹³C NMR spectrum of **17** in CDCl₃

Sample Name	Mol Fomula	MW	M+H	observed	delta	ppm
SW-85-31	C22H25NO7S	447.1352	448.1430	448.1431	0.0001	0.20

SW-85-31 #1933-2007 RT: 10.60-10.98 AV: 75 NL: 1.55E9
T: FTMS + c NSI Full ms [300.0000-1000.0000]

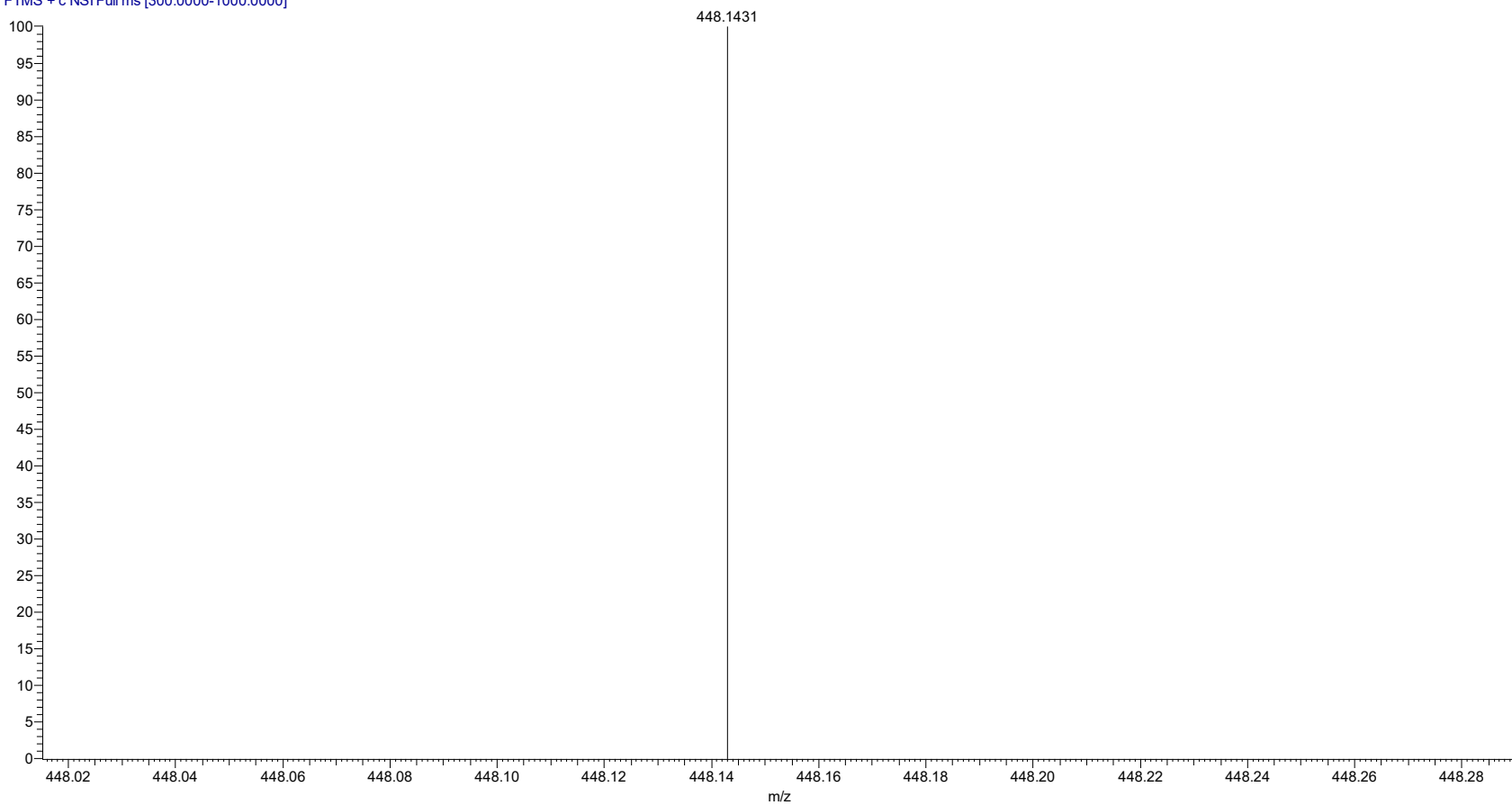
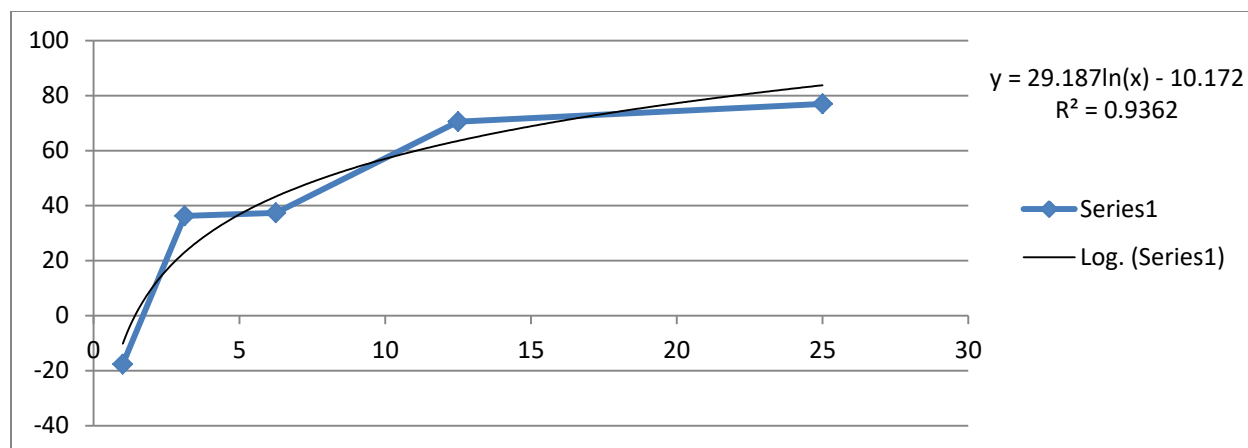


Figure S53: High resolution mass spectrum of **17**

Figure S54: The concentration-effect curves that were used to calculate the IC₅₀ values from the WST-1 cell proliferation assay

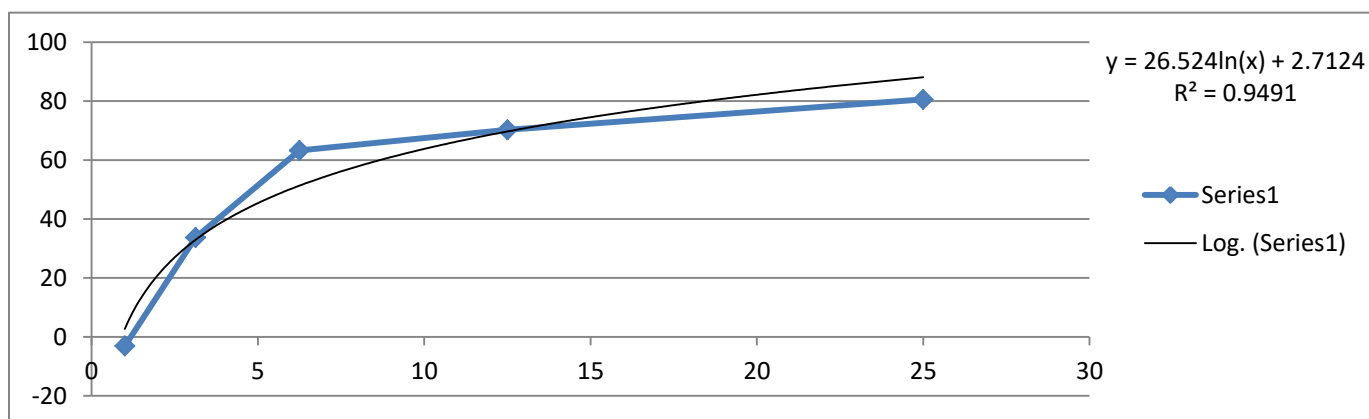
1. The curves that we used to calculate the IC₅₀ value for compound **3** against PC-3



X-axis = concentration (μM) of compound **3**

Y-axis = % Cell Proliferation Inhibition

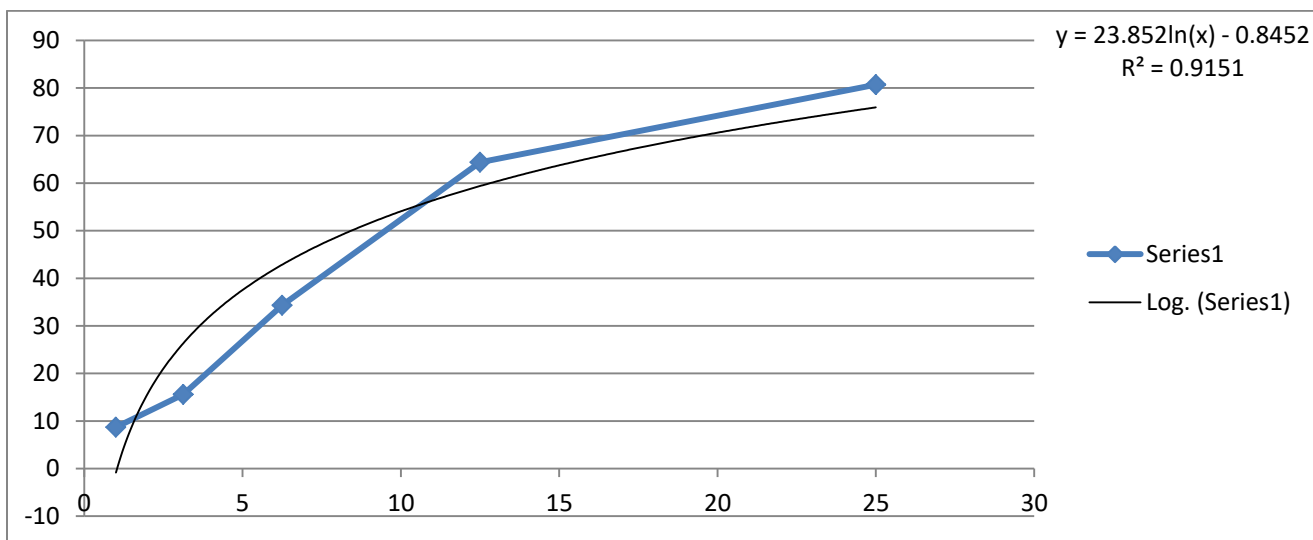
IC₅₀ = 7.858 μM



X-axis = concentration (μM) of compound **3**

Y-axis = % Cell Proliferation Inhibition

IC₅₀ = 5.946 μM

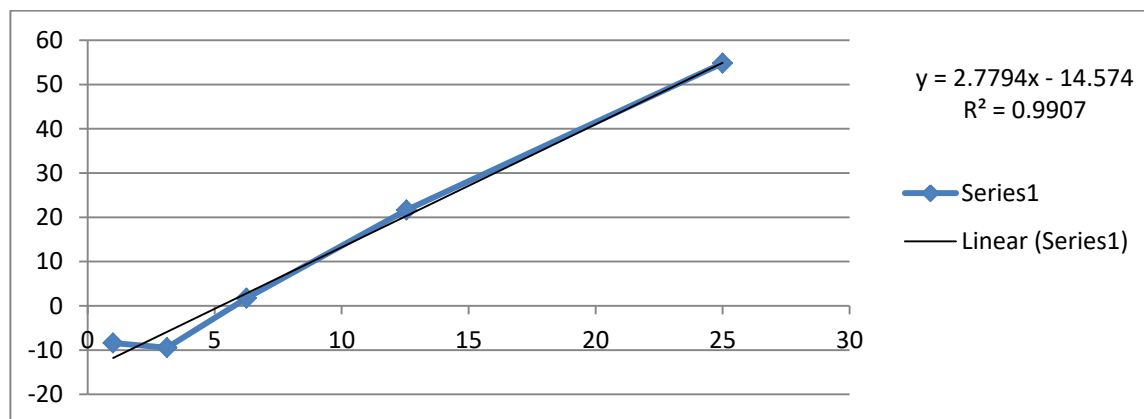


X-axis = concentration (μM) of compound **3**

Y-axis = % Cell Proliferation Inhibition

IC₅₀ = 8.429 μM

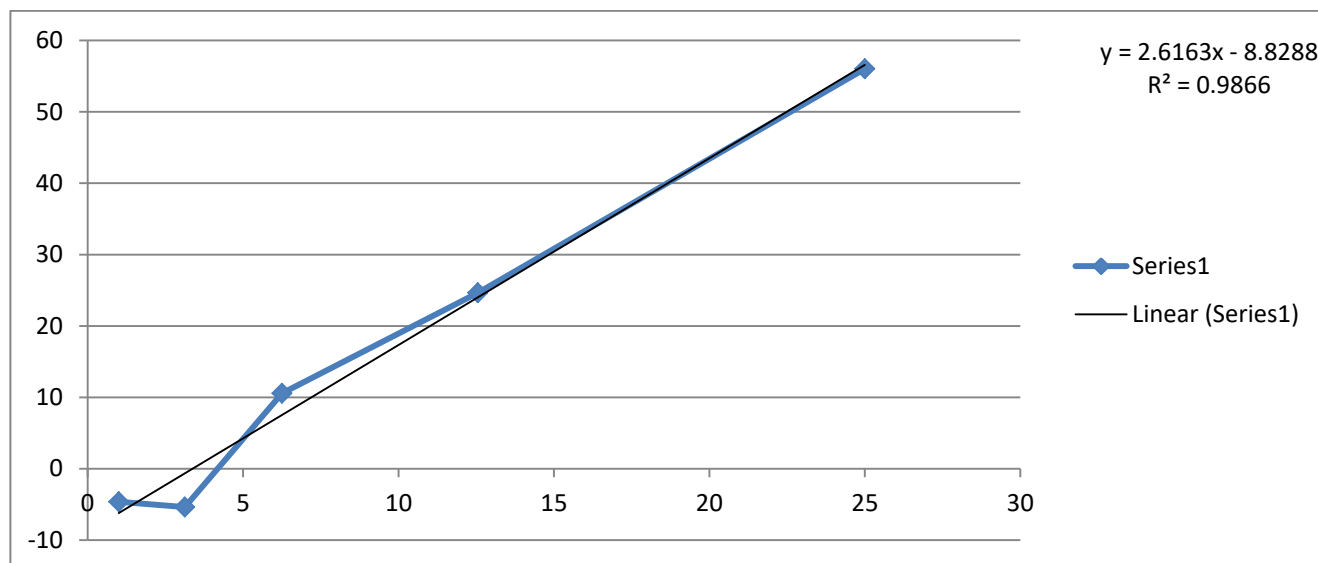
2. The curves that we used to calculate the IC₅₀ value for compound **3** against DU145



X-axis = concentration (μM) of compound **3**

Y-axis = % Cell Proliferation Inhibition

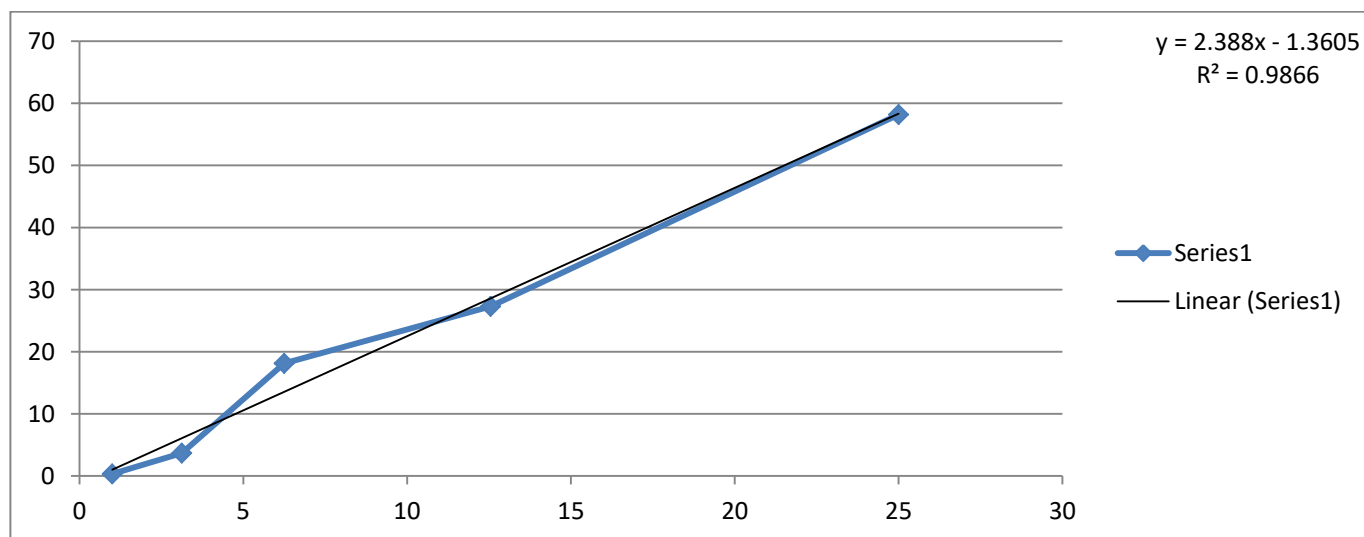
IC₅₀ = 23.233 μM



X-axis = concentration (μM) of compound **3**

Y-axis = % Cell Proliferation Inhibition

$\text{IC}_{50} = 22.485 \mu\text{M}$

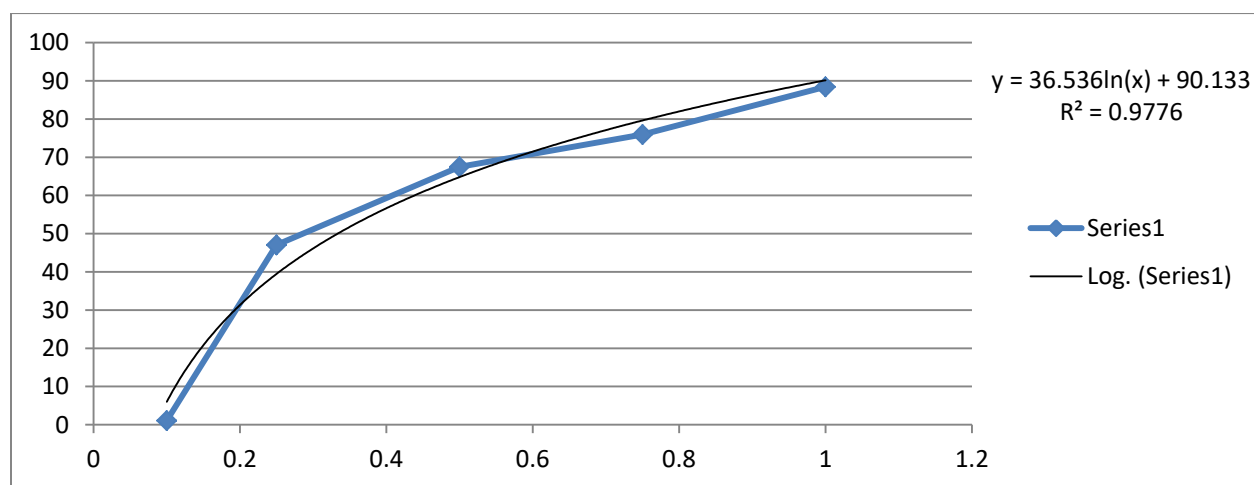


X-axis = concentration (μM) of compound **3**

Y-axis = % Cell Proliferation Inhibition

$\text{IC}_{50} = 21.508 \mu\text{M}$

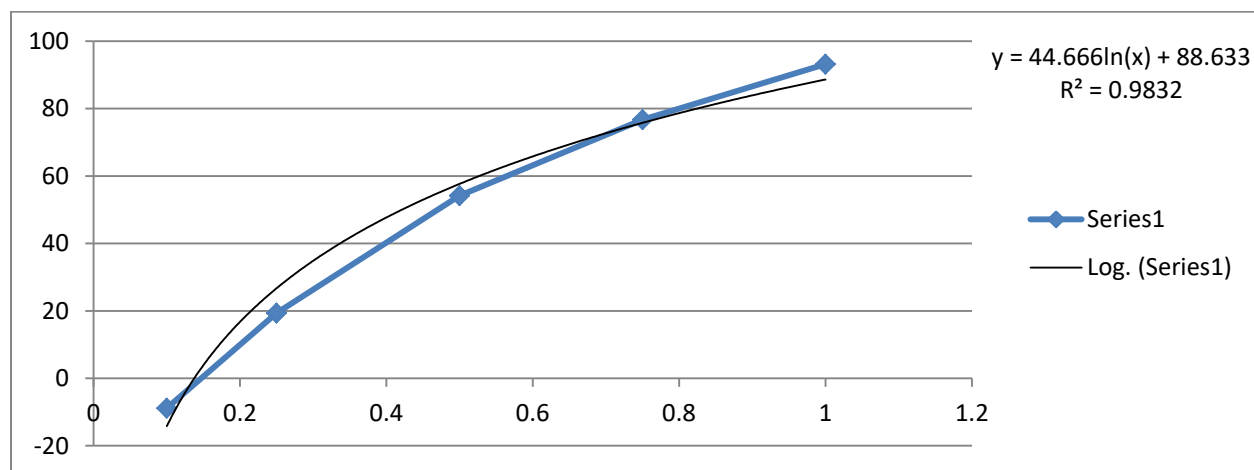
3. The curves that we used to calculate the IC₅₀ value for compound **3** against LNCaP



X-axis = concentration (μM) of compound **3**

Y-axis = % Cell Proliferation Inhibition

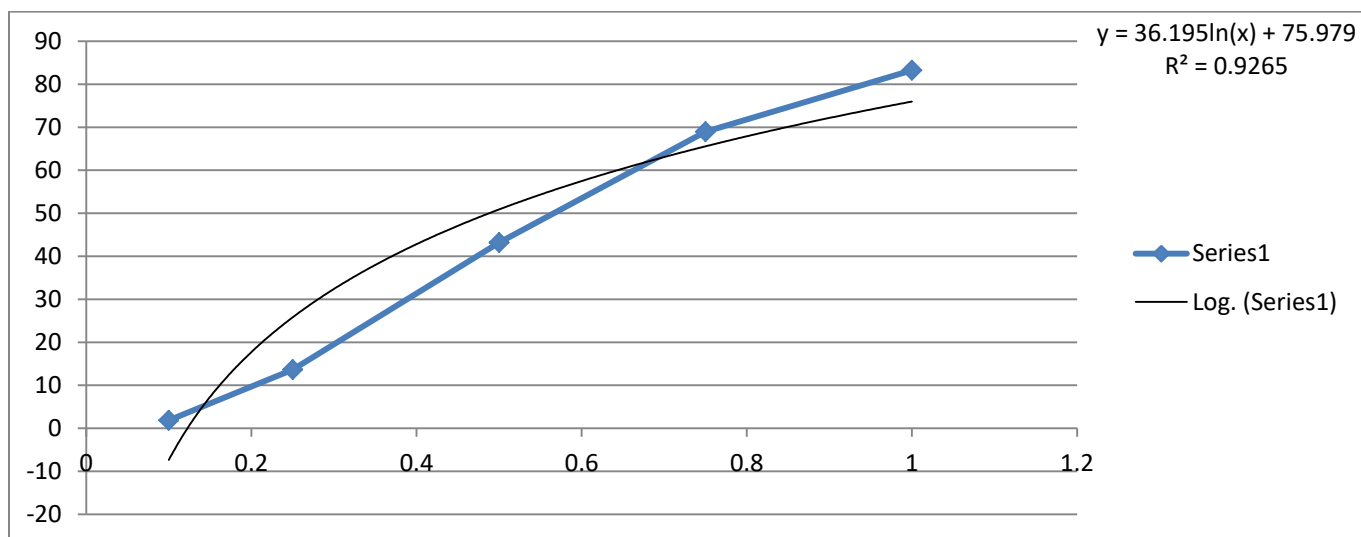
IC₅₀ = 0.333 μM



X-axis = concentration (μM) of compound **3**

Y-axis = % Cell Proliferation Inhibition

IC₅₀ = 0.421 μM

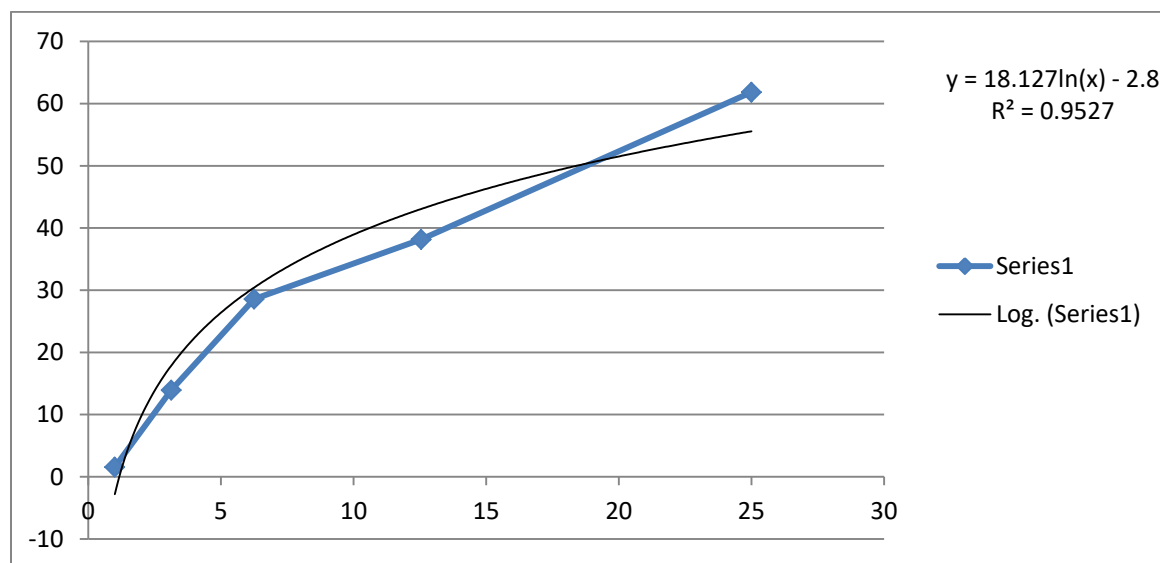


X-axis = concentration (μM) of compound **3**

Y-axis = % Cell Proliferation Inhibition

$\text{IC}_{50} = 0.488 \mu\text{M}$

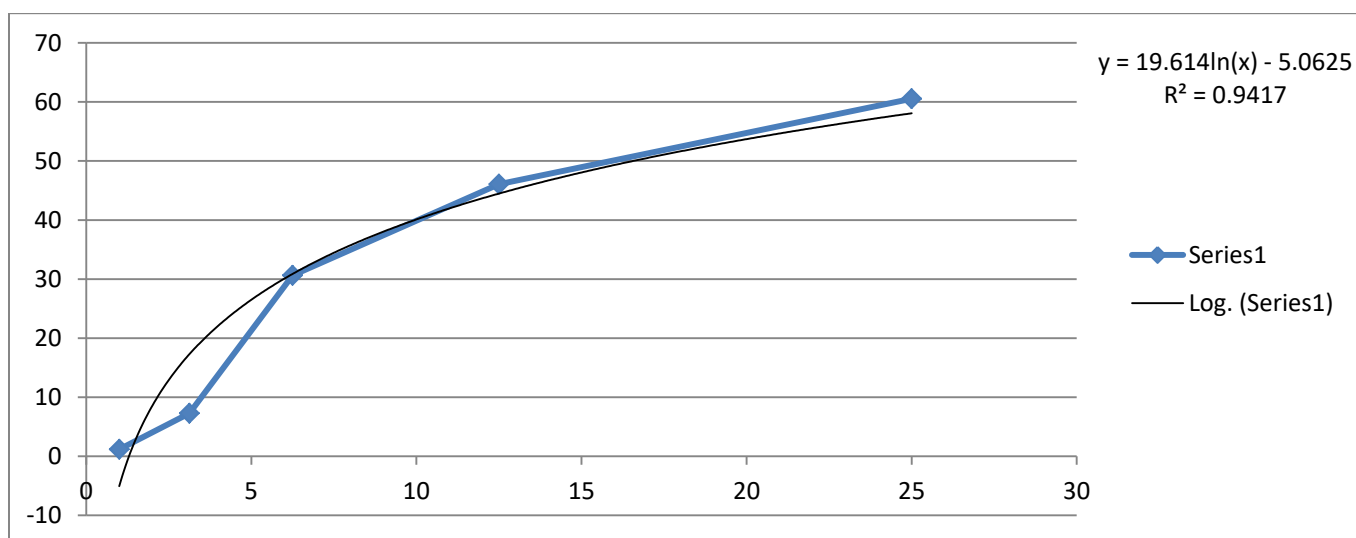
4. The curves that we used to calculate the IC_{50} value for compound **4** against PC-3



