

Supplementary Materials

Chlorinated Enyne Fatty Acid Amides from a Marine Cyanobacterium: Discovery of Taveuniamides L-M and Pharmacological Characterization of Taveuniamide F as a GPCR Antagonist with CNR1 Selectivity

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Figure S1: Structurally related analogs in the literature

Figure S2: ¹H NMR (600 MHz, CDCl₃) of taveuniamide L (**1**)

Figure S3: HSQC (600 MHz, CDCl₃) of taveuniamide L (**1**)

Figure S4: COSY (600 MHz, CDCl₃) of taveuniamide L (**1**)

Figure S5: HMBC (600 MHz, CDCl₃) of taveuniamide L (**1**). The number of increments = 320

Figure S6: HMBC (600 MHz, CDCl₃) of taveuniamide L (**1**). The number of increments = 512

Figure S7: ¹H NMR (600 MHz, CDCl₃) of taveuniamide M (**2**)

Figure S8: HSQC (600 MHz, CDCl₃) of taveuniamide M (**2**)

Figure S9: COSY (600 MHz, CDCl₃) of taveuniamide M (**2**)

Figure S10: HMBC (600 MHz, CDCl₃) of taveuniamide M (**2**)

Figure S11: ¹H NMR (600 MHz, CDCl₃) of taveuniamide N (**3**)

Figure S12: HSQC (600 MHz, CDCl₃) of taveuniamide N (**3**)

Figure S13: COSY (600 MHz, CDCl₃) of taveuniamide N (**3**)

Figure S14: HMBC (600 MHz, CDCl₃) of taveuniamide N (**3**)

Figure S15: ¹H NMR (600 MHz, CDCl₃) of taveuniamide F (**4**)

Figure S16: HSQC (600 MHz, CDCl₃) of taveuniamide F (**4**)

Figure S17: COSY (600 MHz, CDCl₃) of taveuniamide F (**4**)

Figure S18: HMBC (600 MHz, CDCl₃) of taveuniamide F (**4**)

Figure S19. ¹H NMR (600 MHz, CDCl₃) of (*S*)-MTPA amide (**6a**) and (*R*)-MTPA amide (**6b**)

Figure S20. COSY (600 MHz, CDCl₃) of the (*S*)-MTPA amide (**6a**)

Figure S21. COSY (600 MHz, CDCl₃) of the (*R*)-MTPAamide (**6b**)

Figure S22. 1D TOCSY irradiating H-5 of the (*S*)-MTPA amide (**6a**) at 80 ms, 60 ms, 45 ms, 30 ms, and 15 ms

Figure S23. 1D TOCSY irradiating H-5 of the (*R*)-MTPA amide (**6b**) at 80 ms, 60 ms, 45 ms, 30 ms, and 15 ms

Figure S24. Results of DFT coordinate scan for the preferred configuration at the amide bond of the (*R*)-MTPA derivative of taveuniamide F

Figure S25: Results of taveuniamide F (**4**) in GPCR MAX Panel Primary screen (β -arrestin) at 20 μ M in agonist and antagonist mode