X-axis = concentration (μM) of compound **4**

Y-axis = % Cell Proliferation Inhibition

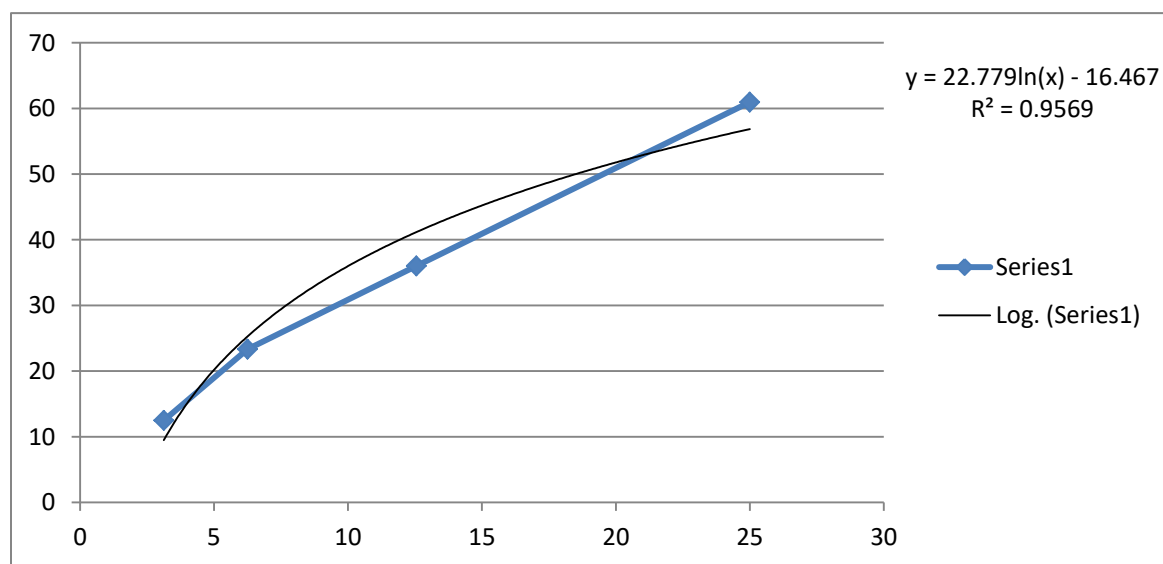
$\text{IC}_{50} = 18.408 \mu\text{M}$



X-axis = concentration (μM) of compound 4

Y-axis = % Cell Proliferation Inhibition

IC₅₀ = 16.565 μM

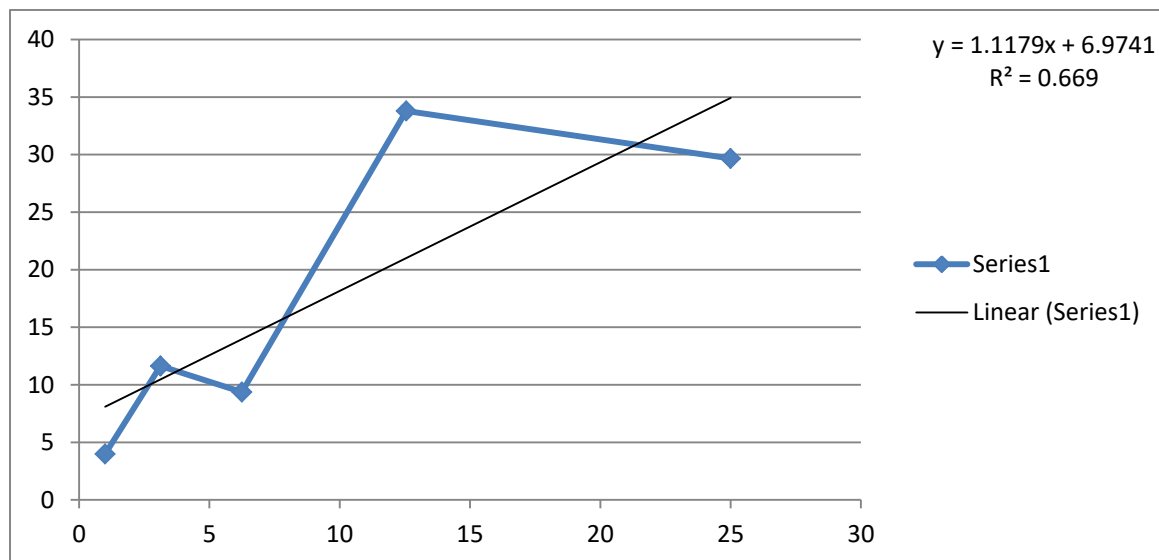


X-axis = concentration (μM) of compound 4

Y-axis = % Cell Proliferation Inhibition

IC₅₀ = 18.5025 μM

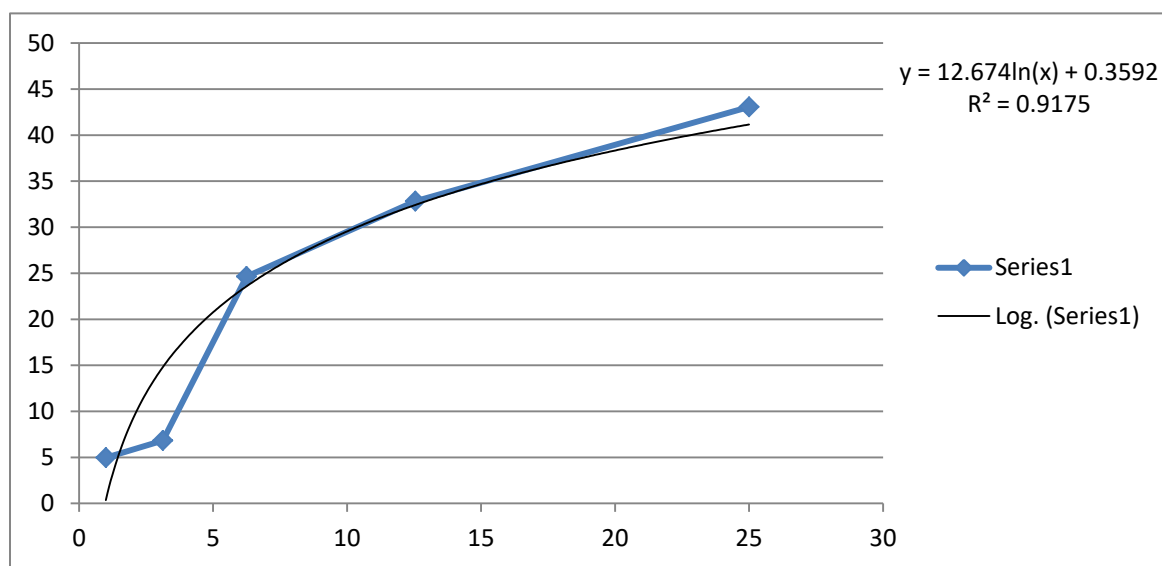
5. The curves that we used to calculate the IC₅₀ value for compound **4** against DU145



X-axis = concentration (μM) of compound **4**

Y-axis = % Cell Proliferation Inhibition

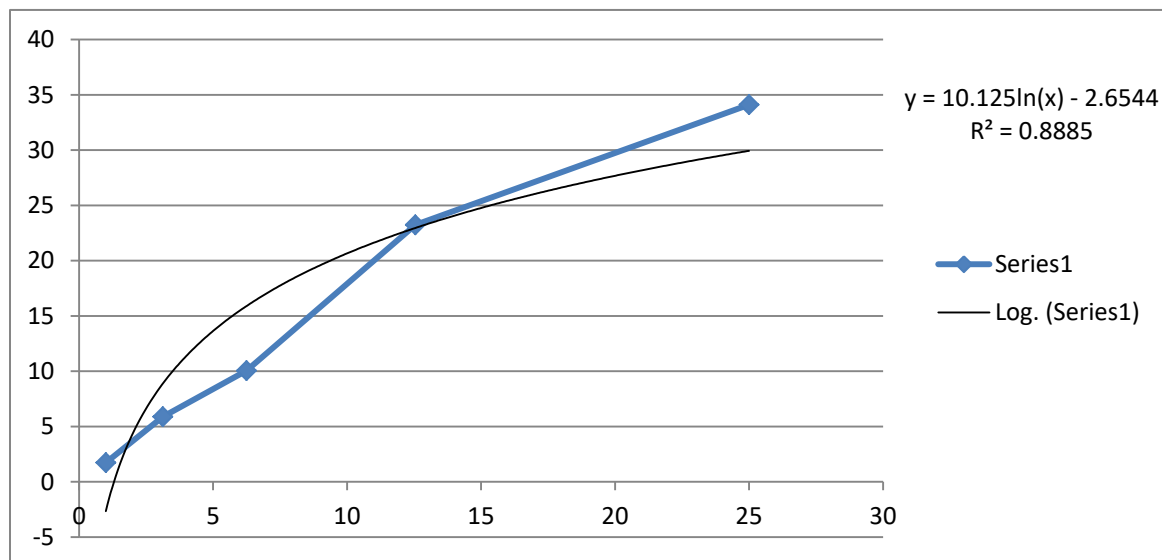
IC₅₀ > 25 μM



X-axis = concentration (μM) of compound **4**

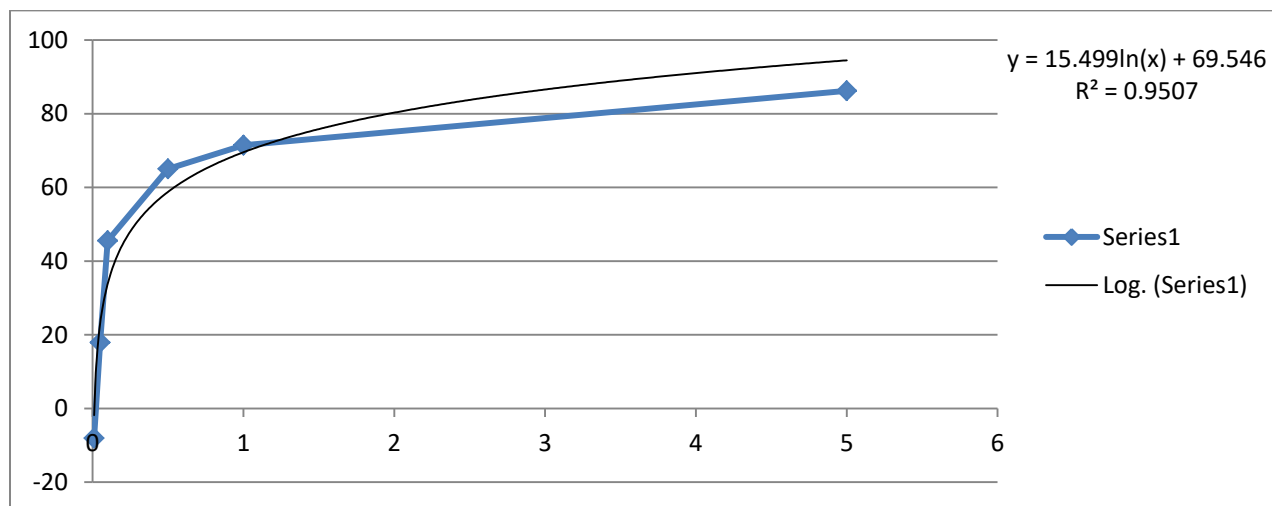
Y-axis = % Cell Proliferation Inhibition

IC₅₀ > 25 μM

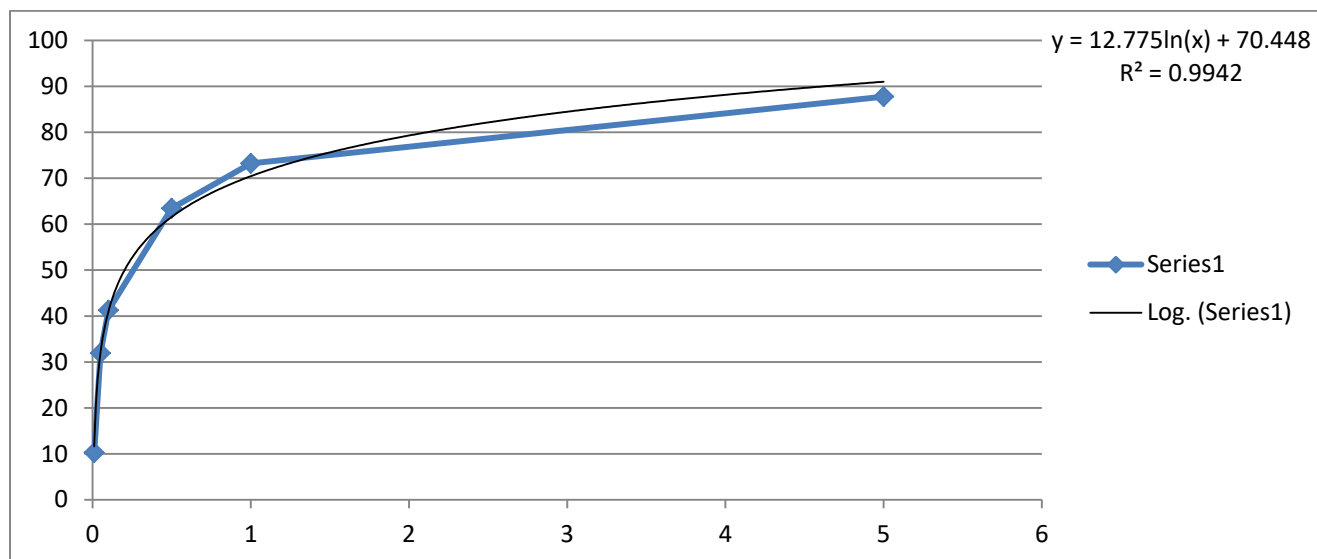


X-axis = concentration (μM) of compound **4**
Y-axis = % Cell Proliferation Inhibition
 $IC_{50} > 25 \mu M$

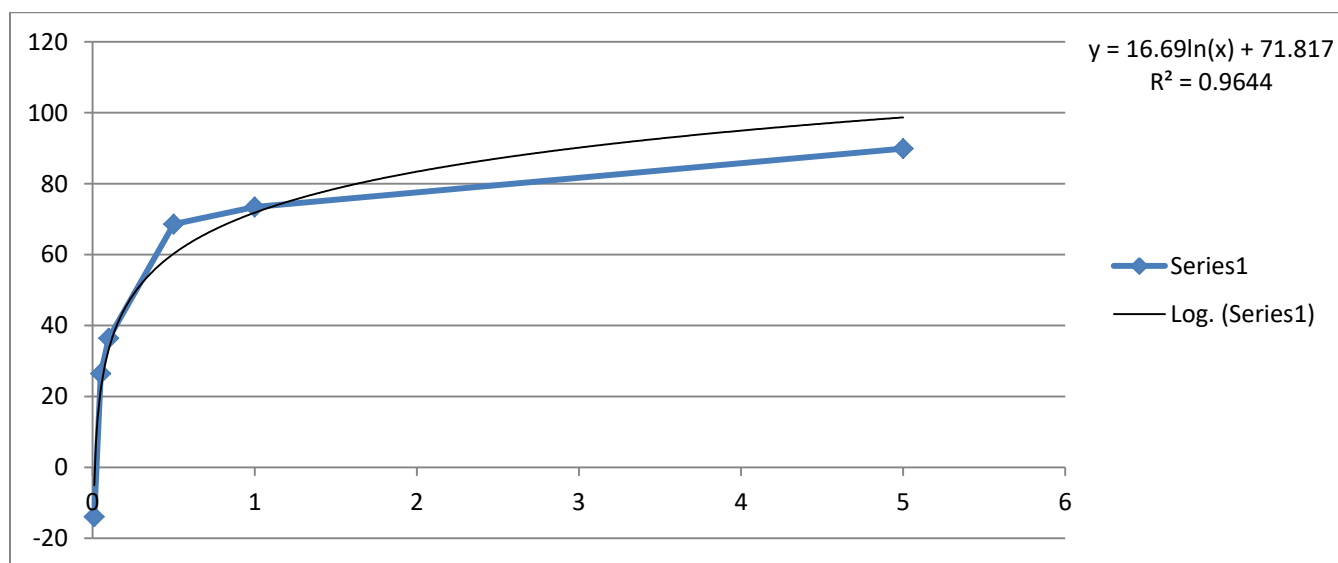
6. The curves that we used to calculate the IC_{50} value for compound **4** against LNCaP



X-axis = concentration (μM) of compound **4**
Y-axis = % Cell Proliferation Inhibition
 $IC_{50} = 0.283 \mu M$

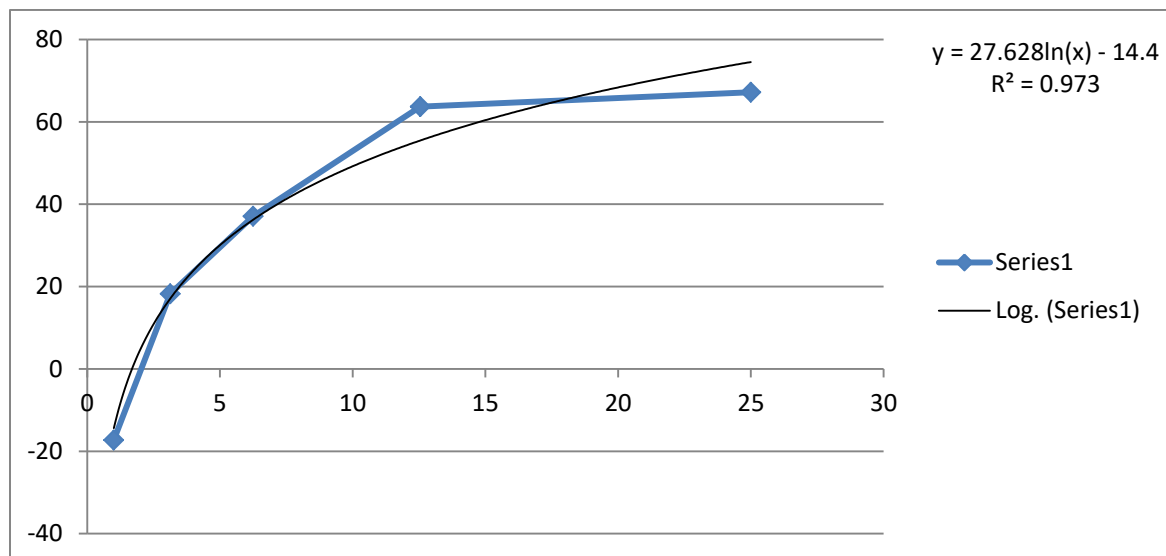


X-axis = concentration (μM) of compound **4**
Y-axis = % Cell Proliferation Inhibition
 $\text{IC}_{50} = 0.202 \mu\text{M}$



X-axis = concentration (μM) of compound **4**
Y-axis = % Cell Proliferation Inhibition
 $\text{IC}_{50} = 0.271 \mu\text{M}$

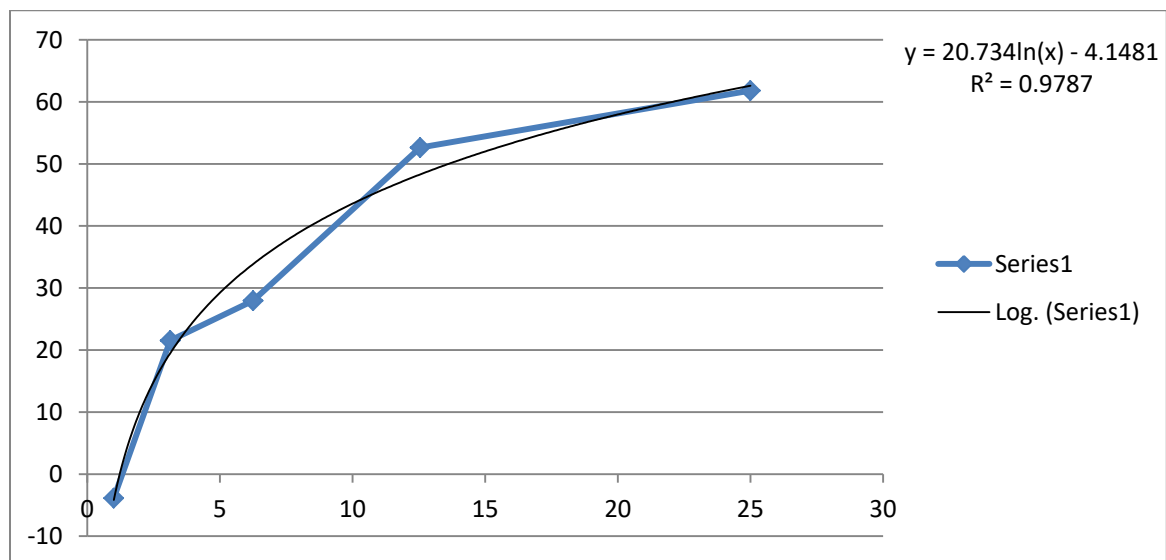
7. The curves that we used to calculate the IC₅₀ value for compound **5** against PC-3



X-axis = concentration (μM) of compound **5**

Y-axis = % Cell Proliferation Inhibition

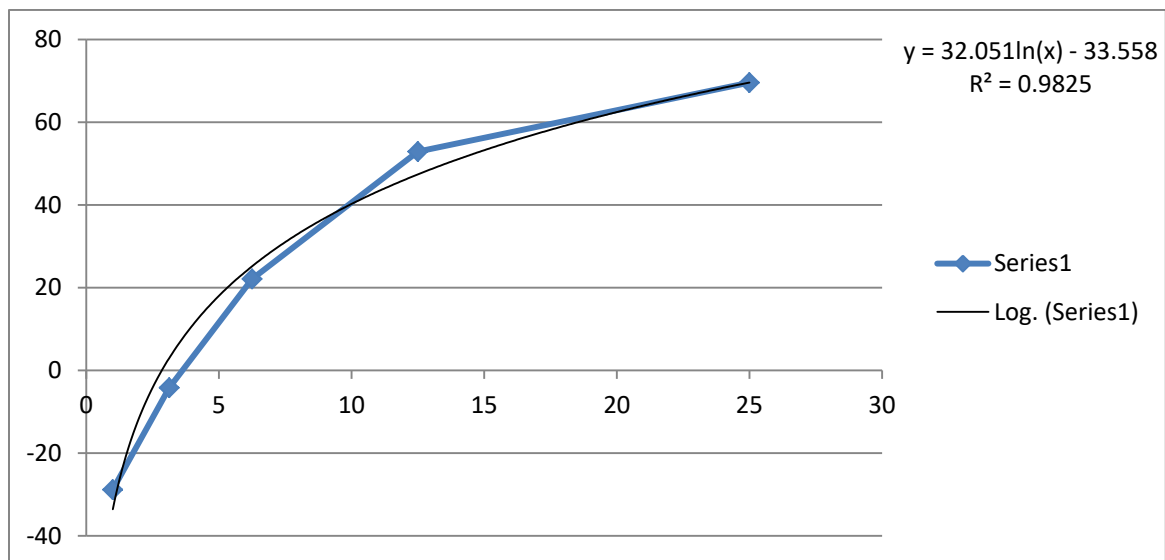
IC₅₀ = 10.288 μM



X-axis = concentration (μM) of compound **5**

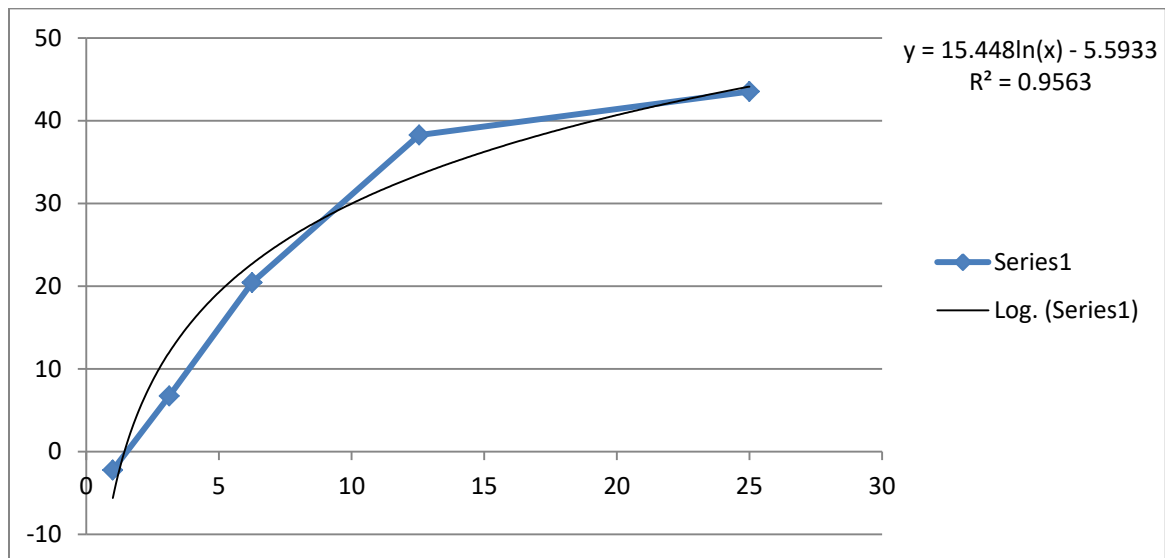
Y-axis = % Cell Proliferation Inhibition

IC₅₀ = 13.620 μM

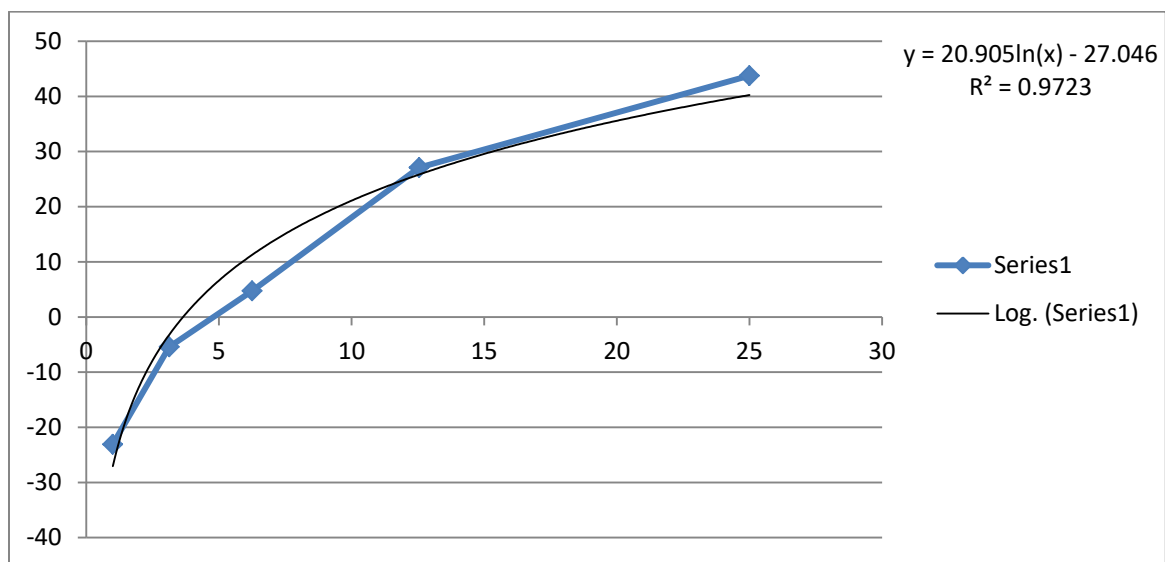


X-axis = concentration (μM) of compound **5**
Y-axis = % Cell Proliferation Inhibition
 IC_{50} = 13.575 μM

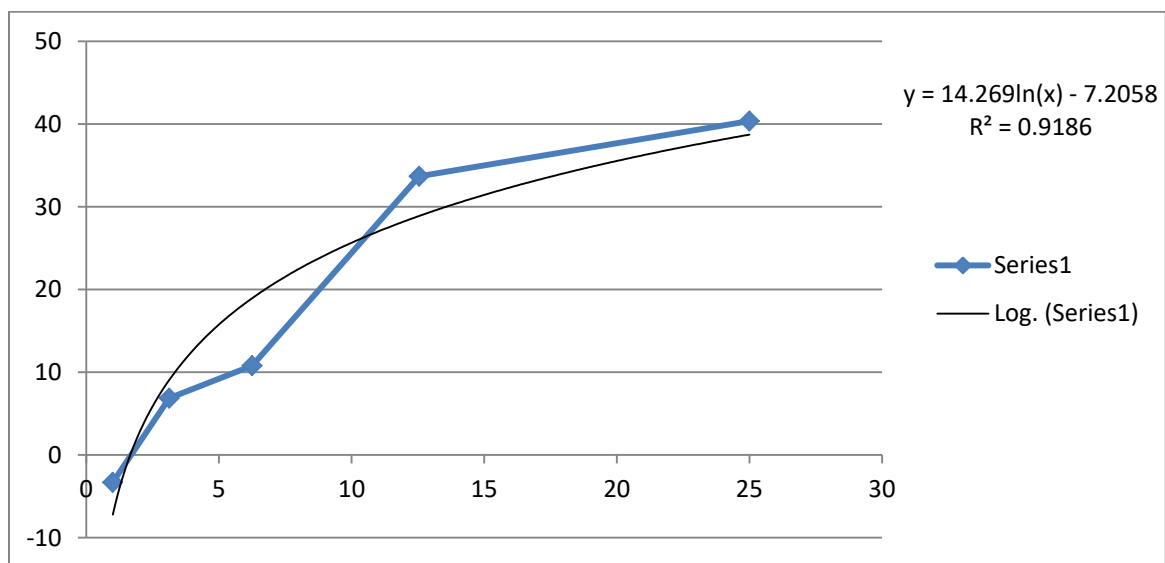
8. The curves that we used to calculate the IC_{50} value for compound **5** against DU145



X-axis = concentration (μM) of compound **5**
Y-axis = % Cell Proliferation Inhibition
 IC_{50} > 25 μM

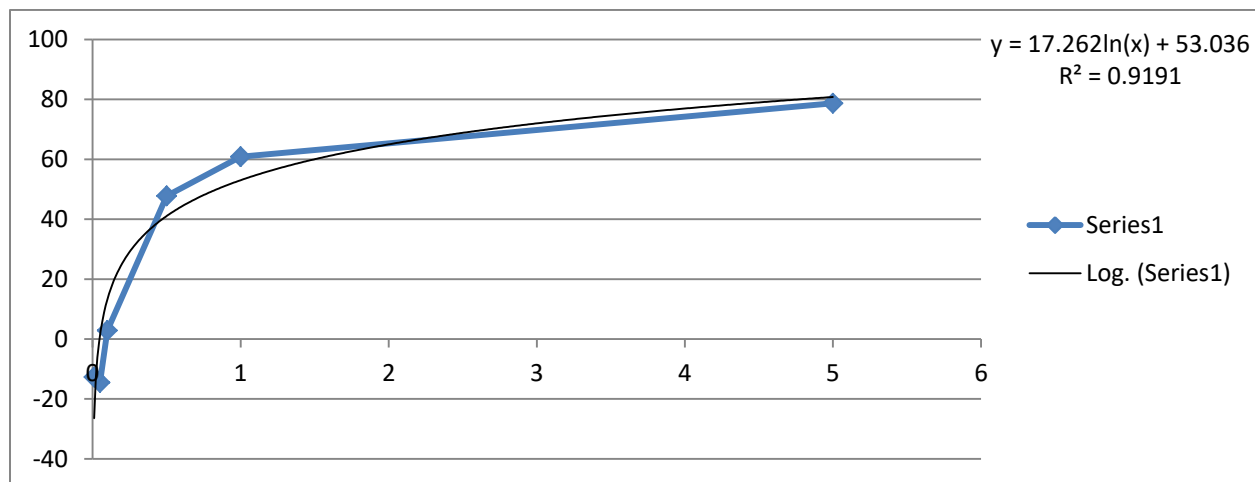


X-axis = concentration (μM) of compound **5**
Y-axis = % Cell Proliferation Inhibition
IC₅₀ > 25 μM



X-axis = concentration (μM) of compound **5**
Y-axis = % Cell Proliferation Inhibition
IC₅₀ > 25 μM

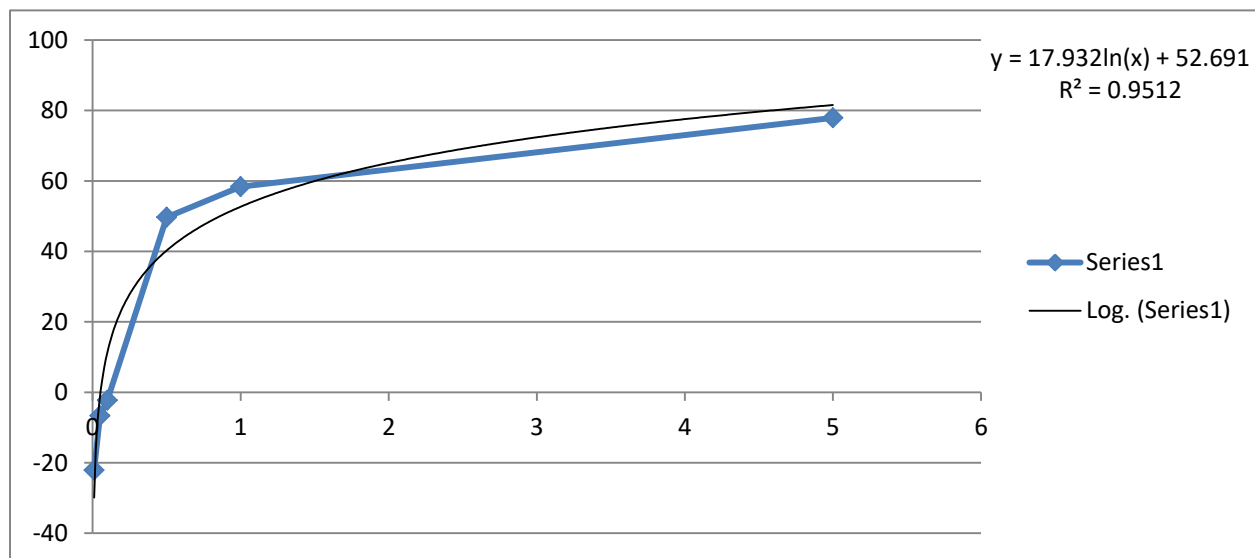
9. The curves that we used to calculate the IC₅₀ value for compound **5** against LNCaP



X-axis = concentration (μM) of compound **5**

Y-axis = % Cell Proliferation Inhibition

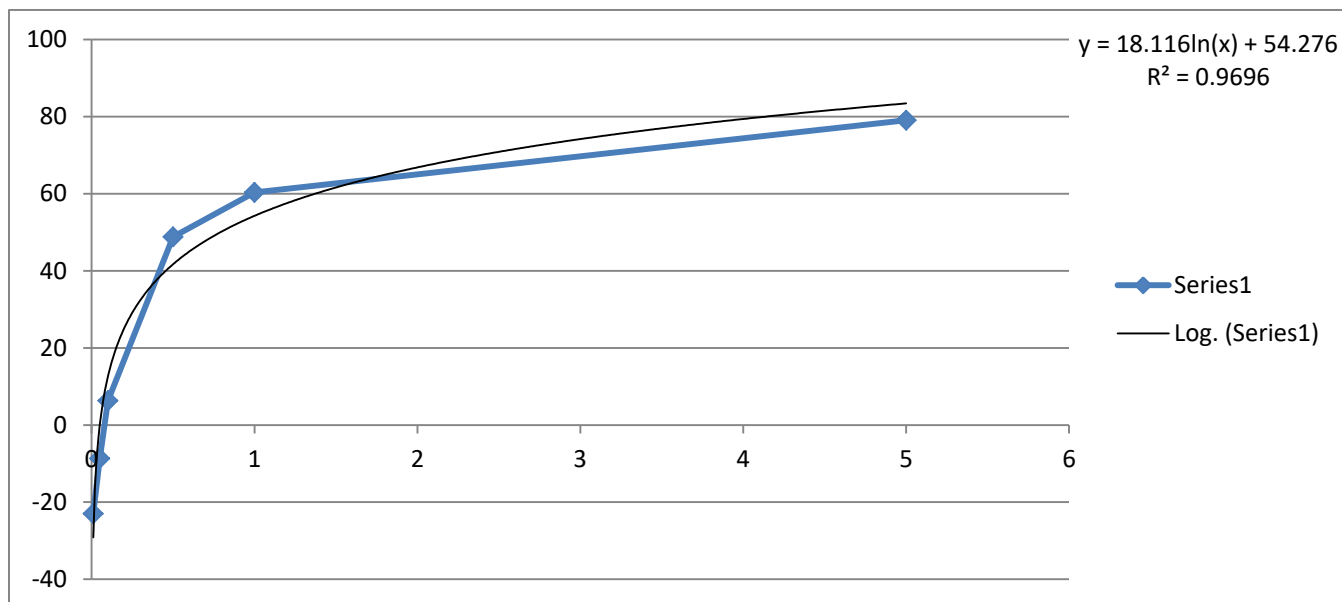
IC₅₀ = 0.839 μM



X-axis = concentration (μM) of compound **5**

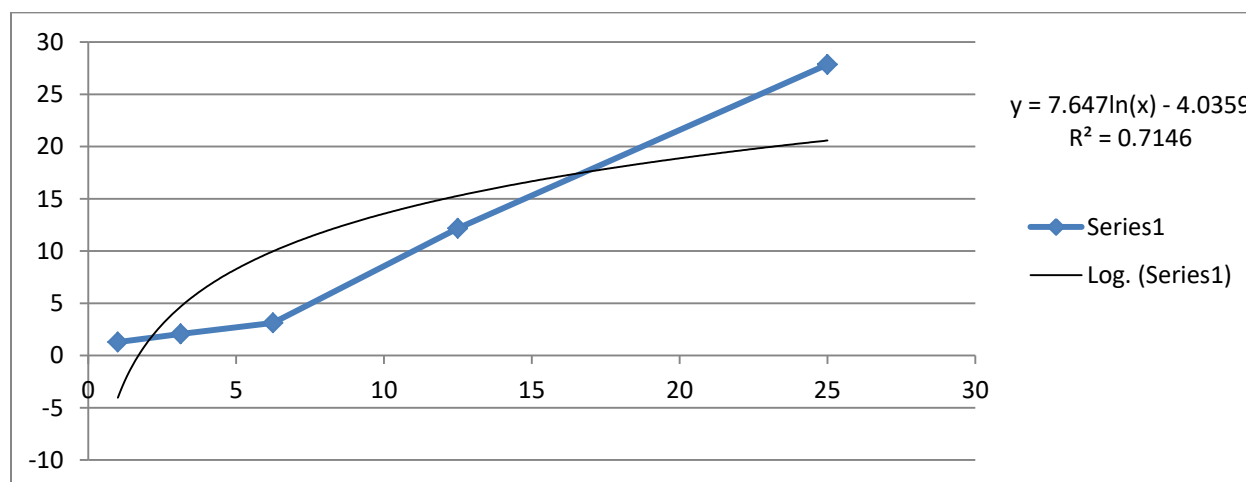
Y-axis = % Cell Proliferation Inhibition

IC₅₀ = 0.861 μM

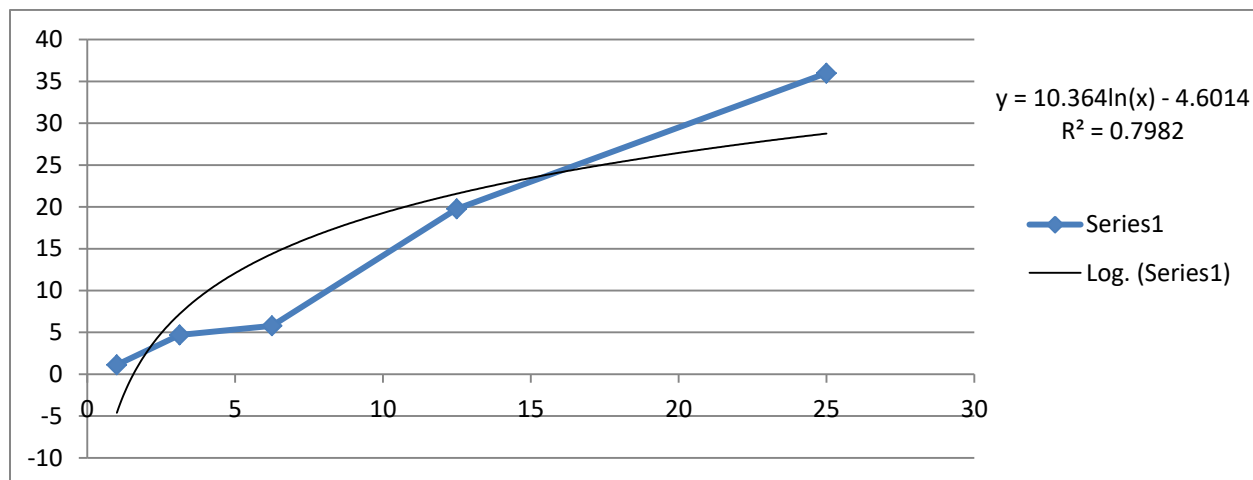


X-axis = concentration (μM) of compound **5**
Y-axis = % Cell Proliferation Inhibition
 $\text{IC}_{50} = 0.790 \mu\text{M}$

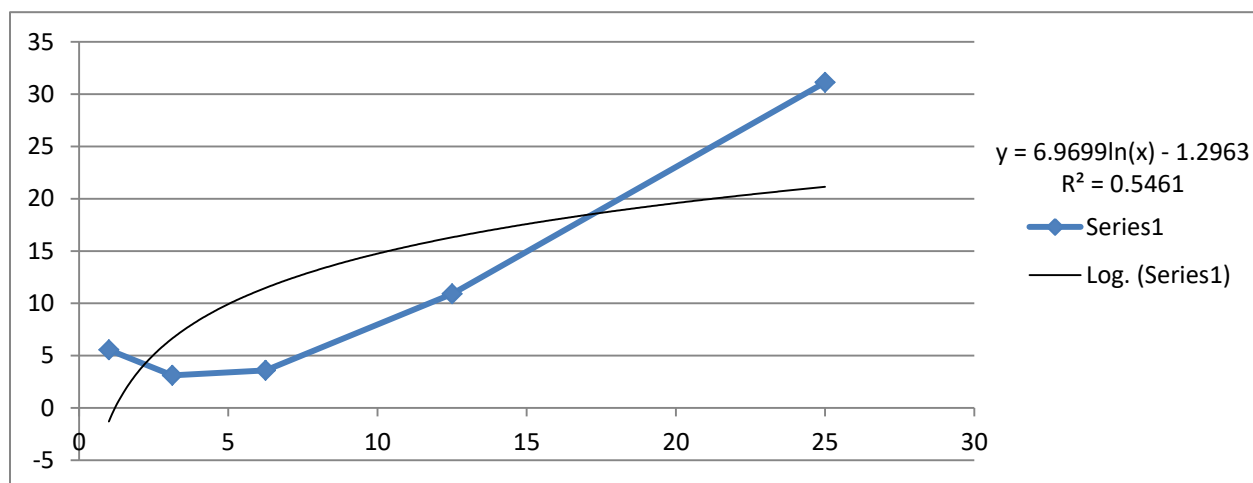
10. The curves that we used to calculate the IC_{50} value for compound **6** against PC-3



X-axis = concentration (μM) of compound **6**
Y-axis = % Cell Proliferation Inhibition
 $\text{IC}_{50} > 25 \mu\text{M}$

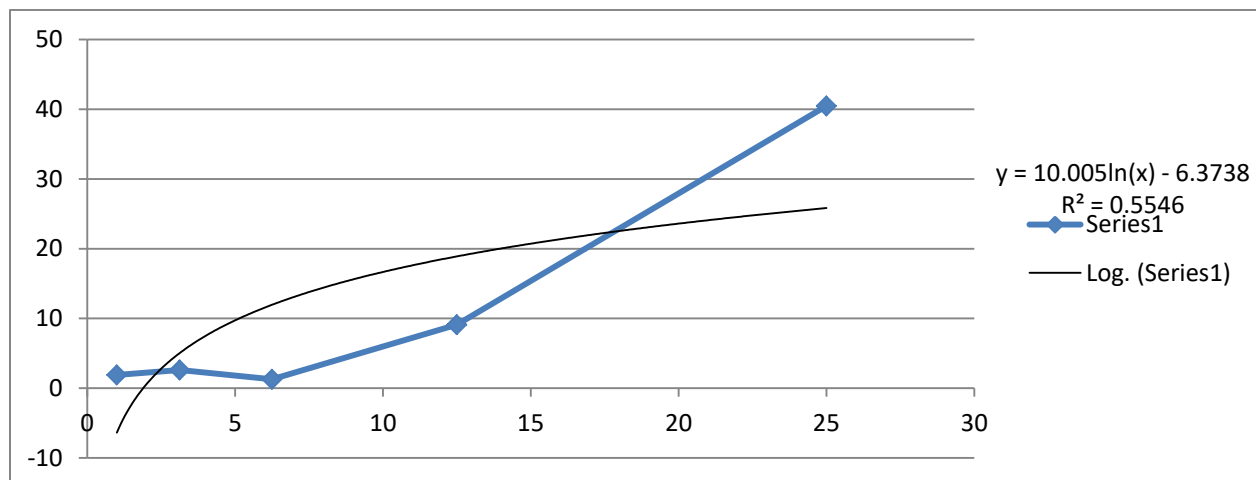


X-axis = concentration (μM) of compound **6**
Y-axis = % Cell Proliferation Inhibition
IC₅₀ > 25 μM



X-axis = concentration (μM) of compound **6**
Y-axis = % Cell Proliferation Inhibition
IC₅₀ > 25 μM

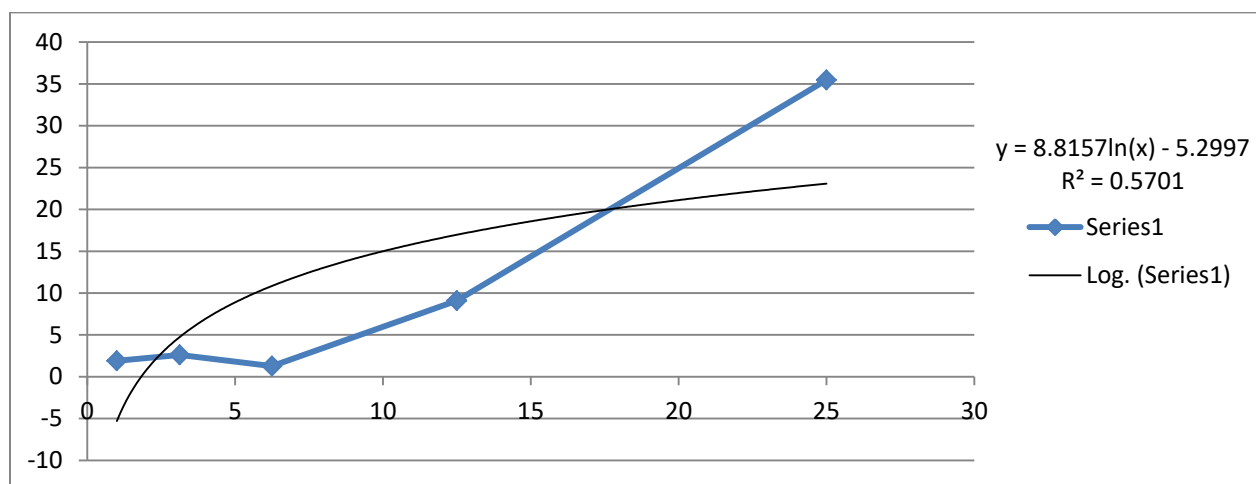
11. The curves that we used to calculate the IC₅₀ value for compound **6** against DU145



X-axis = concentration (μM) of compound **6**

Y-axis = % Cell Proliferation Inhibition

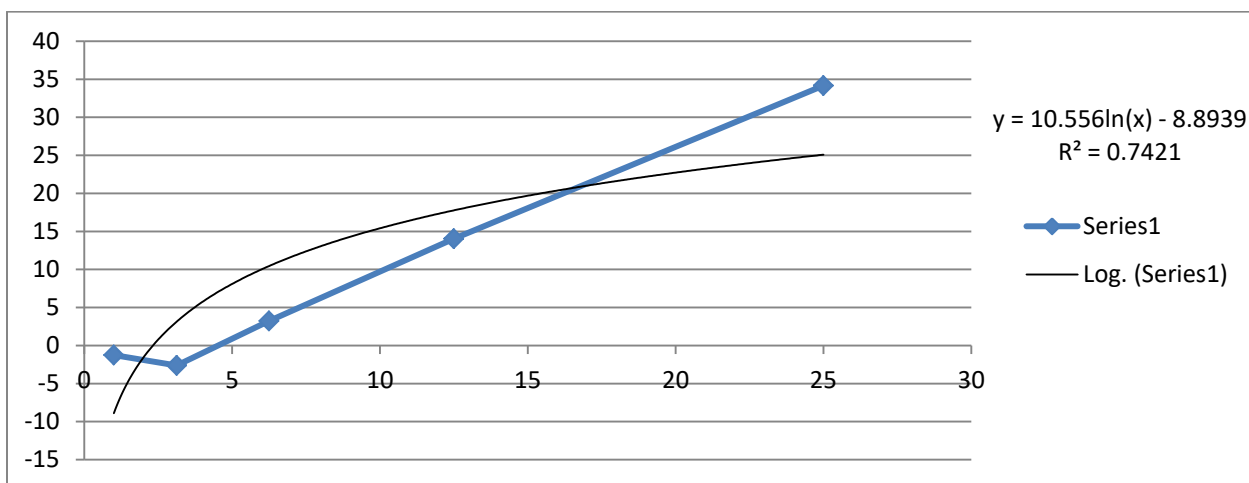
IC₅₀ > 25 μM



X-axis = concentration (μM) of compound **6**

Y-axis = % Cell Proliferation Inhibition

IC₅₀ > 25 μM

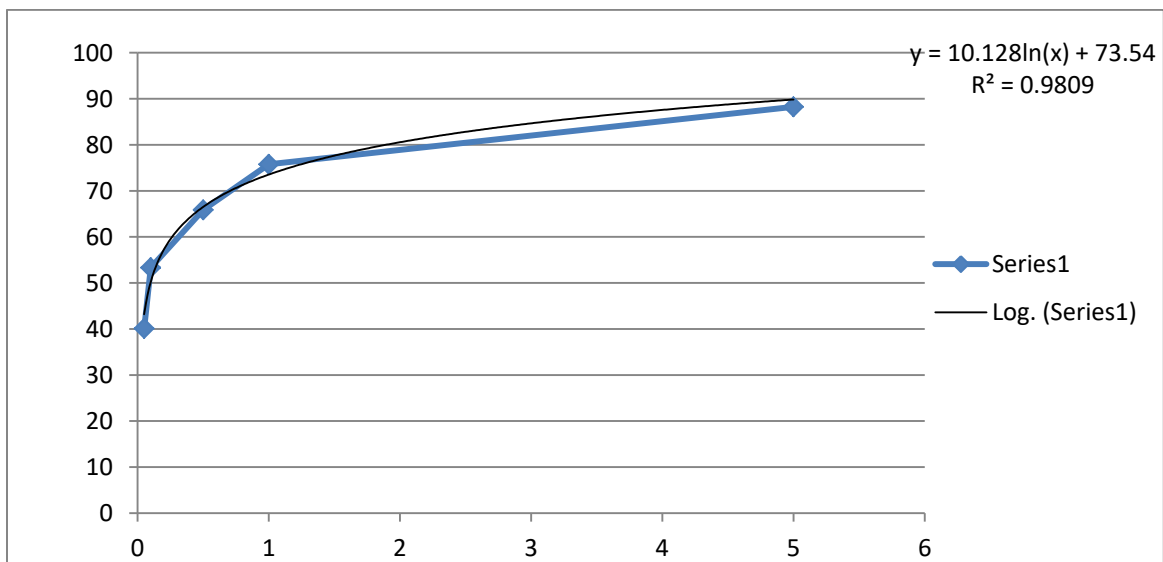


X-axis = concentration (μM) of compound **6**

Y-axis = % Cell Proliferation Inhibition

$\text{IC}_{50} > 25 \mu\text{M}$

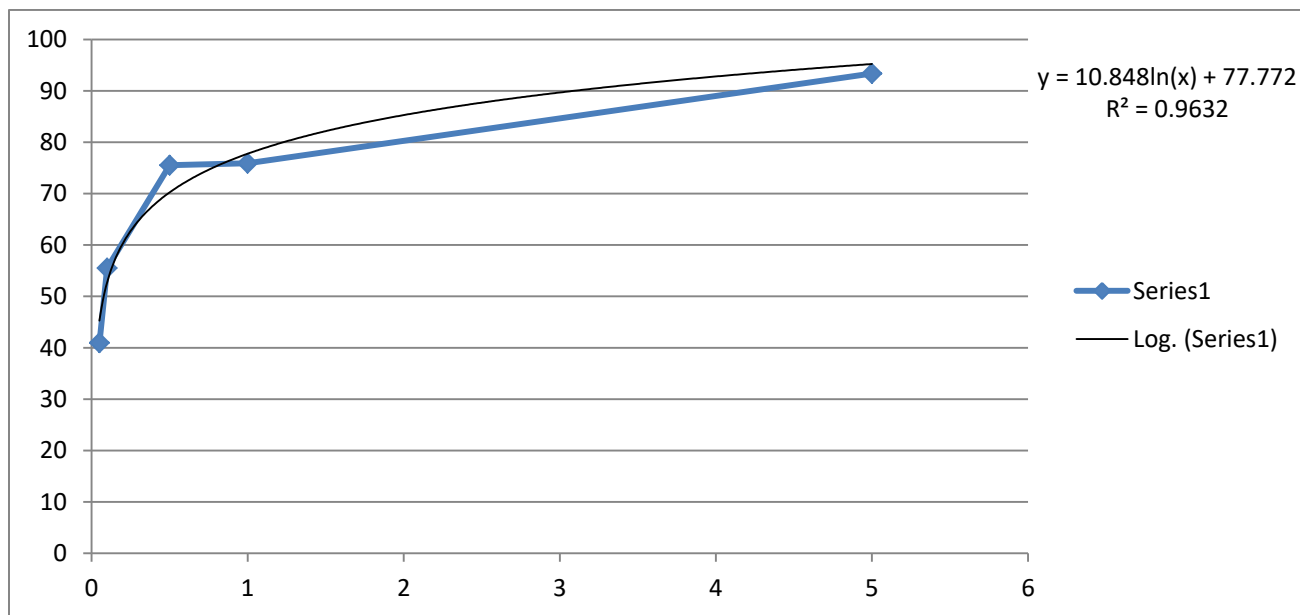
12. The curves that we used to calculate the IC_{50} value for compound **6** against LNCaP



X-axis = concentration (μM) of compound **6**

Y-axis = % Cell Proliferation Inhibition

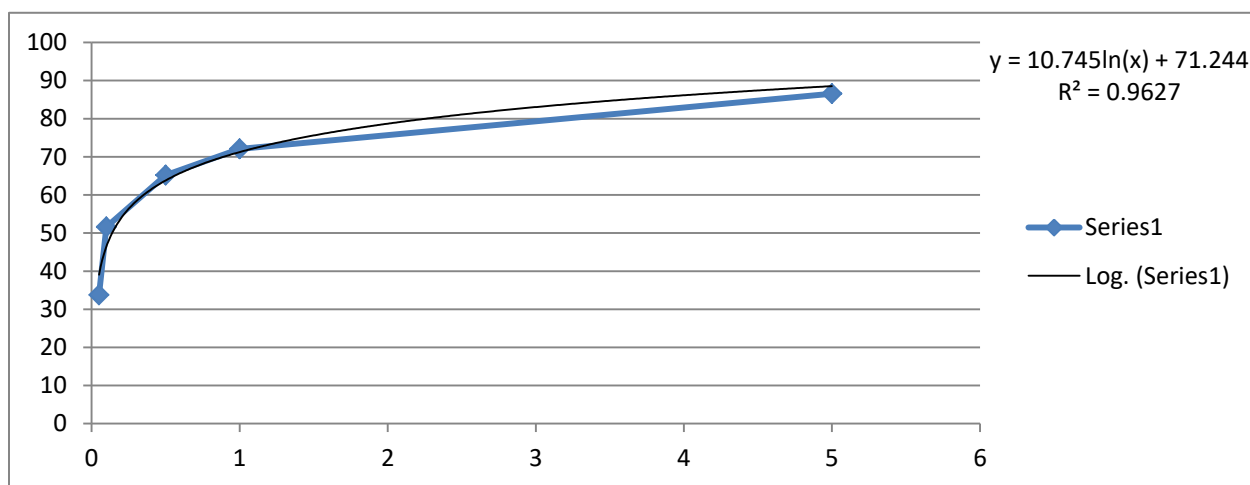
$\text{IC}_{50} = 0.0979 \mu\text{M}$



X-axis = concentration (μM) of compound 6

Y-axis = % Cell Proliferation Inhibition

IC₅₀ = 0.0773 μM

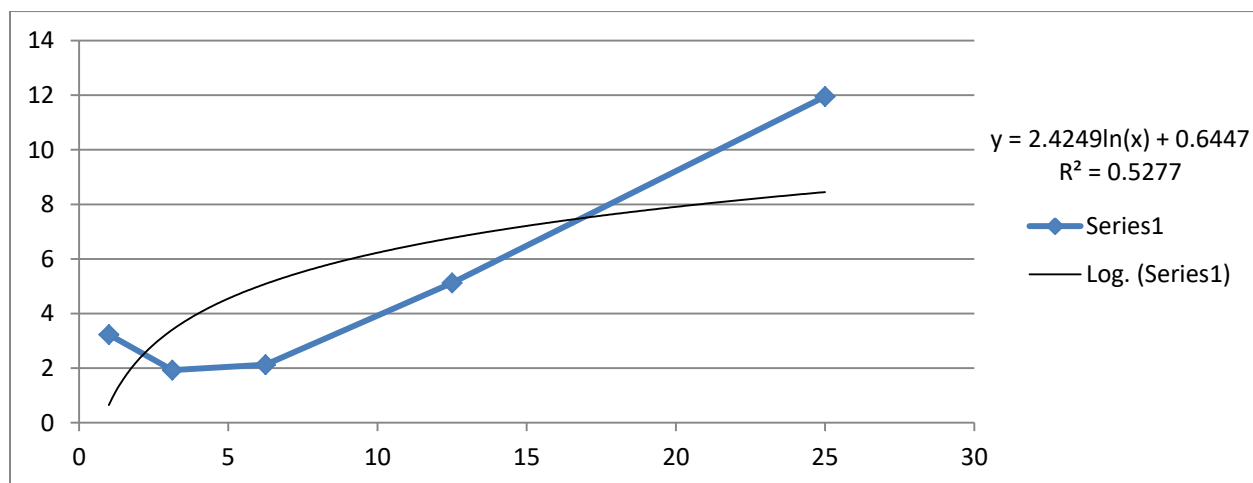


X-axis = concentration (μM) of compound 6

Y-axis = % Cell Proliferation Inhibition

IC₅₀ = 0.1385 μM

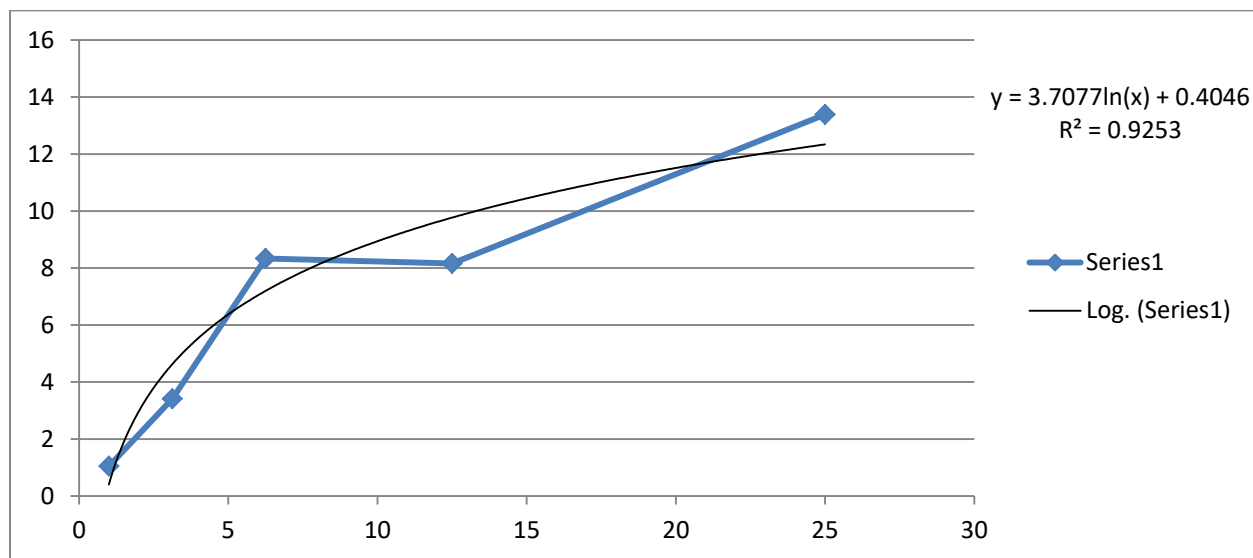
13. The curves that we used to calculate the IC₅₀ value for compound 7 against PC-3



X-axis = concentration (μM) of compound 7

Y-axis = % Cell Proliferation Inhibition

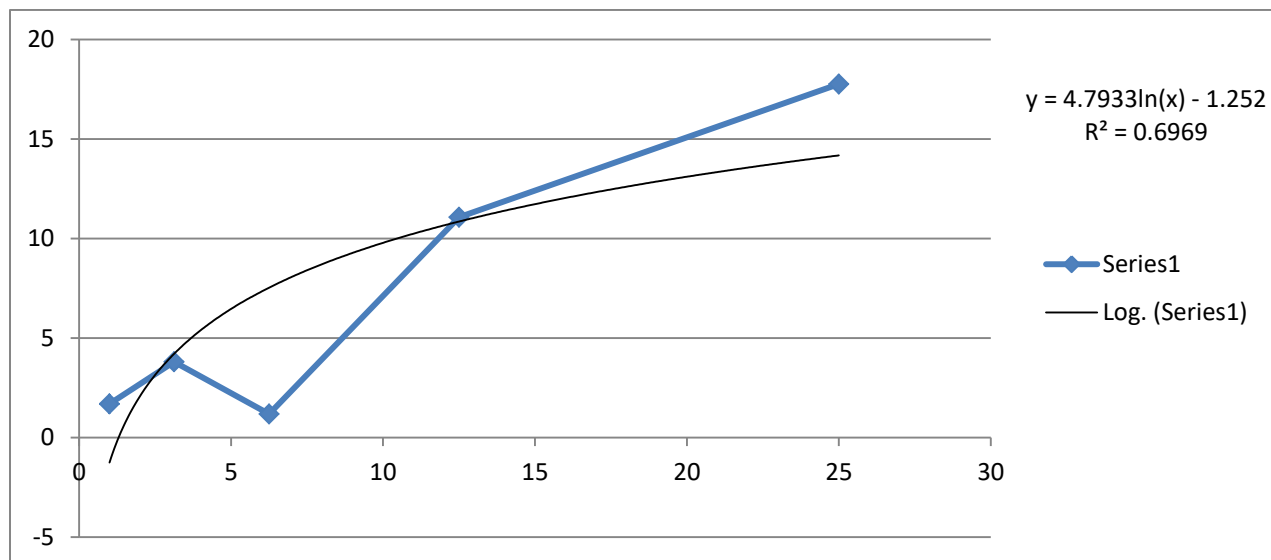
IC₅₀ > 25 μM



X-axis = concentration (μM) of compound 7

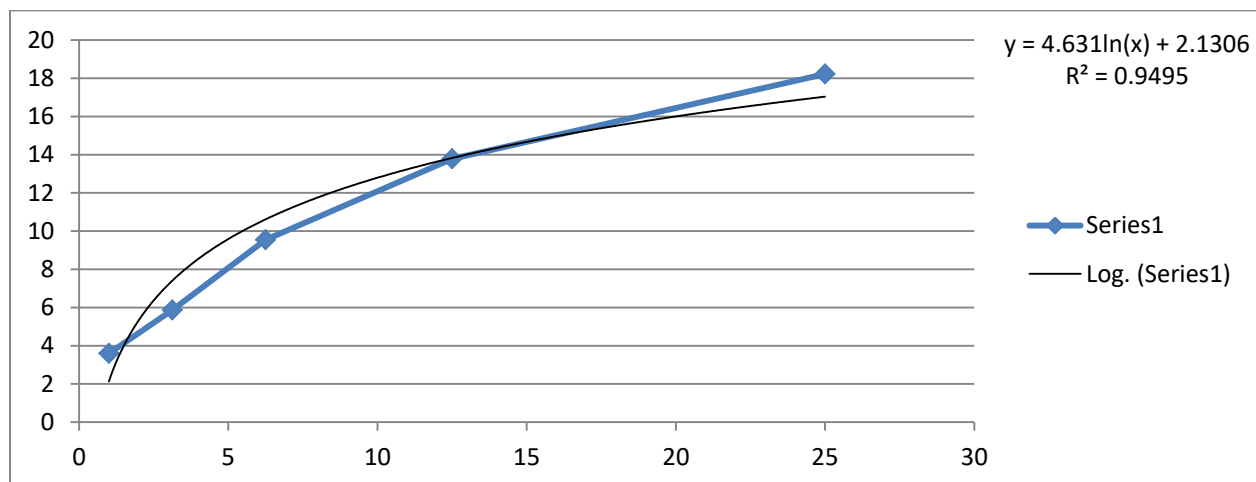
Y-axis = % Cell Proliferation Inhibition

IC₅₀ > 25 μM

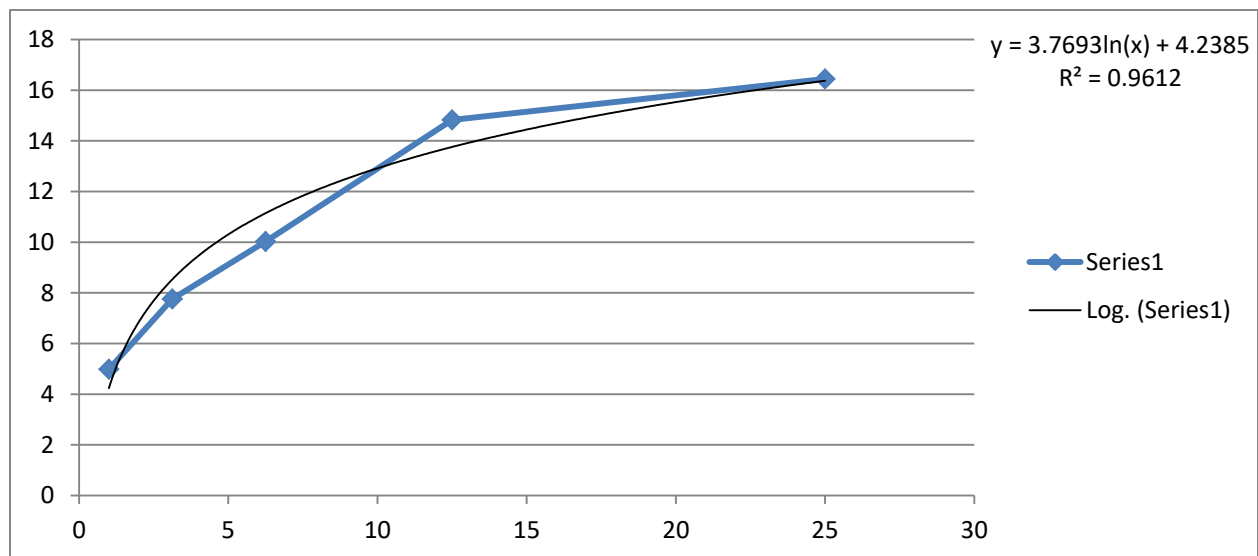


X-axis = concentration (μM) of compound 7
Y-axis = % Cell Proliferation Inhibition
 $\text{IC}_{50} > 25 \mu\text{M}$

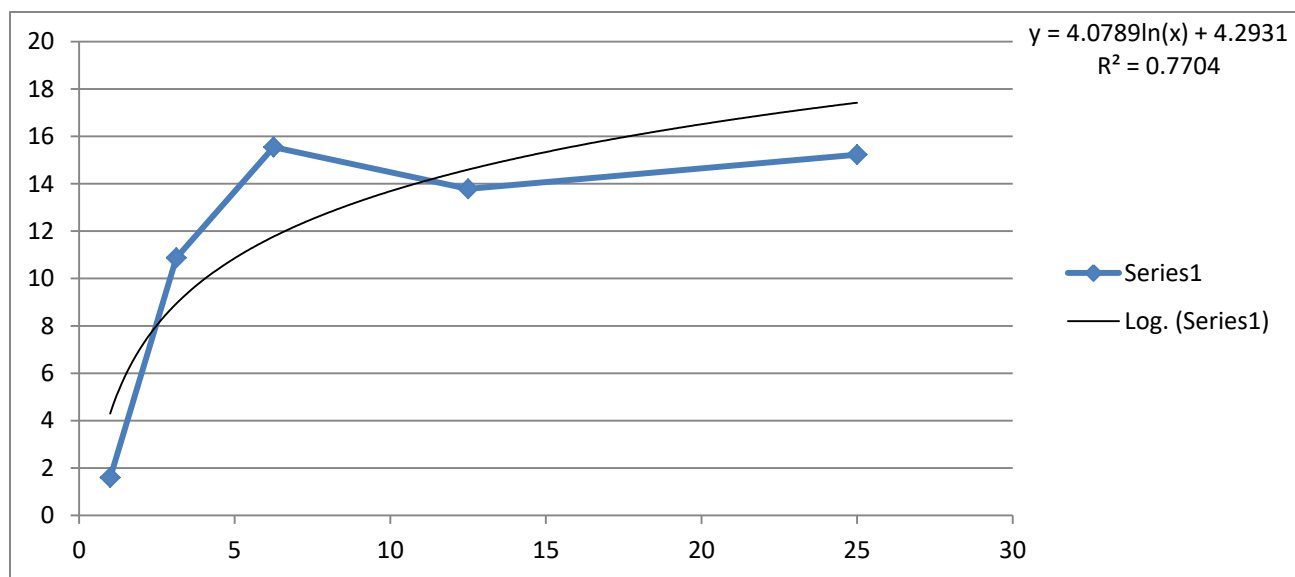
14. The curves that we used to calculate the IC_{50} value for compound 7 against DU145



X-axis = concentration (μM) of compound 7
Y-axis = % Cell Proliferation Inhibition
 $\text{IC}_{50} > 25 \mu\text{M}$

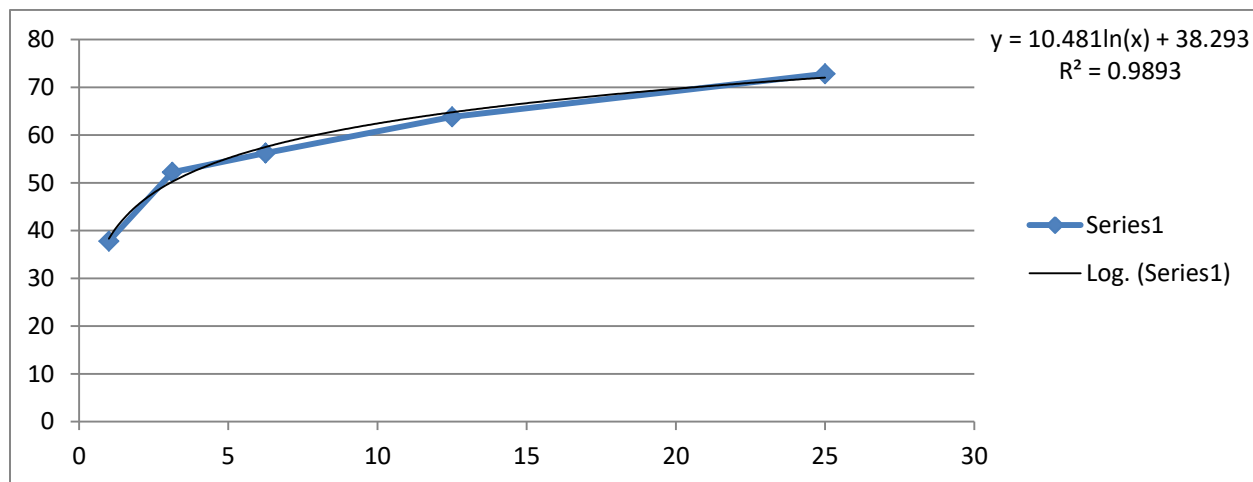


X-axis = concentration (μM) of compound 7
Y-axis = % Cell Proliferation Inhibition
IC₅₀ > 25 μM



X-axis = concentration (μM) of compound 7
Y-axis = % Cell Proliferation Inhibition
IC₅₀ > 25 μM

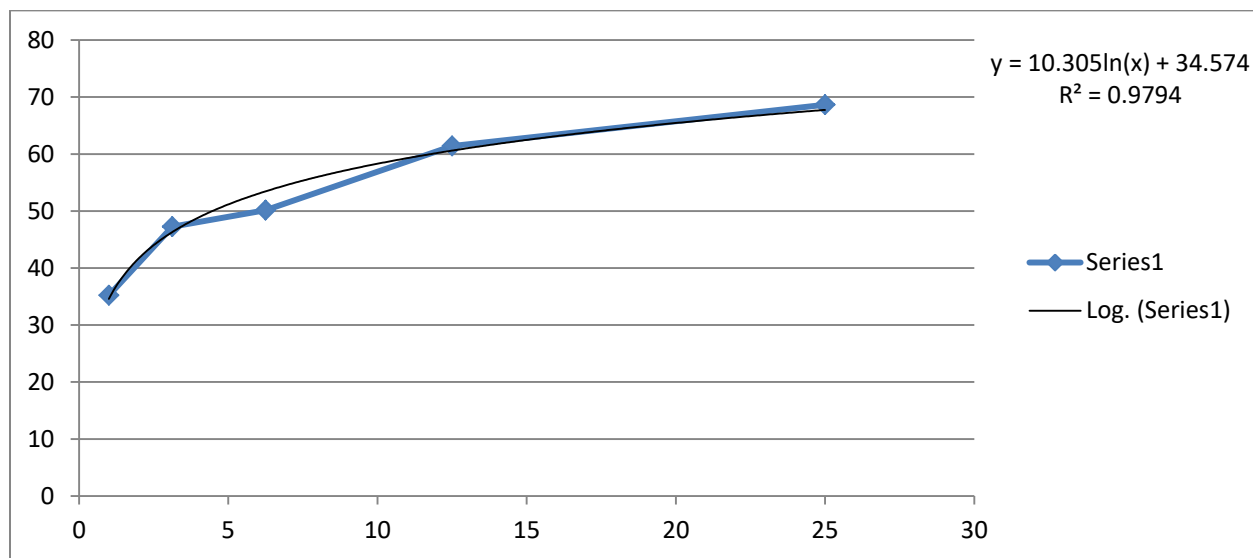
15. The curves that we used to calculate the IC₅₀ value for compound 7 against LNCaP



X-axis = concentration (μM) of compound 7

Y-axis = % Cell Proliferation Inhibition

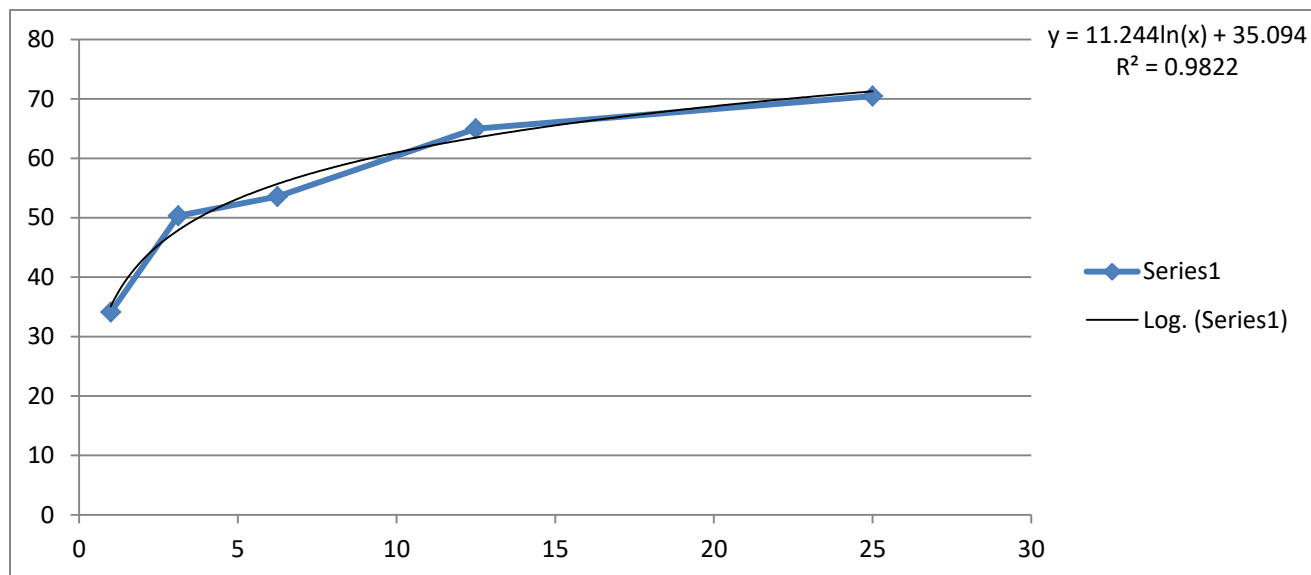
IC₅₀ = 3.055 μM



X-axis = concentration (μM) of compound 7

Y-axis = % Cell Proliferation Inhibition

IC₅₀ = 4.468 μM

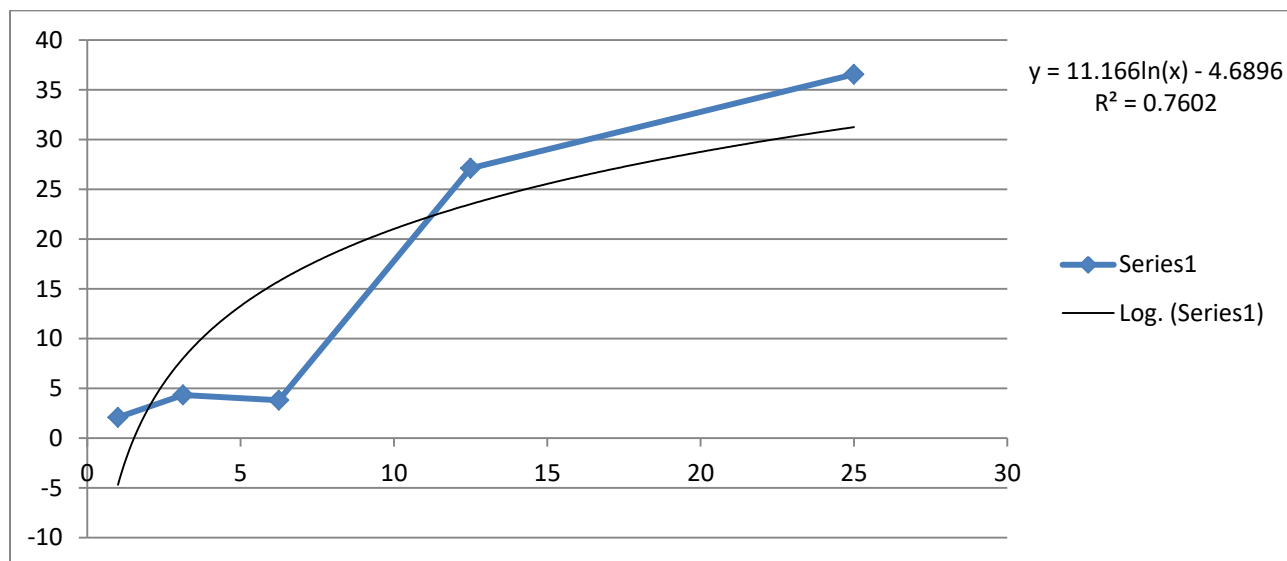


X-axis = concentration (μM) of compound 7

Y-axis = % Cell Proliferation Inhibition

IC₅₀ = 3.765 μM

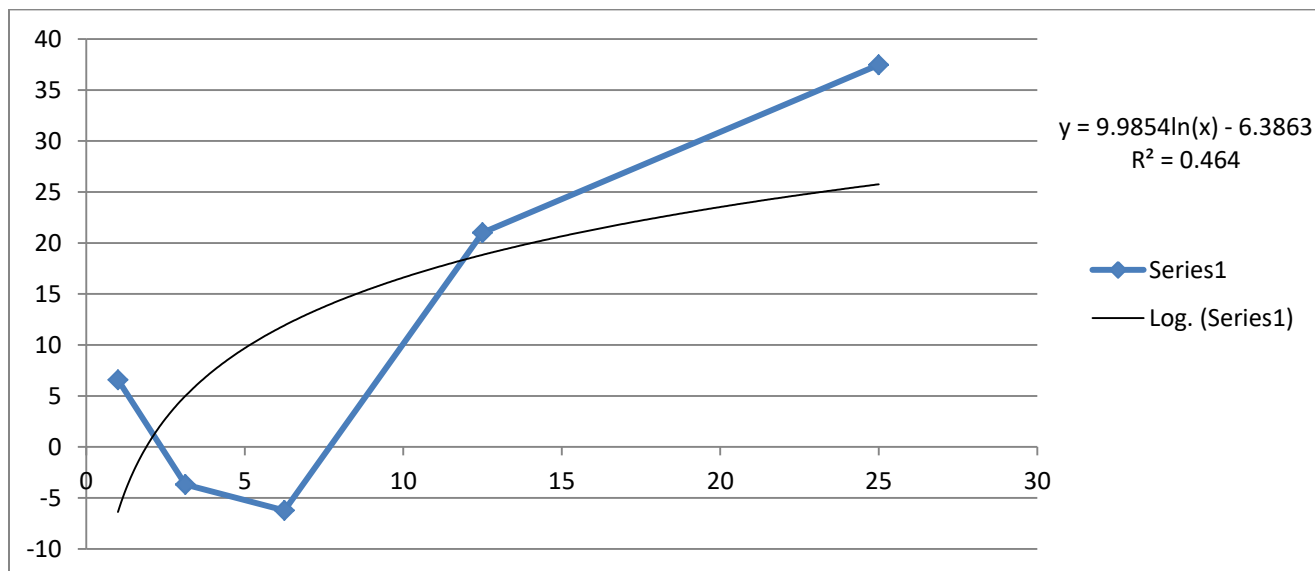
16. The curves that we used to calculate the IC₅₀ value for compound 8 against PC-3



X-axis = concentration (μM) of compound 8

Y-axis = % Cell Proliferation Inhibition

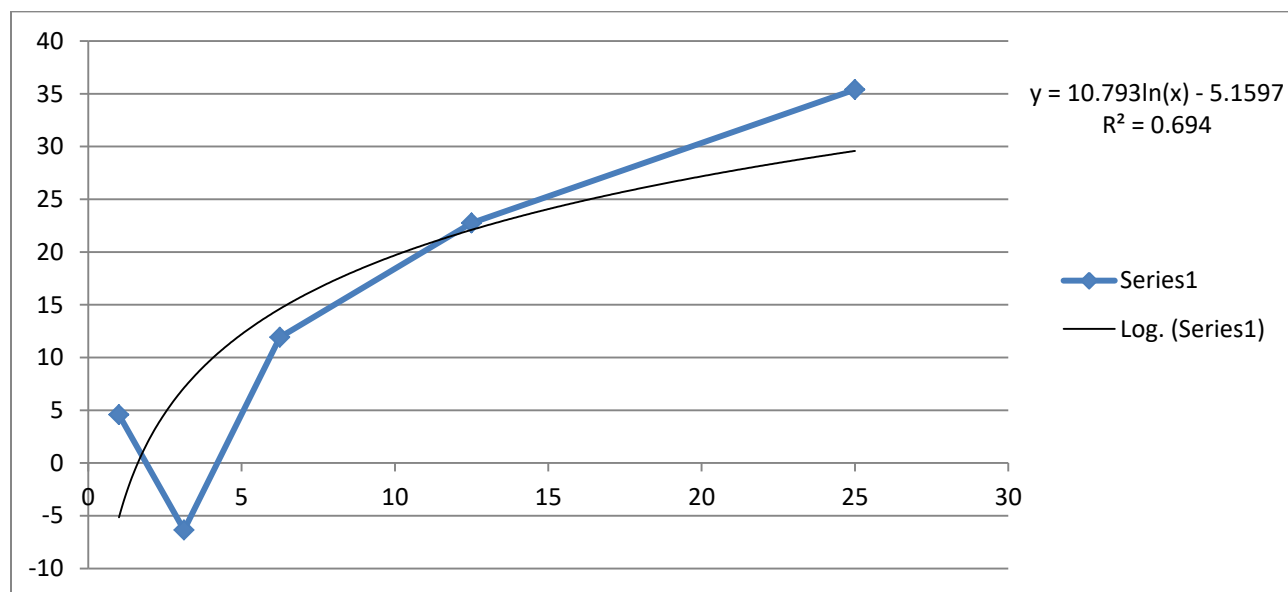
IC₅₀ > 25 μM



X-axis = concentration (μM) of compound 8

Y-axis = % Cell Proliferation Inhibition

IC₅₀ > 25 μM

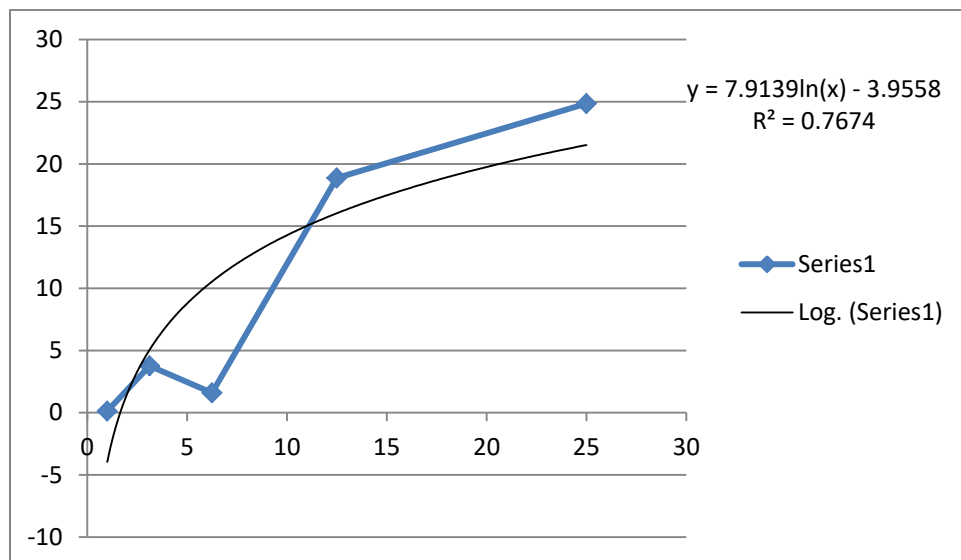


X-axis = concentration (μM) of compound 8

Y-axis = % Cell Proliferation Inhibition

IC₅₀ > 25 μM

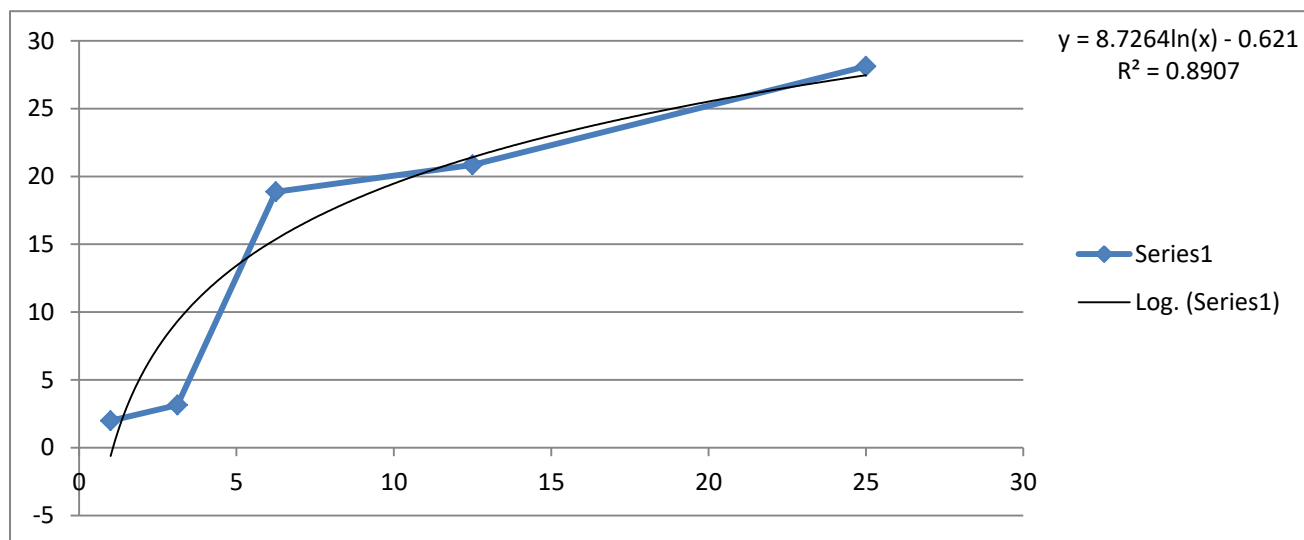
17. The curves that we used to calculate the IC₅₀ value for compound **8** against DU145



X-axis = concentration (μM) of compound **8**

Y-axis = % Cell Proliferation Inhibition

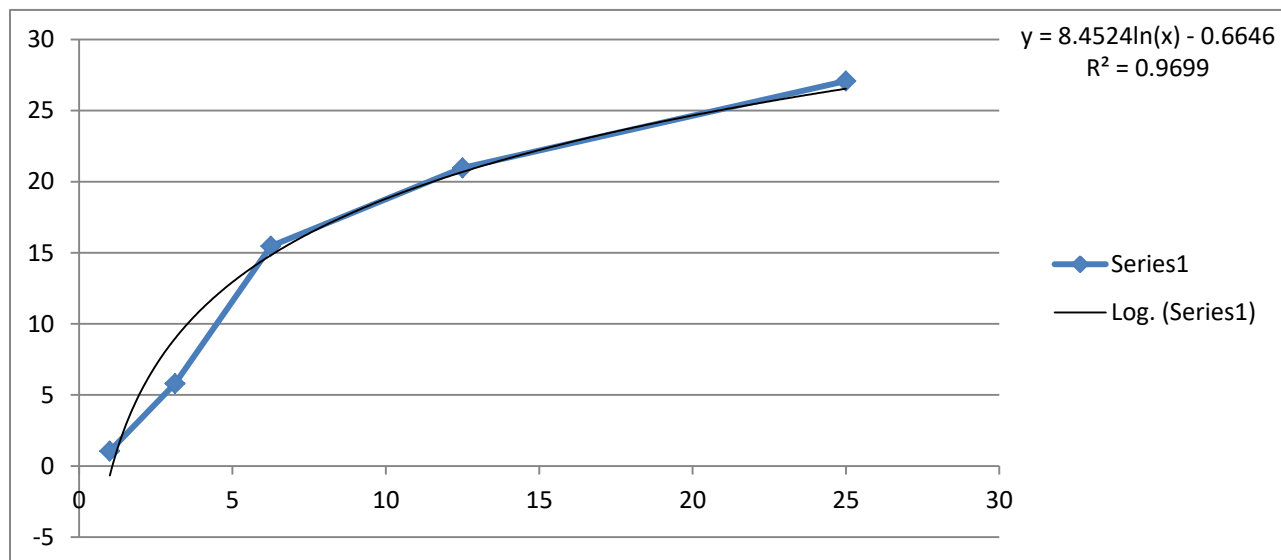
IC₅₀ > 25 μM



X-axis = concentration (μM) of compound **8**

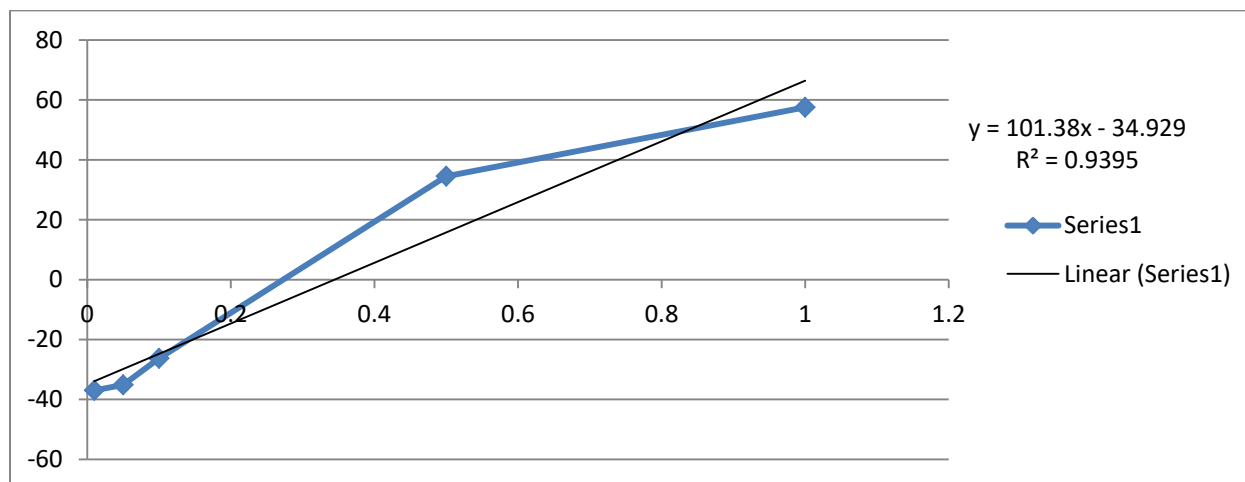
Y-axis = % Cell Proliferation Inhibition

IC₅₀ > 25 μM

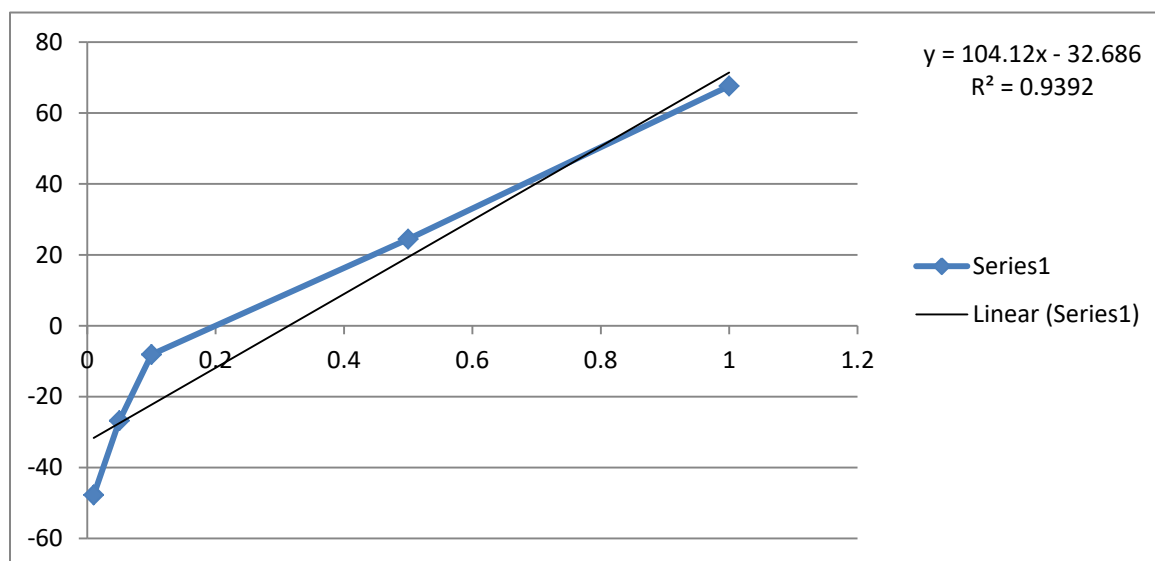


X-axis = concentration (μM) of compound **8**
Y-axis = % Cell Proliferation Inhibition
IC₅₀ > 25 μM

18. The curves that we used to calculate the IC₅₀ value for compound **8** against LNCaP



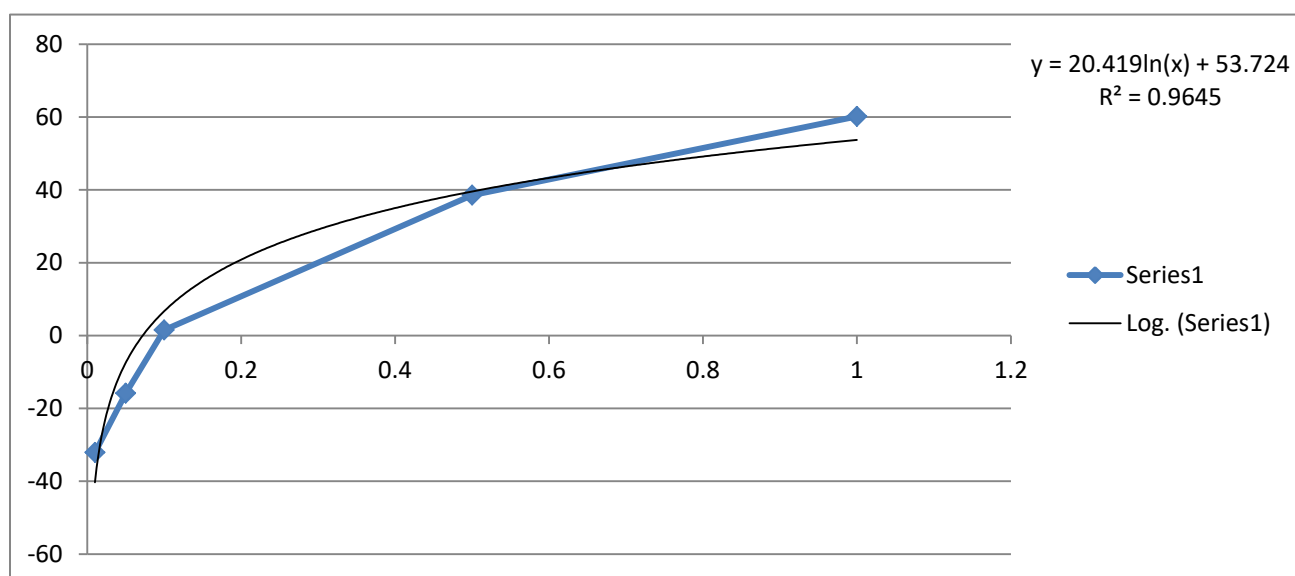
X-axis = concentration (μM) of compound **8**
Y-axis = % Cell Proliferation Inhibition
IC₅₀ = 0.838 μM



X-axis = concentration (μM) of compound **8**

Y-axis = % Cell Proliferation Inhibition

$\text{IC}_{50} = 0.794 \mu\text{M}$

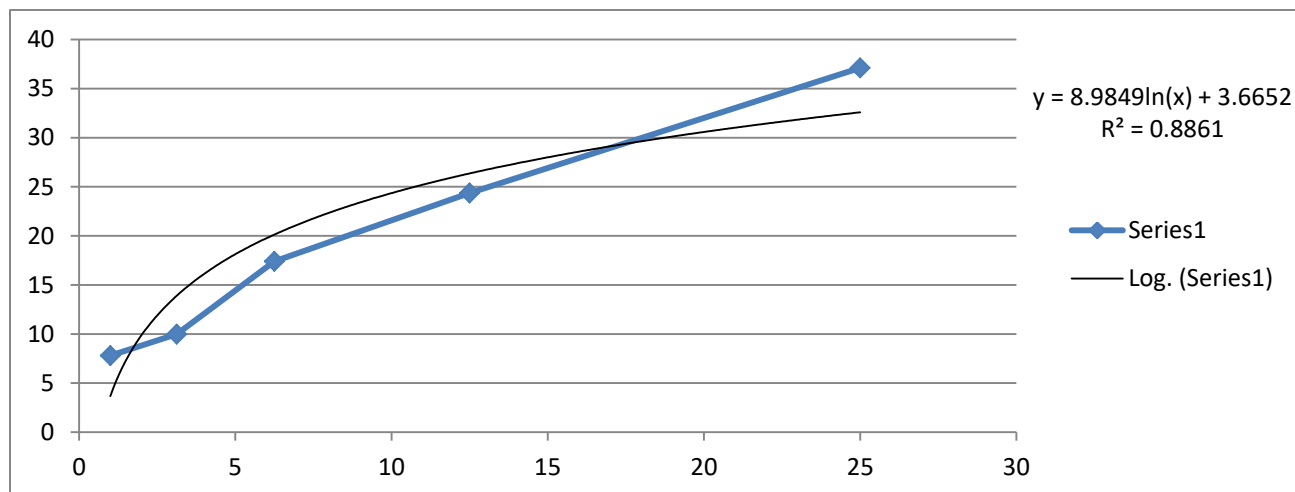


X-axis = concentration (μM) of compound **8**

Y-axis = % Cell Proliferation Inhibition

$\text{IC}_{50} = 0.833 \mu\text{M}$

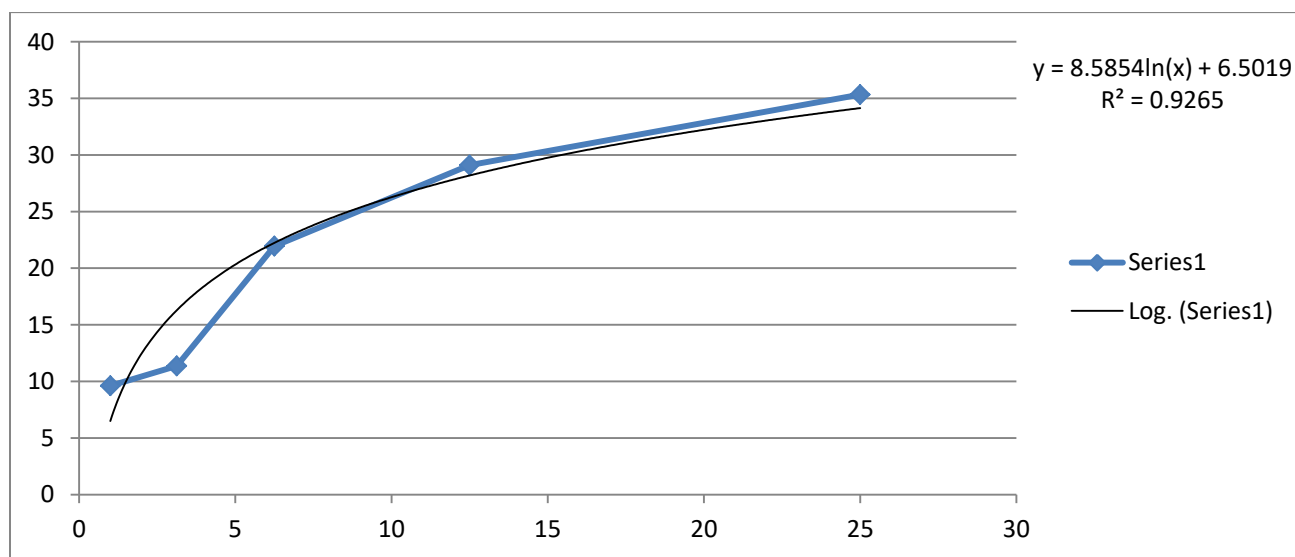
19. The curves that we used to calculate the IC₅₀ value for compound **9** against PC-3



X-axis = concentration (μM) of compound **9**

Y-axis = % Cell Proliferation Inhibition

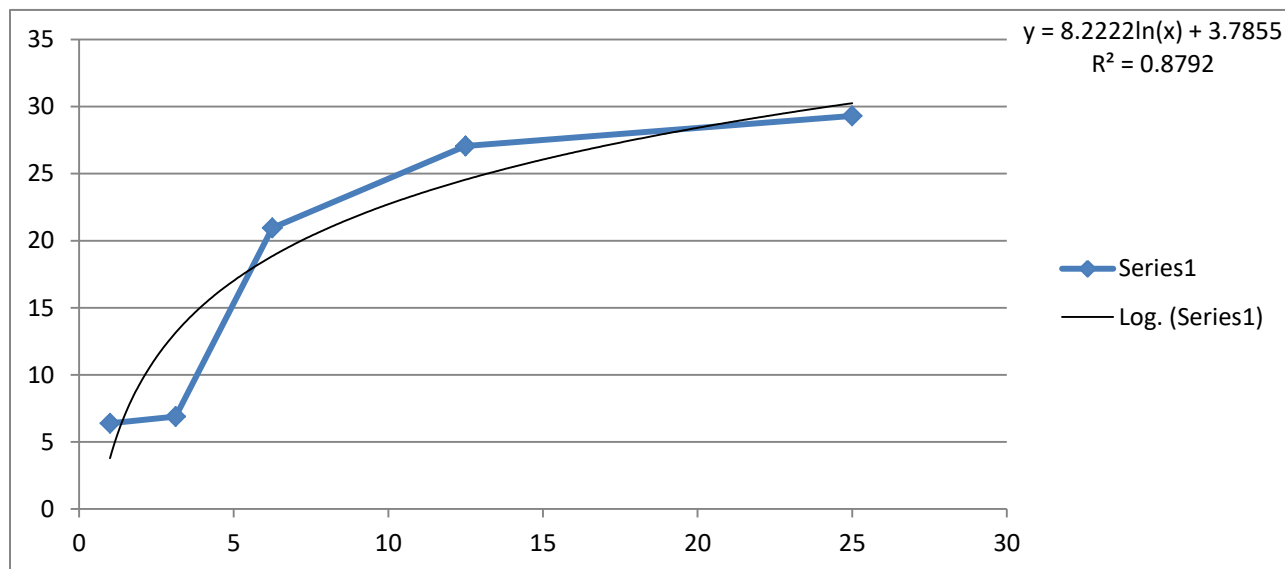
IC₅₀ > 25 μM



X-axis = concentration (μM) of compound **9**

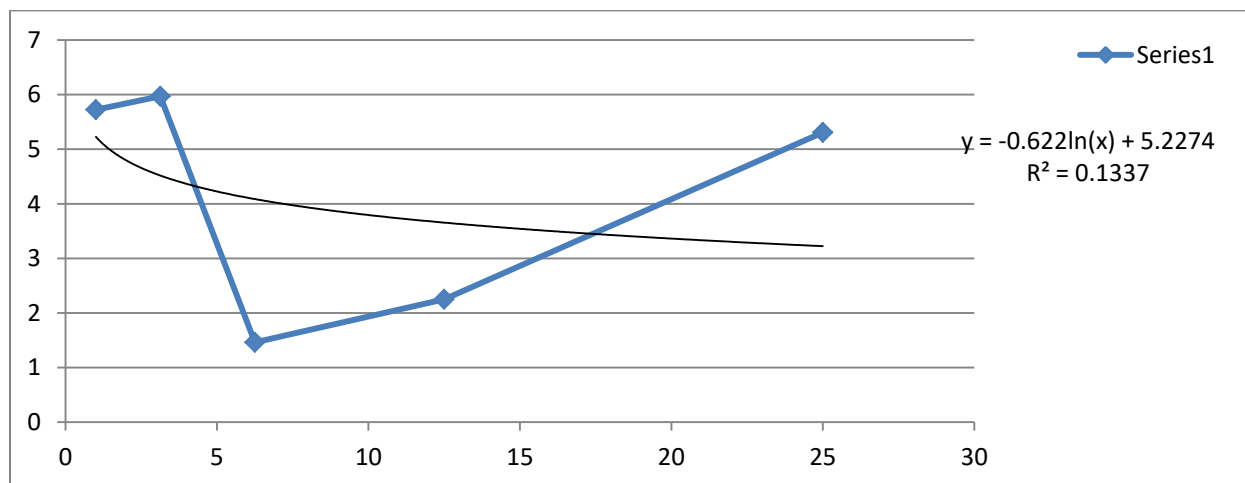
Y-axis = % Cell Proliferation Inhibition

IC₅₀ > 25 μM

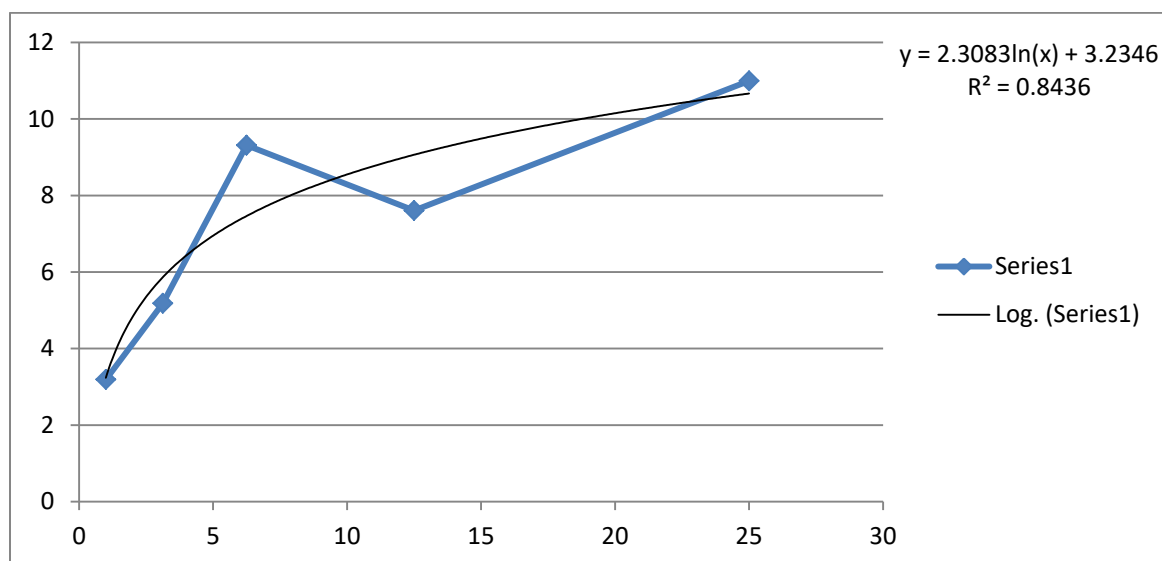


X-axis = concentration (μM) of compound 9
Y-axis = % Cell Proliferation Inhibition
IC₅₀ > 25 μM

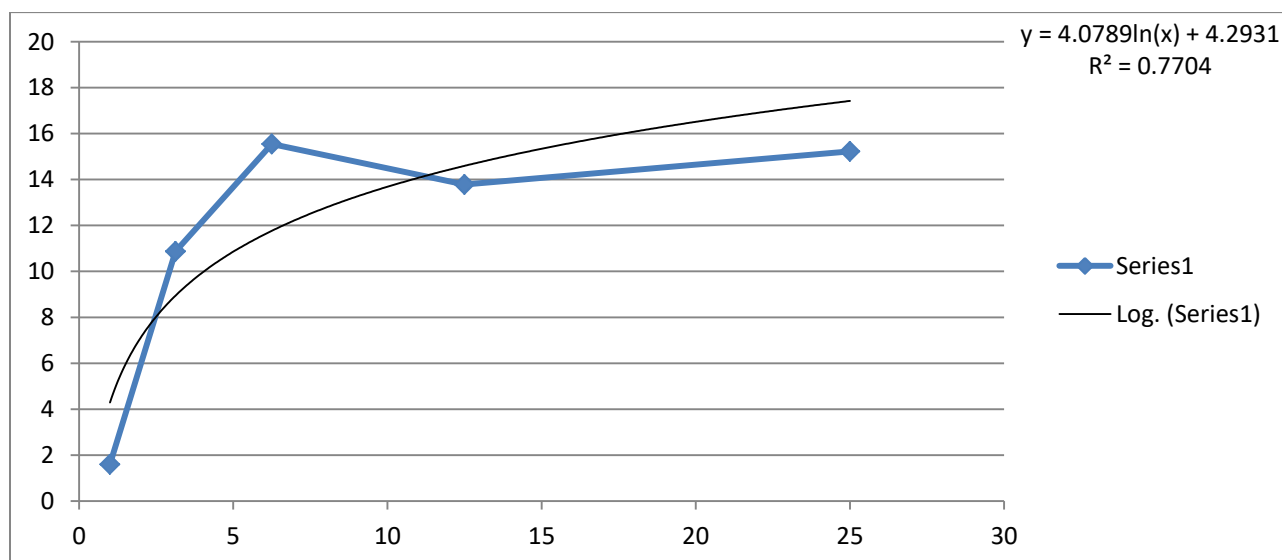
20. The curves that we used to calculate the IC₅₀ value for compound 9 against DU145



X-axis = concentration (μM) of compound 9
Y-axis = % Cell Proliferation Inhibition
IC₅₀ > 25 μM

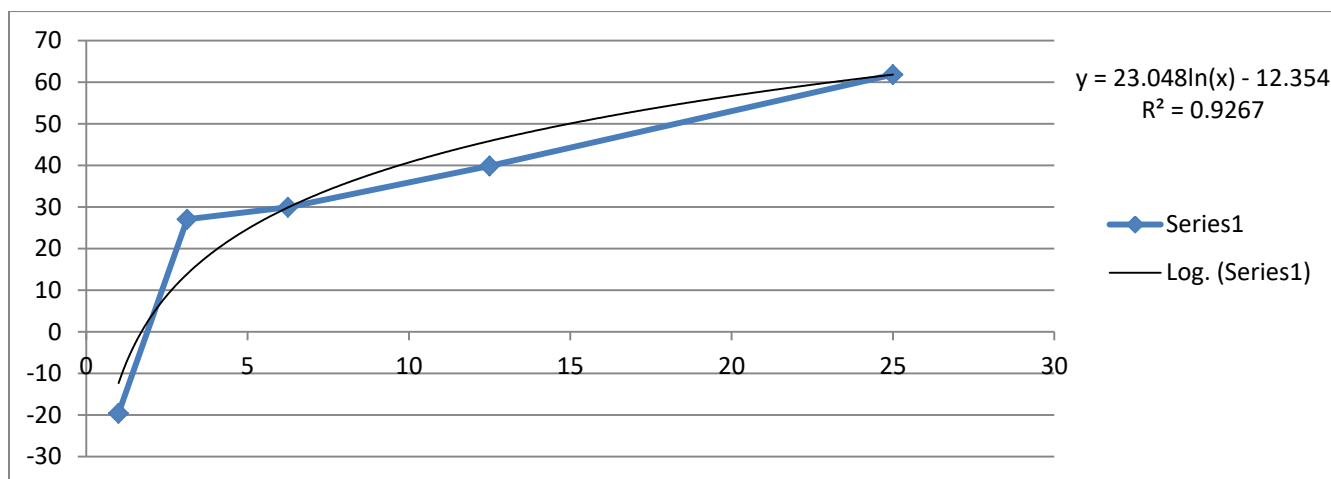


X-axis = concentration (μM) of compound **9**
 Y-axis = % Cell Proliferation Inhibition
 IC₅₀ > 25 μM



X-axis = concentration (μM) of compound **9**
 Y-axis = % Cell Proliferation Inhibition
 IC₅₀ > 25 μM

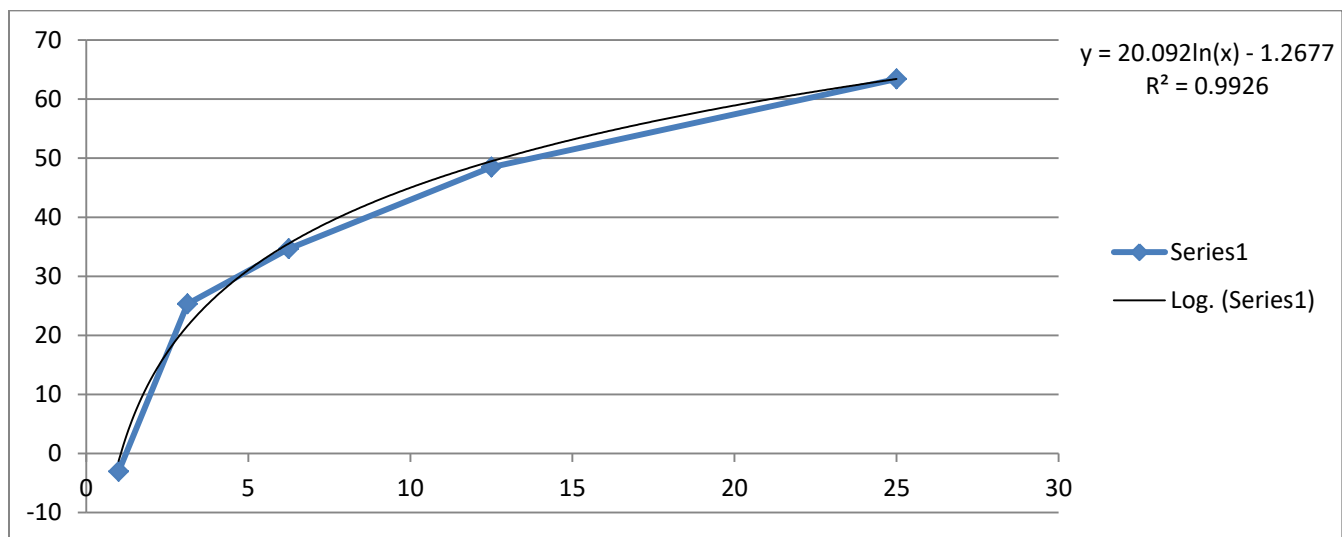
21. The curves that we used to calculate the IC₅₀ value for compound **9** against LNCaP



X-axis = concentration (μM) of compound **9**

Y-axis = % Cell Proliferation Inhibition

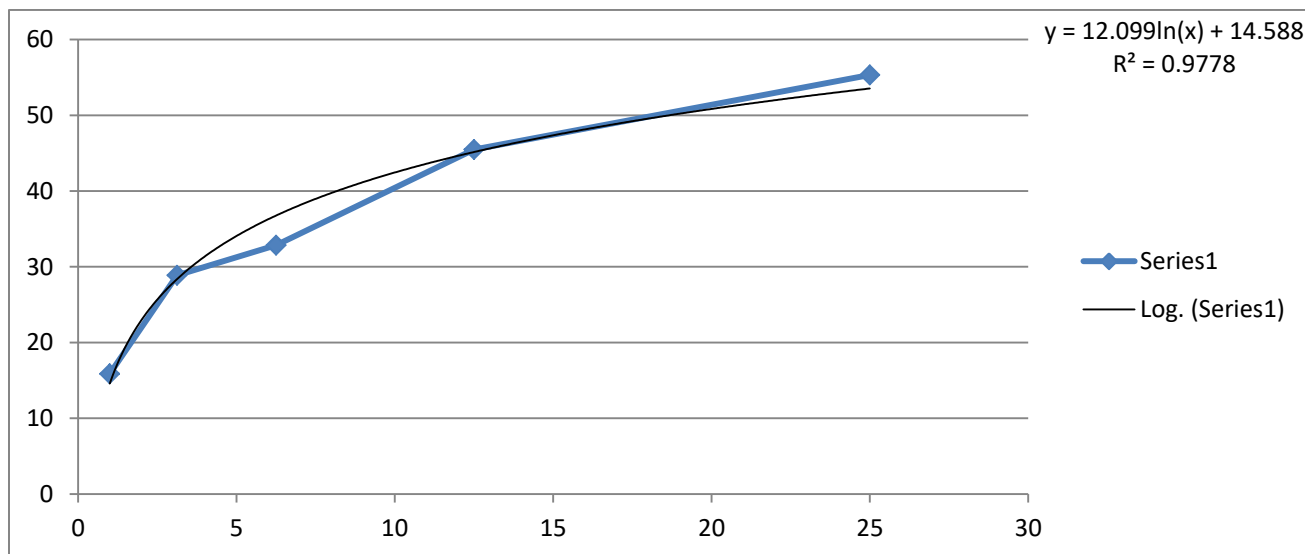
IC₅₀ = 14.960 μM



X-axis = concentration (μM) of compound **9**

Y-axis = % Cell Proliferation Inhibition

IC₅₀ = 12.828 μM

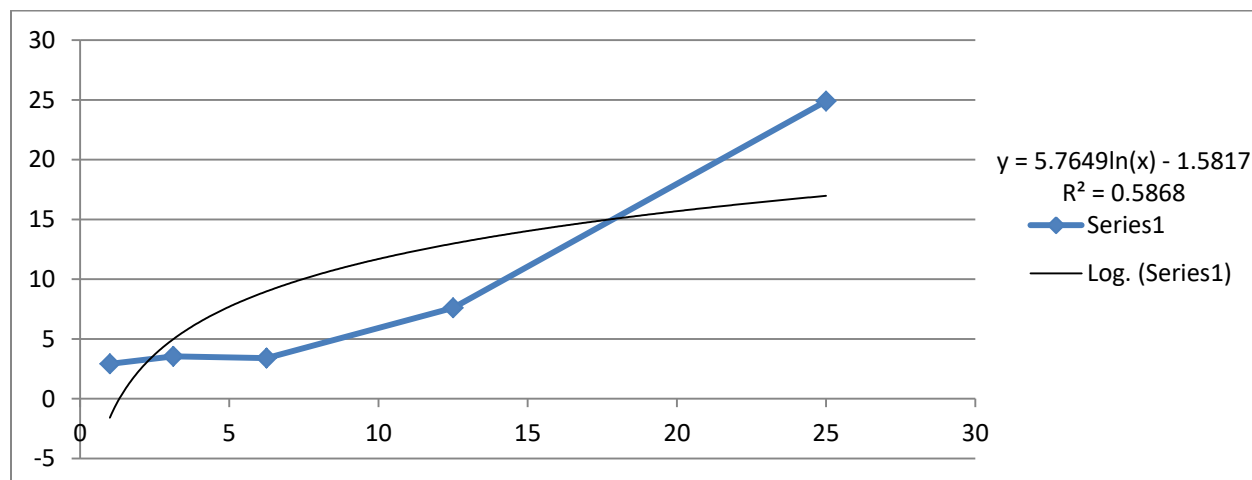


X-axis = concentration (μM) of compound **9**

Y-axis = % Cell Proliferation Inhibition

$\text{IC}_{50} = 18.669 \mu\text{M}$

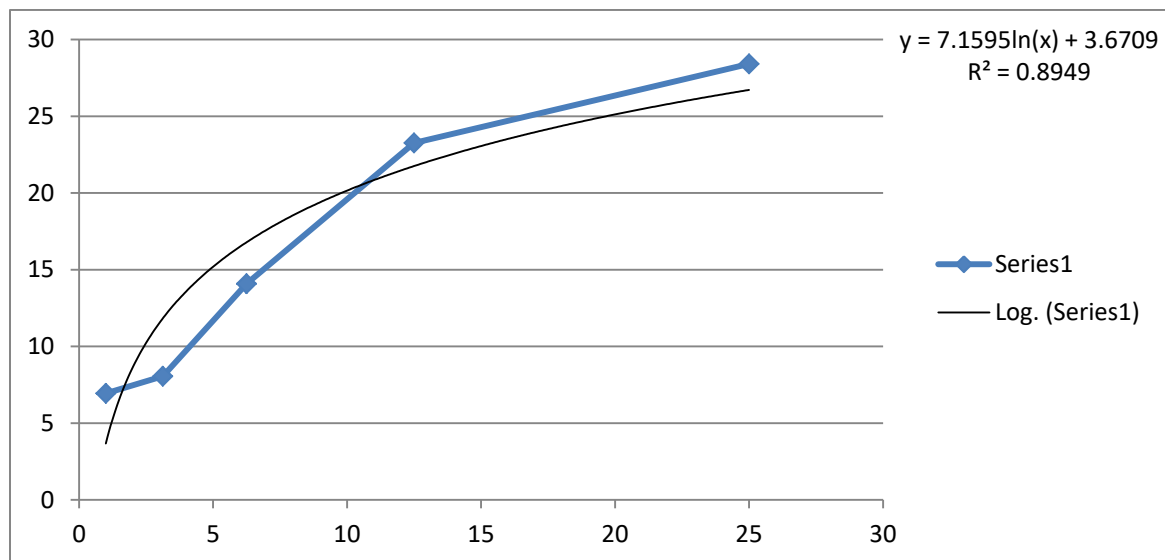
22. The curves that we used to calculate the IC_{50} value for compound **11** against PC-3



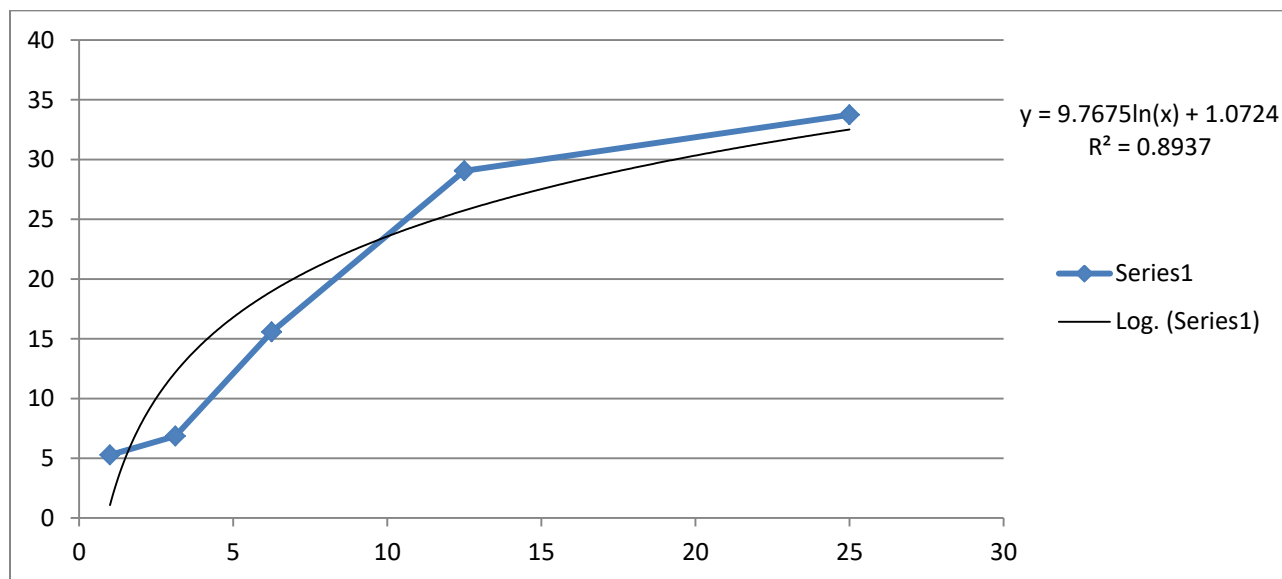
X-axis = concentration (μM) of compound **11**

Y-axis = % Cell Proliferation Inhibition

$\text{IC}_{50} > 25 \mu\text{M}$

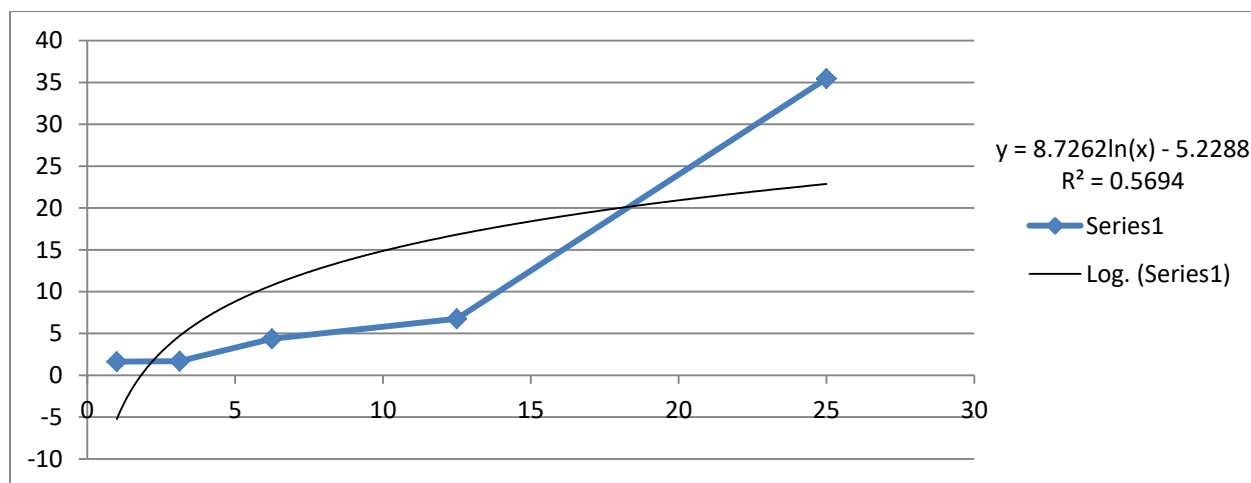


X-axis = concentration (μM) of compound **11**
Y-axis = % Cell Proliferation Inhibition
IC₅₀ > 25 μM



X-axis = concentration (μM) of compound **11**
Y-axis = % Cell Proliferation Inhibition
IC₅₀ > 25 μM

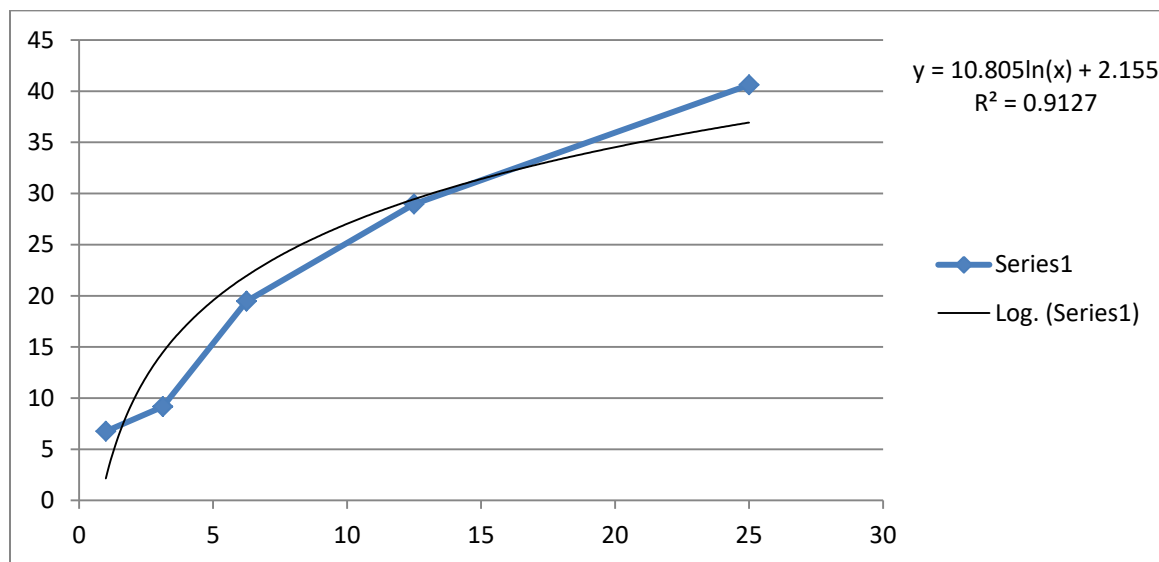
23. The curves that we used to calculate the IC₅₀ value for compound **11** against DU145



X-axis = concentration (μM) of compound **11**

Y-axis = % Cell Proliferation Inhibition

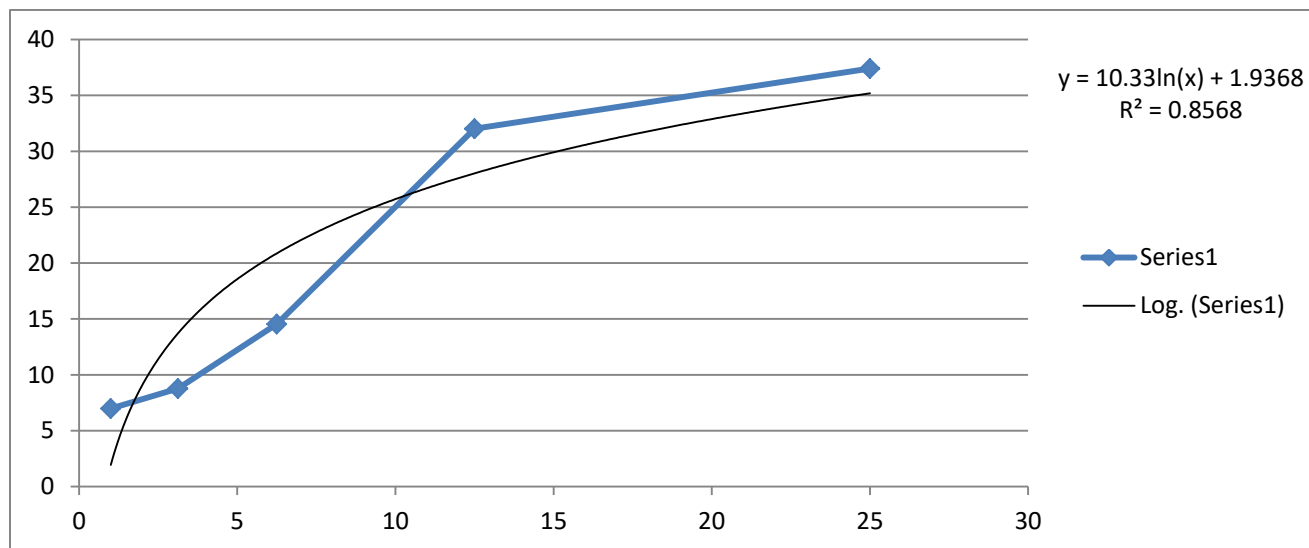
IC₅₀ > 25 μM



X-axis = concentration (μM) of compound **11**

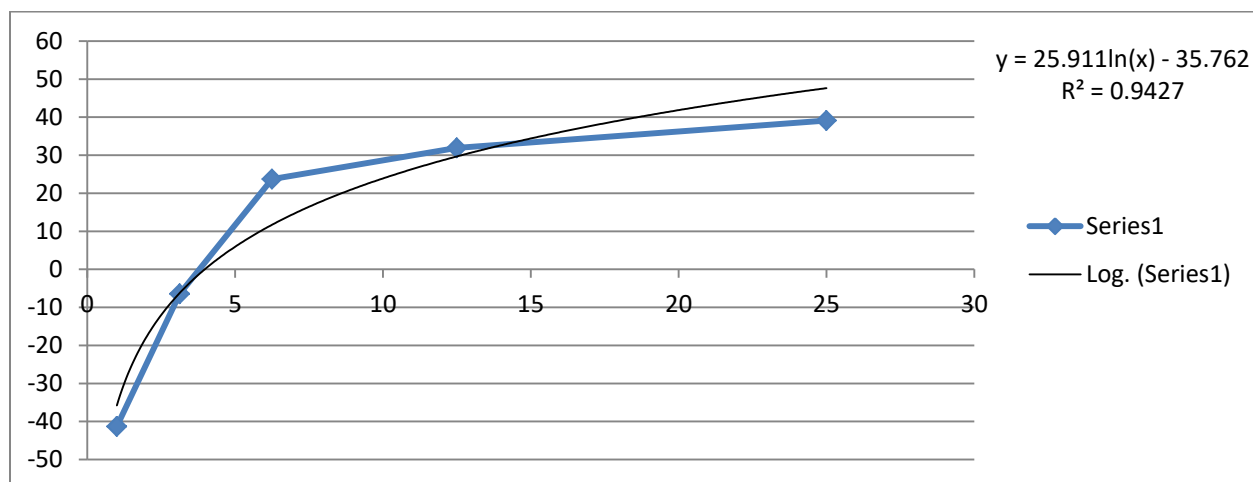
Y-axis = % Cell Proliferation Inhibition

IC₅₀ > 25 μM

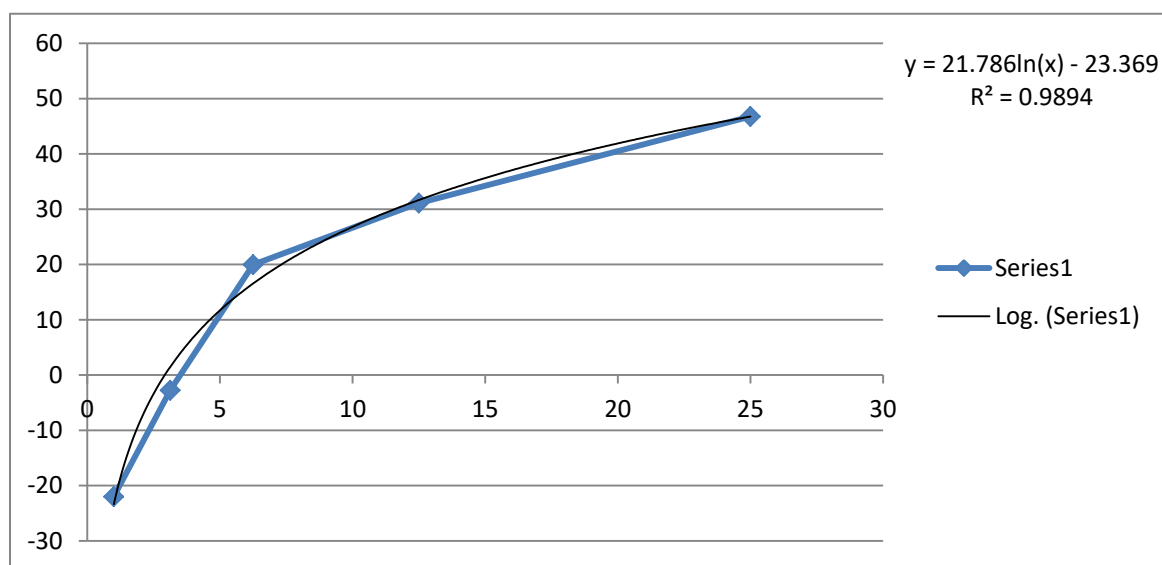


X-axis = concentration (μM) of compound **11**
 Y-axis = % Cell Proliferation Inhibition
 IC₅₀ > 25 μM

24. The curves that we used to calculate the IC₅₀ value for compound **11** against LNCaP



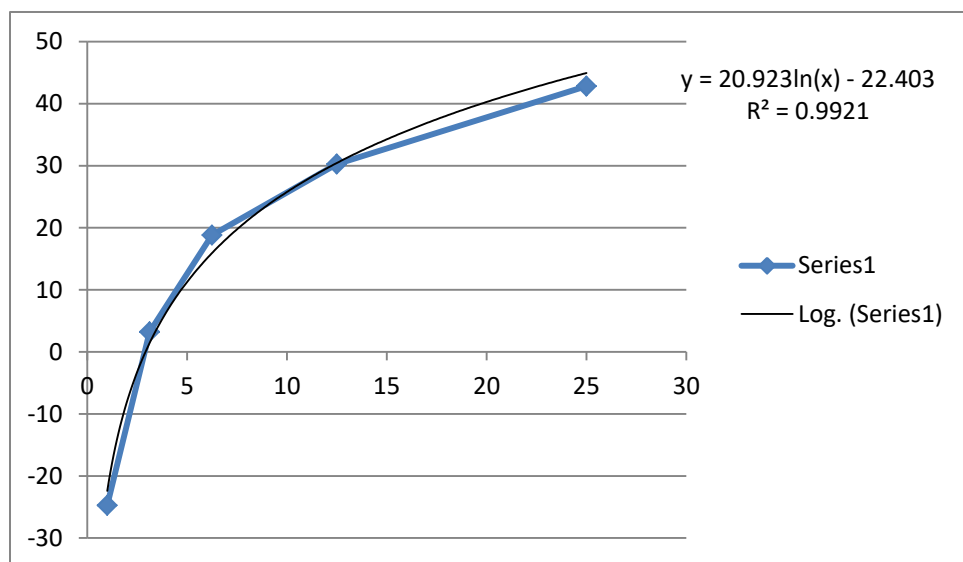
X-axis = concentration (μM) of compound **11**
 Y-axis = % Cell Proliferation Inhibition
 IC₅₀ = 27.381 μM



X-axis = concentration (μM) of compound **11**

Y-axis = % Cell Proliferation Inhibition

$\text{IC}_{50} = 29.012 \mu\text{M}$

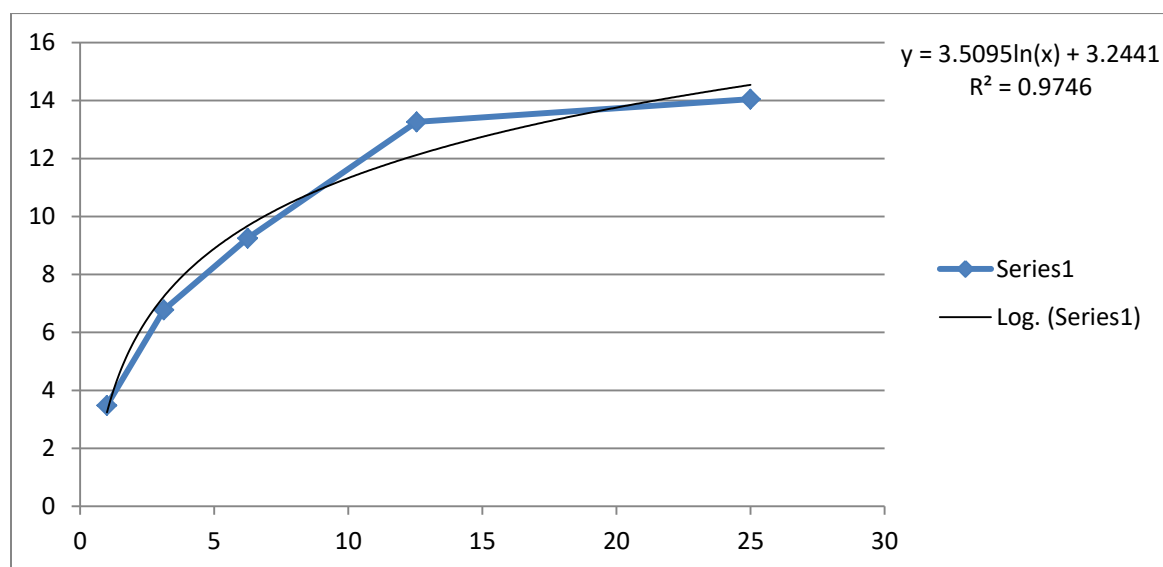


X-axis = concentration (μM) of compound **11**

Y-axis = % Cell Proliferation Inhibition

$\text{IC}_{50} = 31.831 \mu\text{M}$

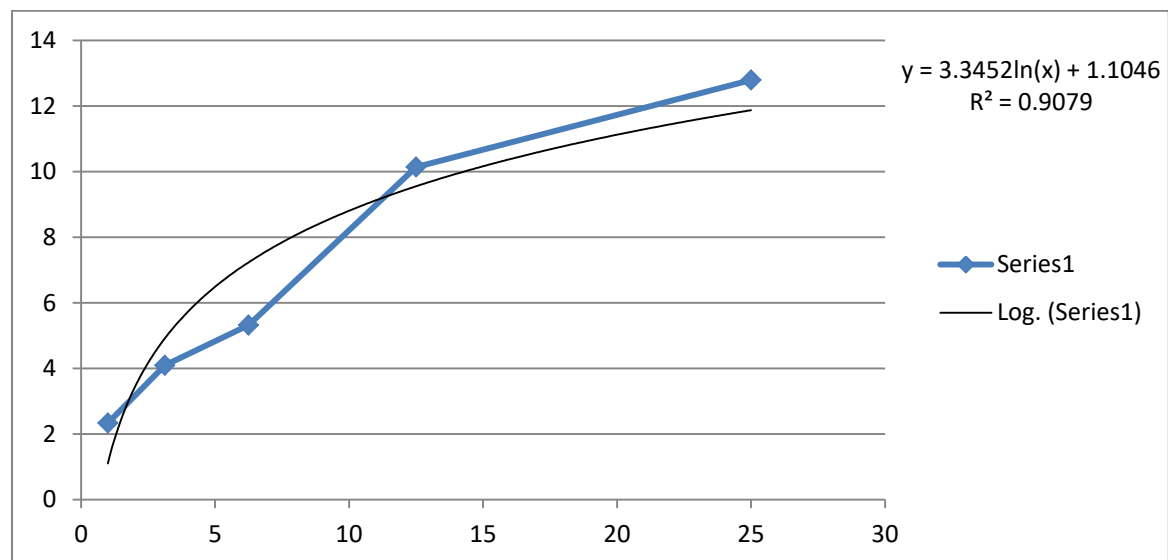
25. The curves that we used to calculate the IC₅₀ value for compound **12** against PC-3



X-axis = concentration (μM) of compound **12**

Y-axis = % Cell Proliferation Inhibition

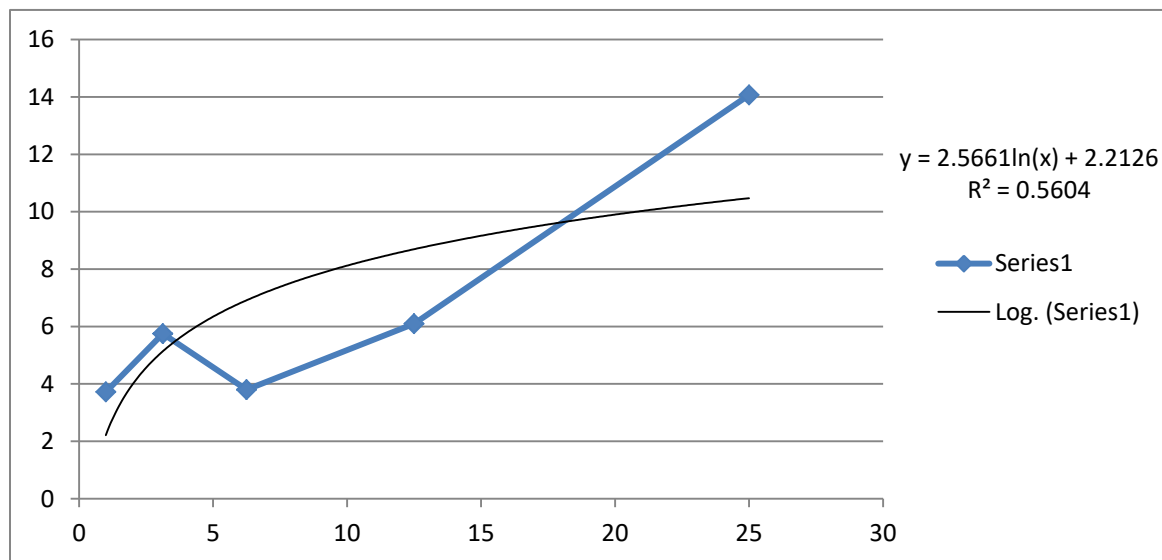
IC₅₀ > 25 μM



X-axis = concentration (μM) of compound **12**

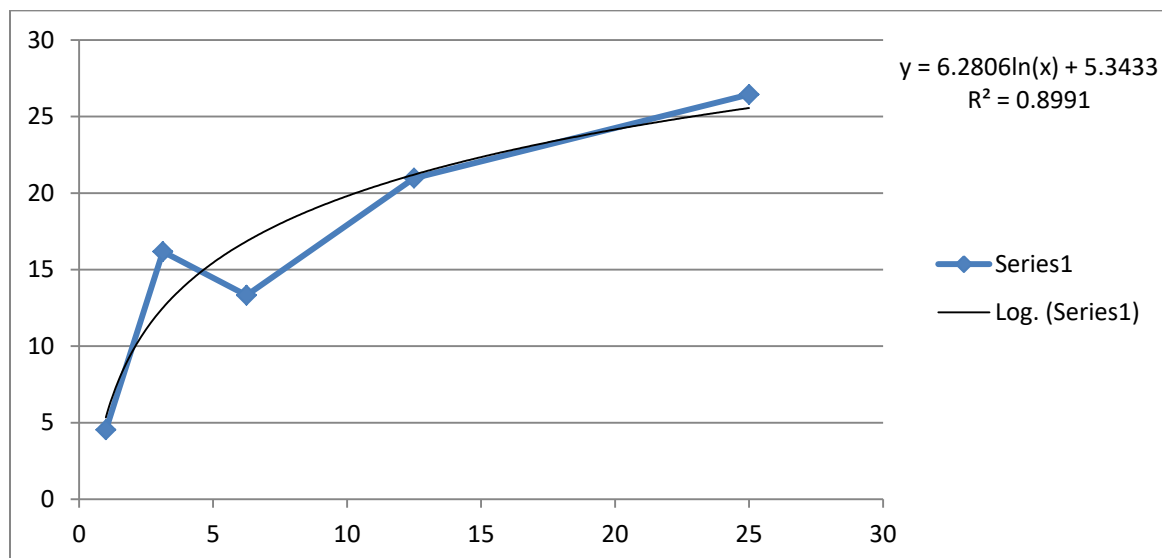
Y-axis = % Cell Proliferation Inhibition

IC₅₀ > 25 μM

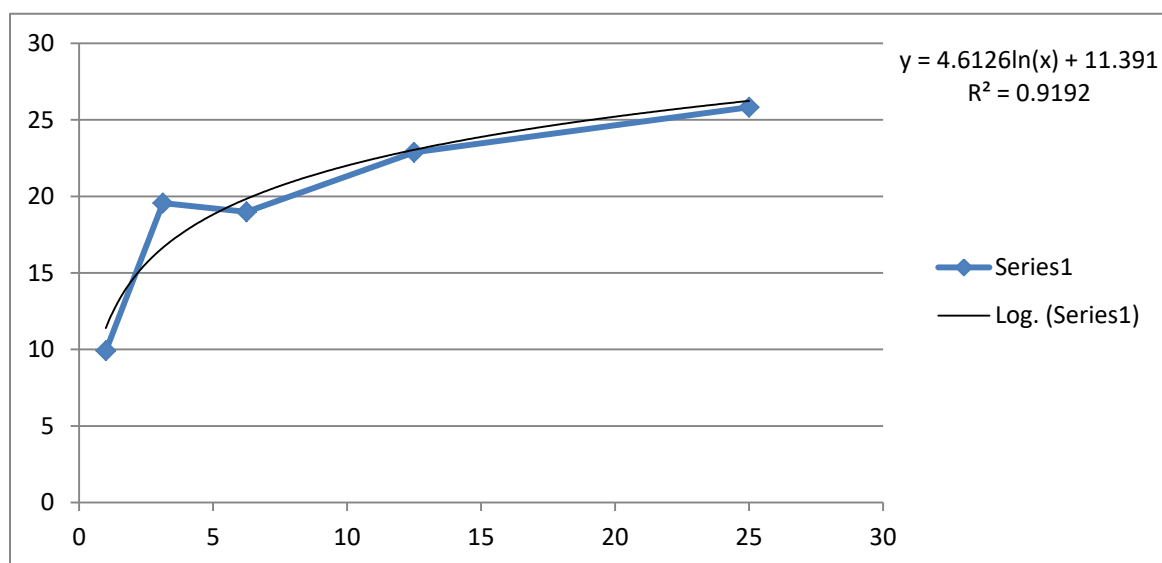


X-axis = concentration (μM) of compound **12**
Y-axis = % Cell Proliferation Inhibition
 $\text{IC}_{50} > 25 \mu\text{M}$

26. The curves that we used to calculate the IC_{50} value for compound **12** against DU145



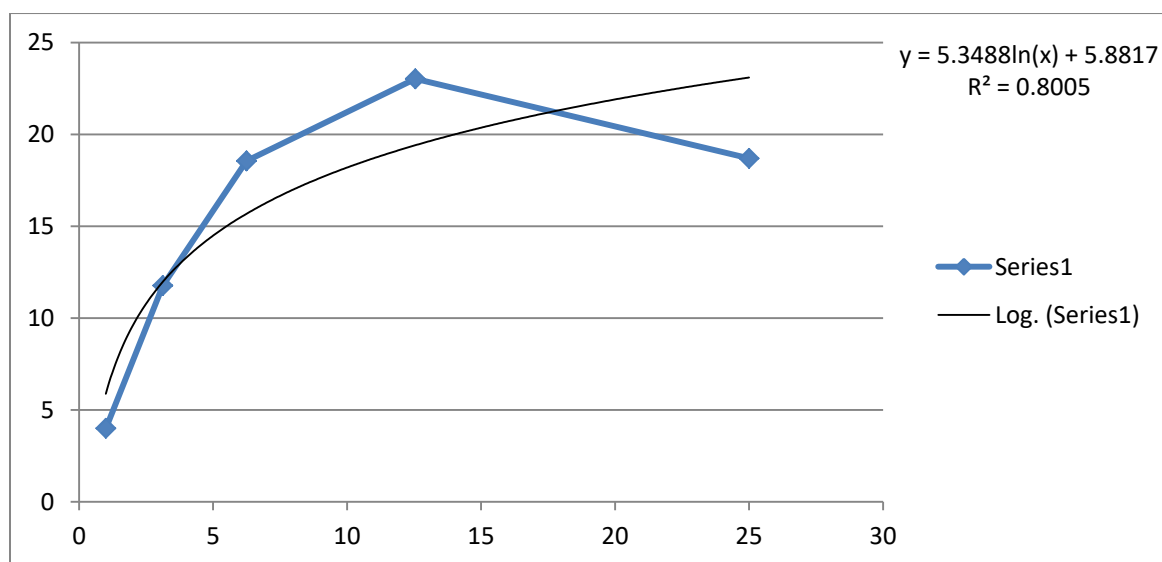
X-axis = concentration (μM) of compound **12**
Y-axis = % Cell Proliferation Inhibition
 $\text{IC}_{50} > 25 \mu\text{M}$



X-axis = concentration (μM) of compound **12**

Y-axis = % Cell Proliferation Inhibition

IC₅₀ > 25 μM

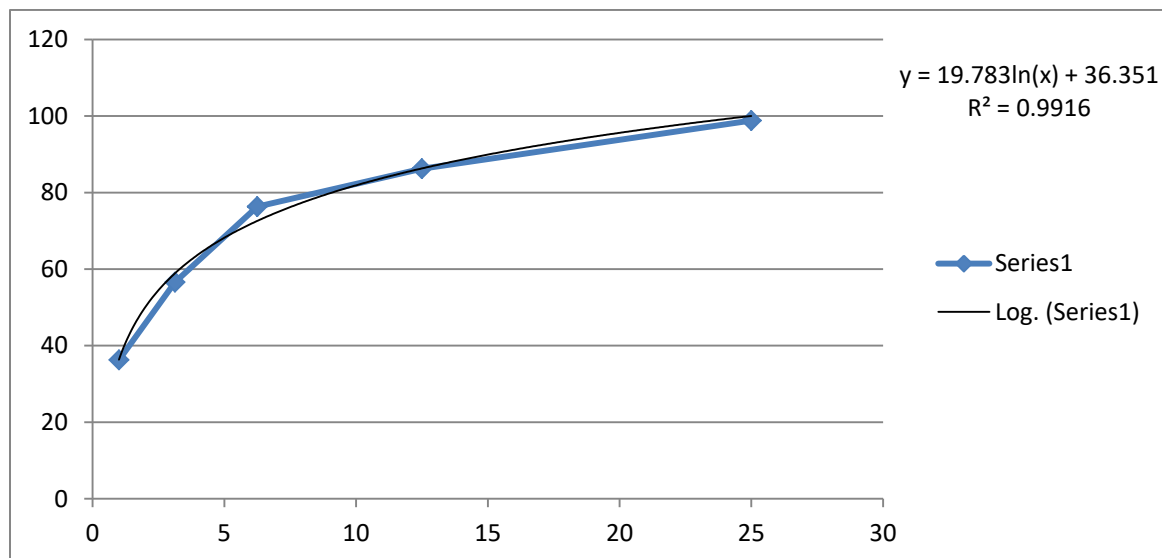


X-axis = concentration (μM) of compound **12**

Y-axis = % Cell Proliferation Inhibition

IC₅₀ > 25 μM

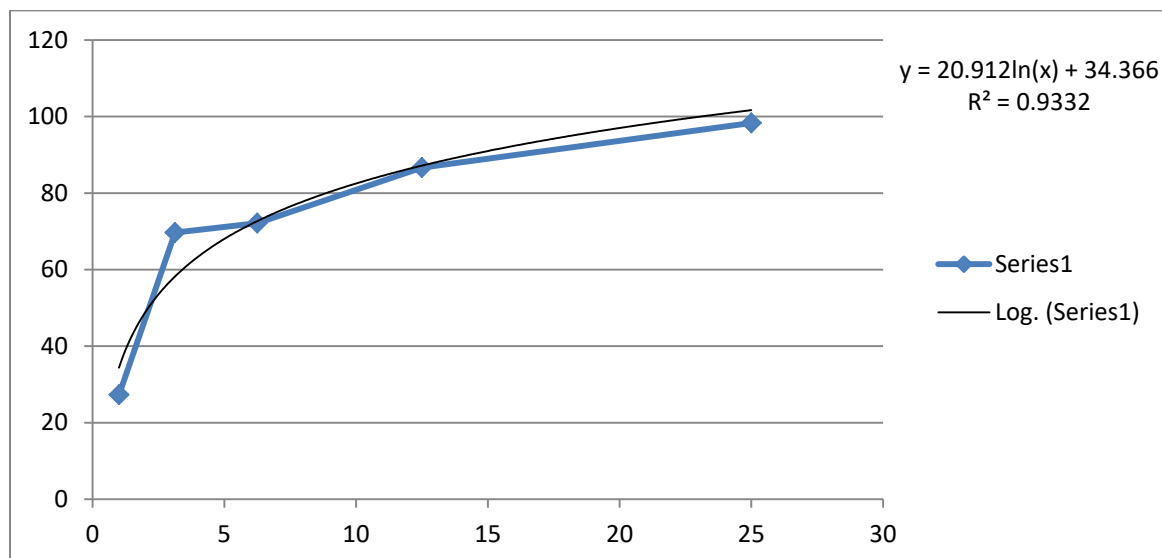
27. The curves that we used to calculate the IC₅₀ value for compound **12** against LNCaP



X-axis = concentration (μM) of compound **12**

Y-axis = % Cell Proliferation Inhibition

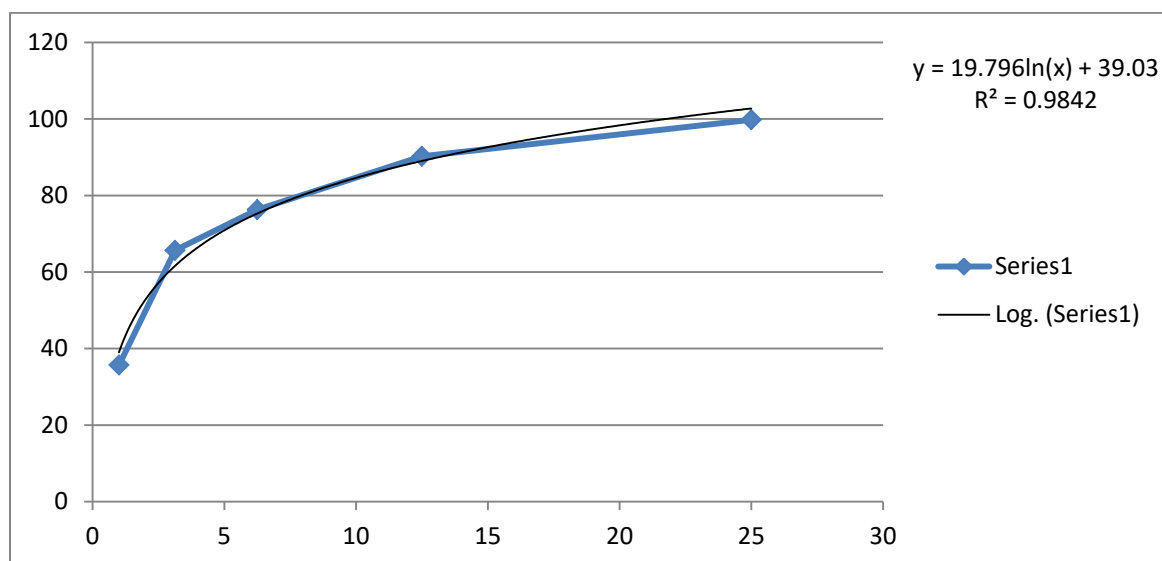
IC₅₀ = 1.994 μM



X-axis = concentration (μM) of compound **12**

Y-axis = % Cell Proliferation Inhibition

IC₅₀ = 2.112 μM

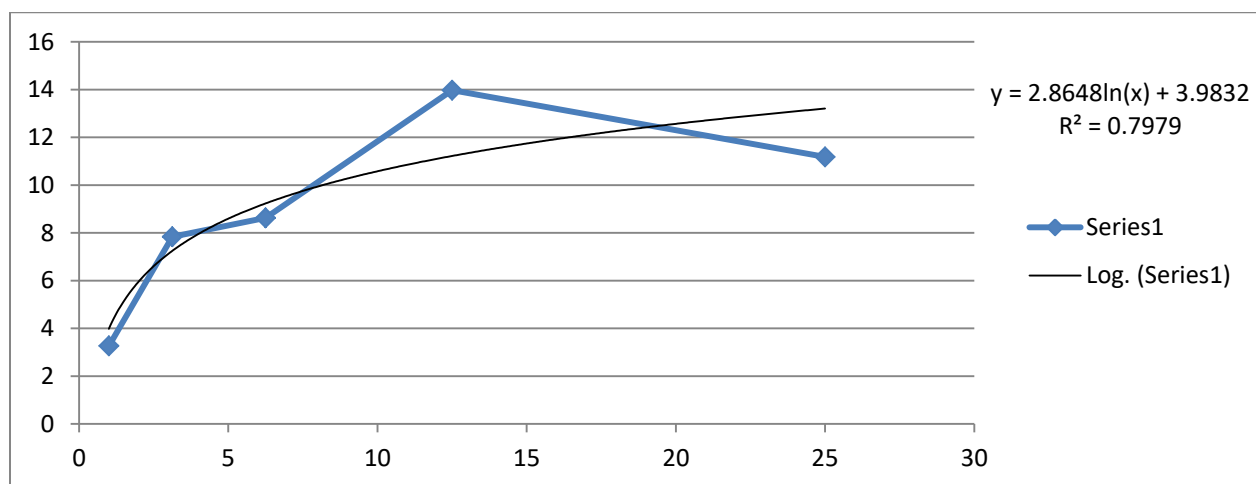


X-axis = concentration (μM) of compound **12**

Y-axis = % Cell Proliferation Inhibition

IC₅₀ = 1.740 μM

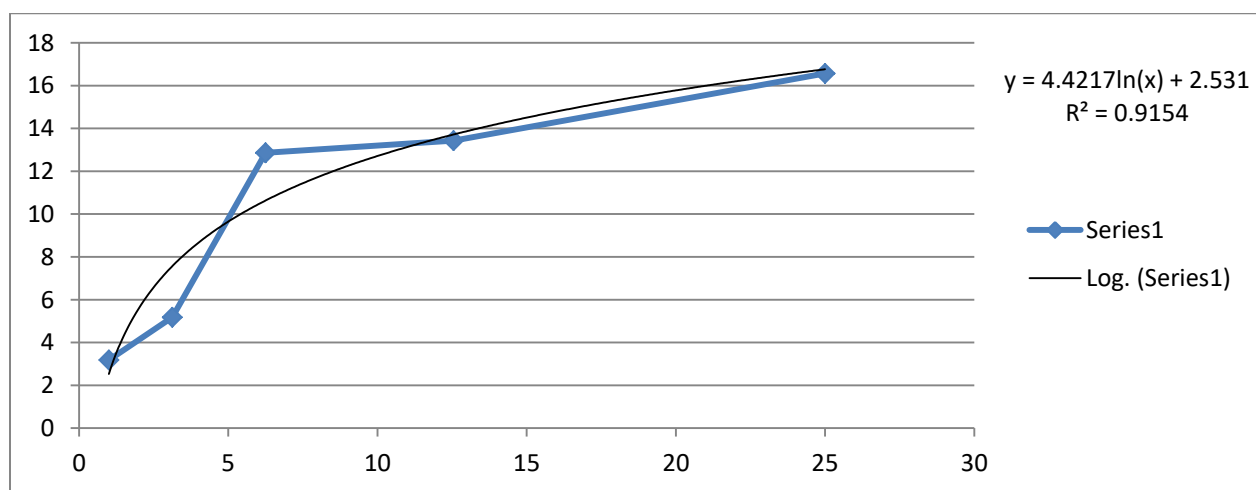
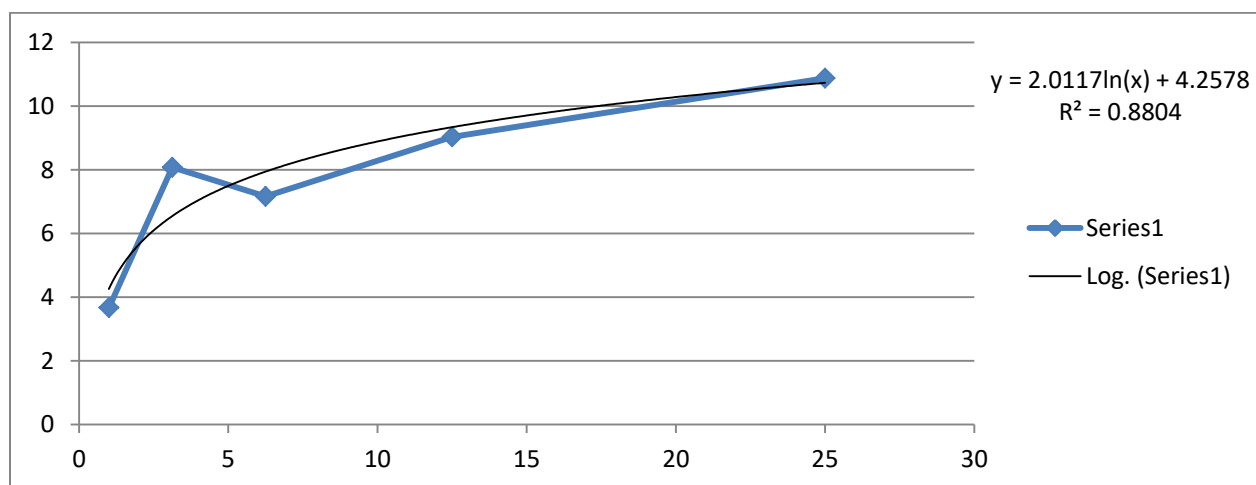
28. The curves that we used to calculate the IC₅₀ value for compound **13** against PC-3



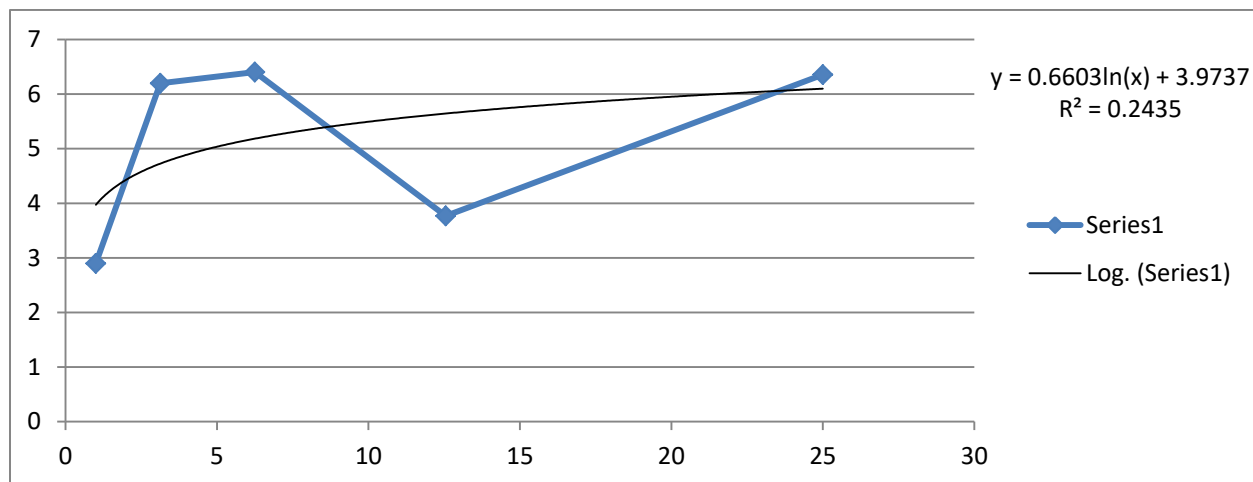
X-axis = concentration (μM) of compound **13**

Y-axis = % Cell Proliferation Inhibition

IC₅₀ > 25 μM



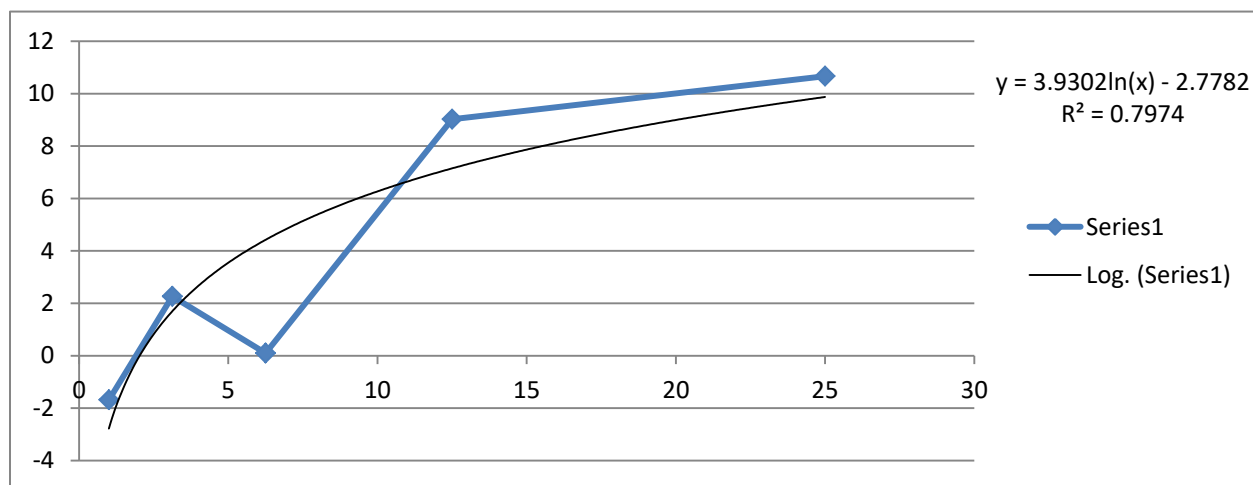
29. The curves that we used to calculate the IC₅₀ value for compound **13** against DU145



X-axis = concentration (μM) of compound **13**

Y-axis = % Cell Proliferation Inhibition

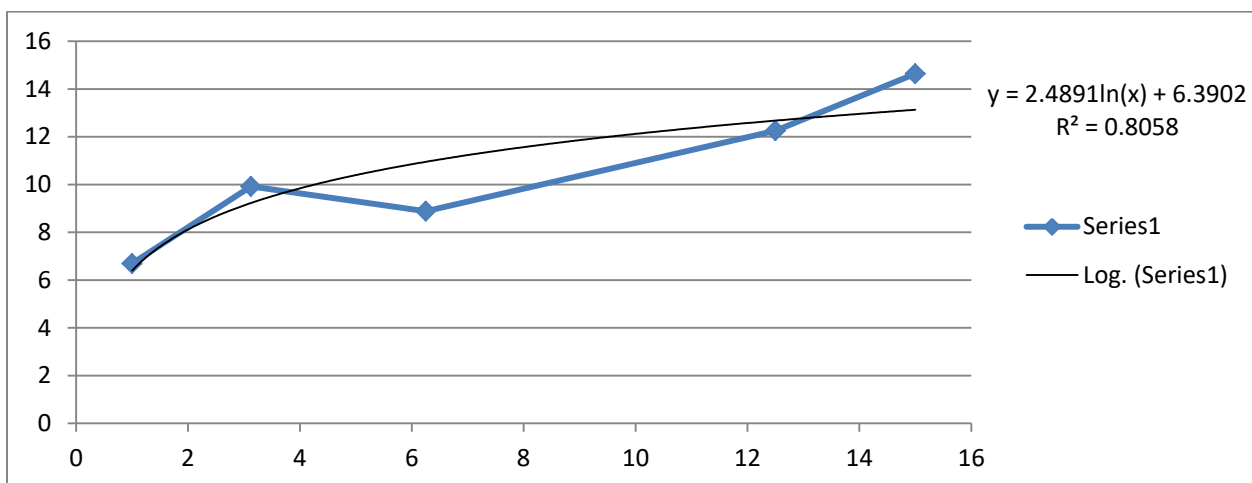
IC₅₀ > 25 μM



X-axis = concentration (μM) of compound **13**

Y-axis = % Cell Proliferation Inhibition

IC₅₀ > 25 μM

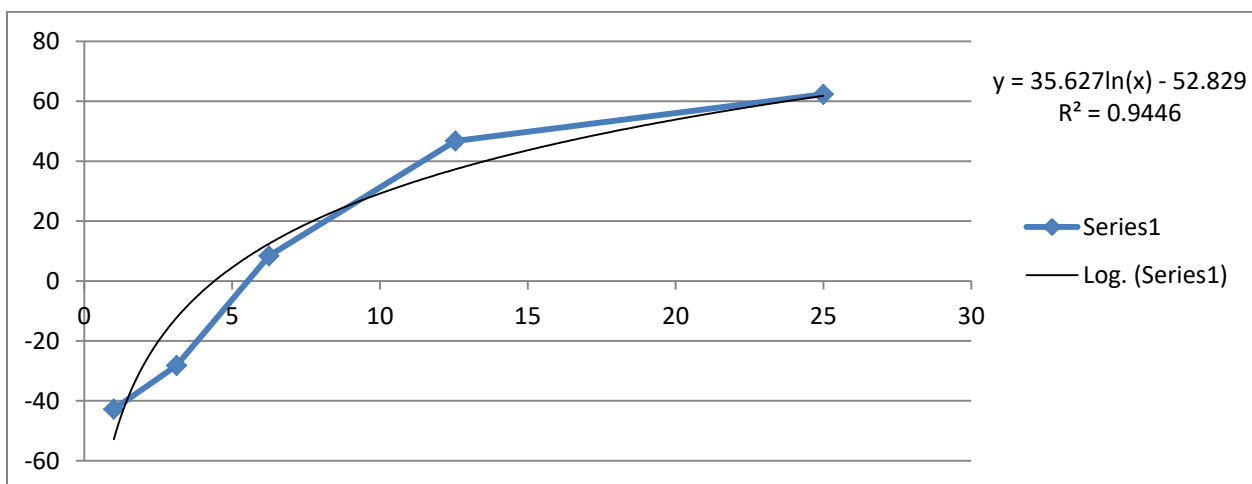


X-axis = concentration (μM) of compound **13**

Y-axis = % Cell Proliferation Inhibition

$IC_{50} > 25 \mu M$

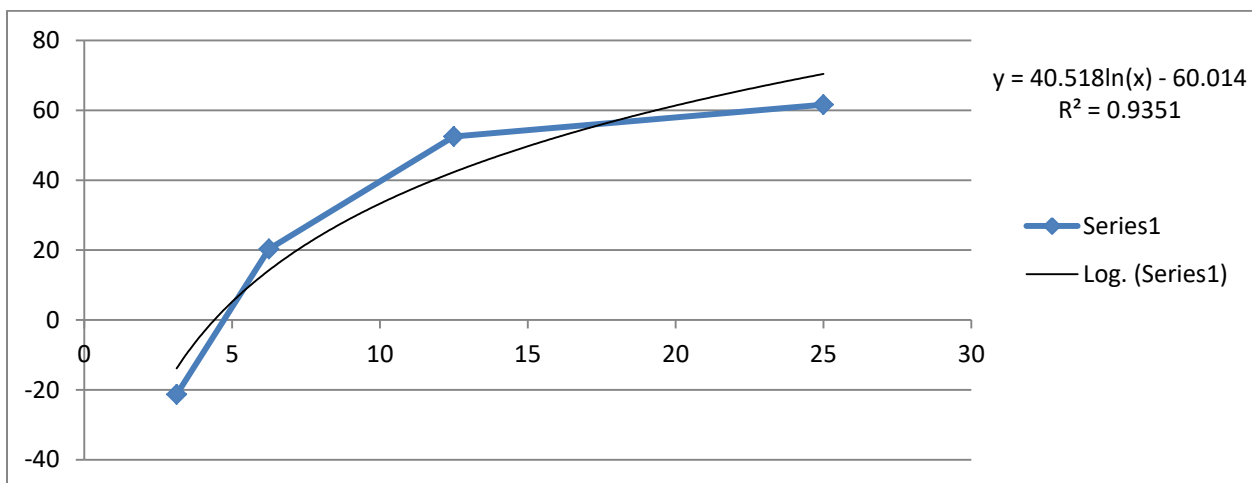
30. The curves that we used to calculate the IC_{50} value for compound **13** against LNCaP



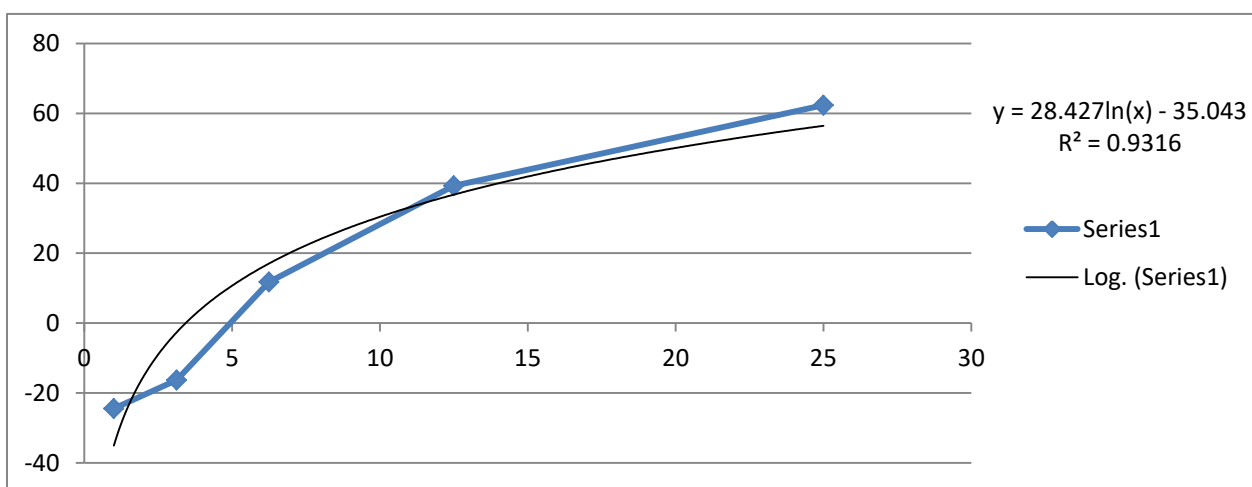
X-axis = concentration (μM) of compound **13**

Y-axis = % Cell Proliferation Inhibition

$IC_{50} = 17.926 \mu M$



X-axis = concentration (μM) of compound **13**
Y-axis = % Cell Proliferation Inhibition
IC₅₀ = 15.123 μM



X-axis = concentration (μM) of compound **13**
Y-axis = % Cell Proliferation Inhibition
IC₅₀ = 19.918 μM