Figure S26: Cell viability assay of taveuniamide F using HEK293 cells

Figure S27: Docking poses obtained for taranabant

Supplementary References

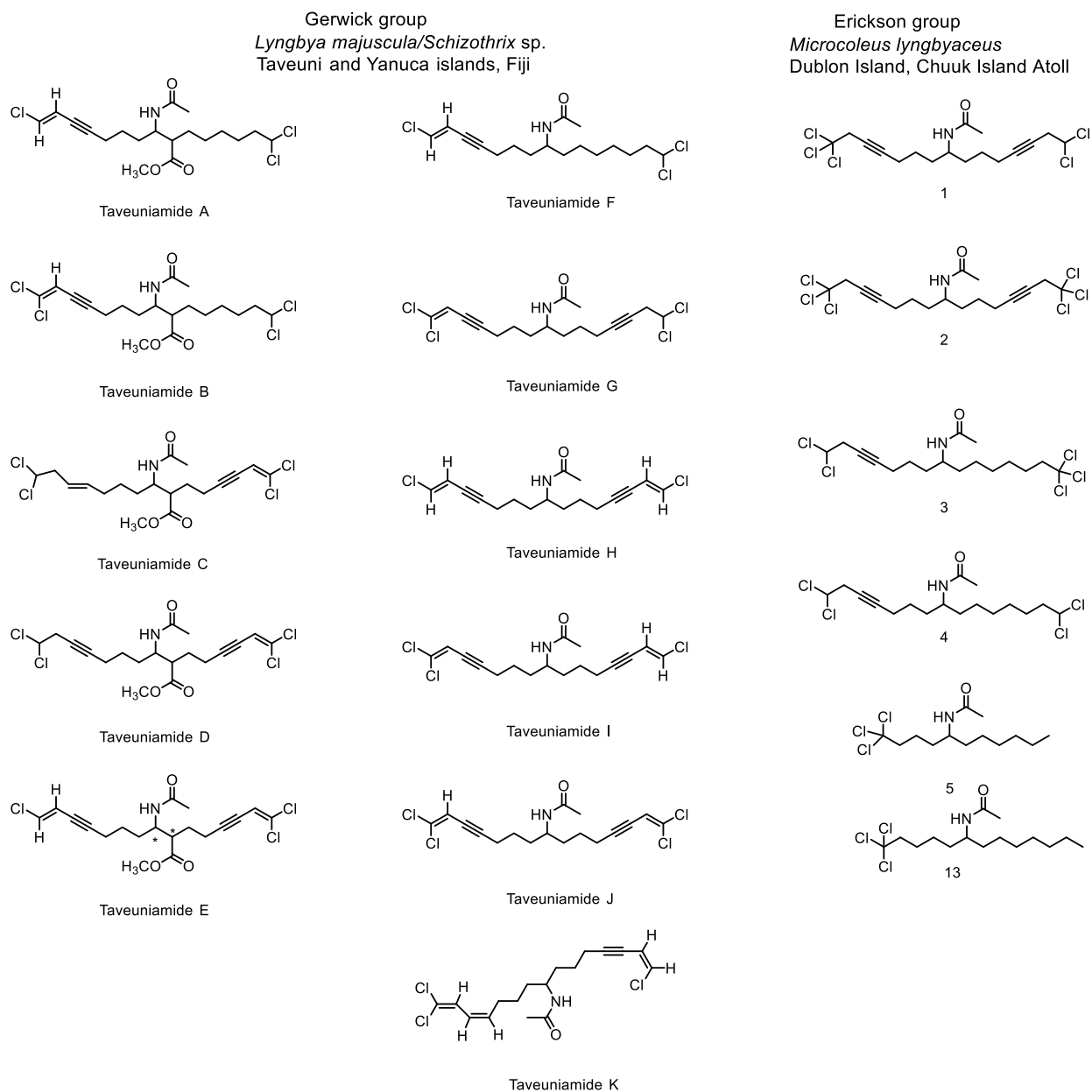


Figure S1. Structurally related analogs of taveuniamides in the literature.^{1,2} The relative configuration of taveuniamide E was determined by the Gerwick group.¹

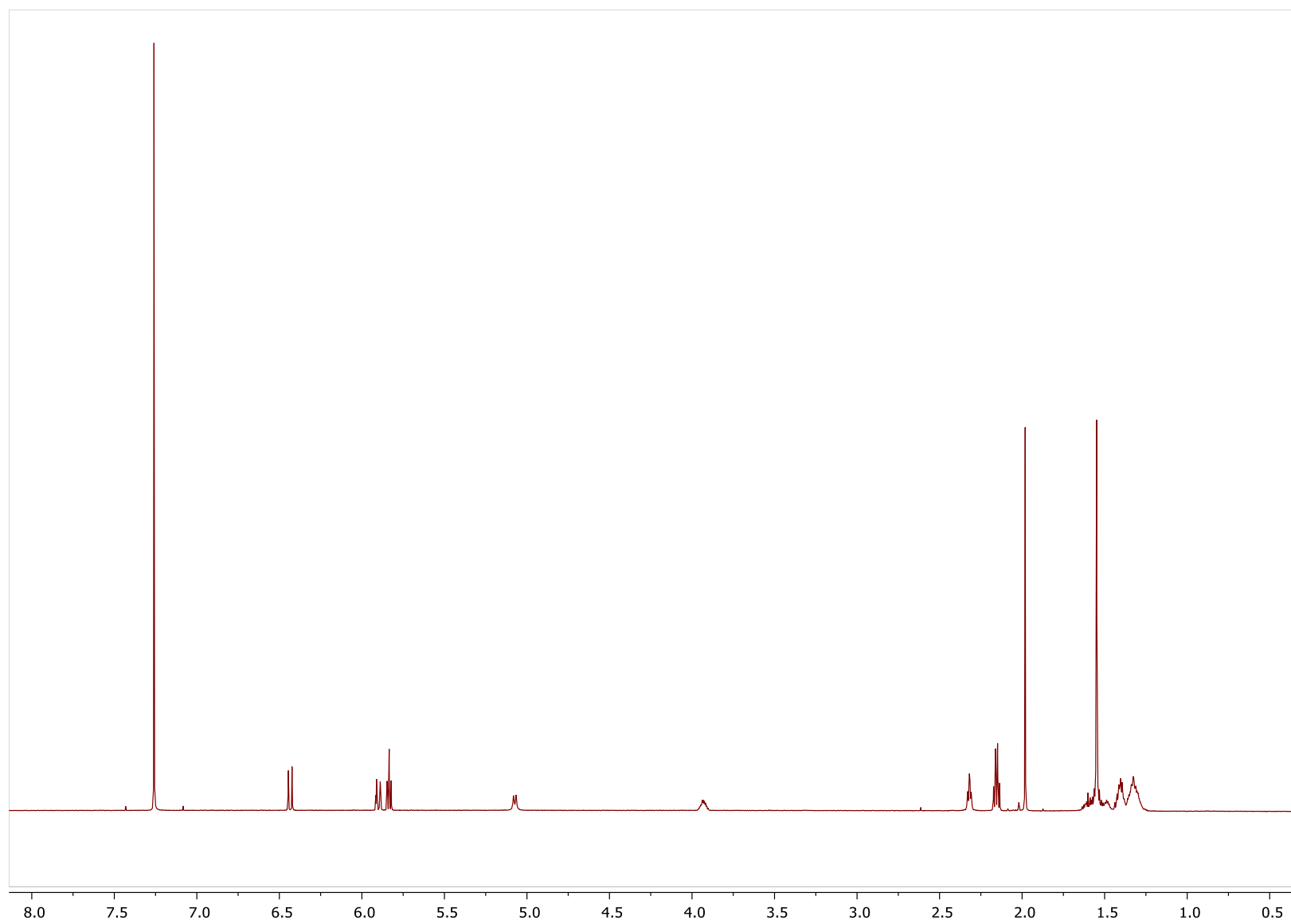


Figure S2: ^1H NMR (600 MHz, CDCl_3) of taveuniamide L (**1**).

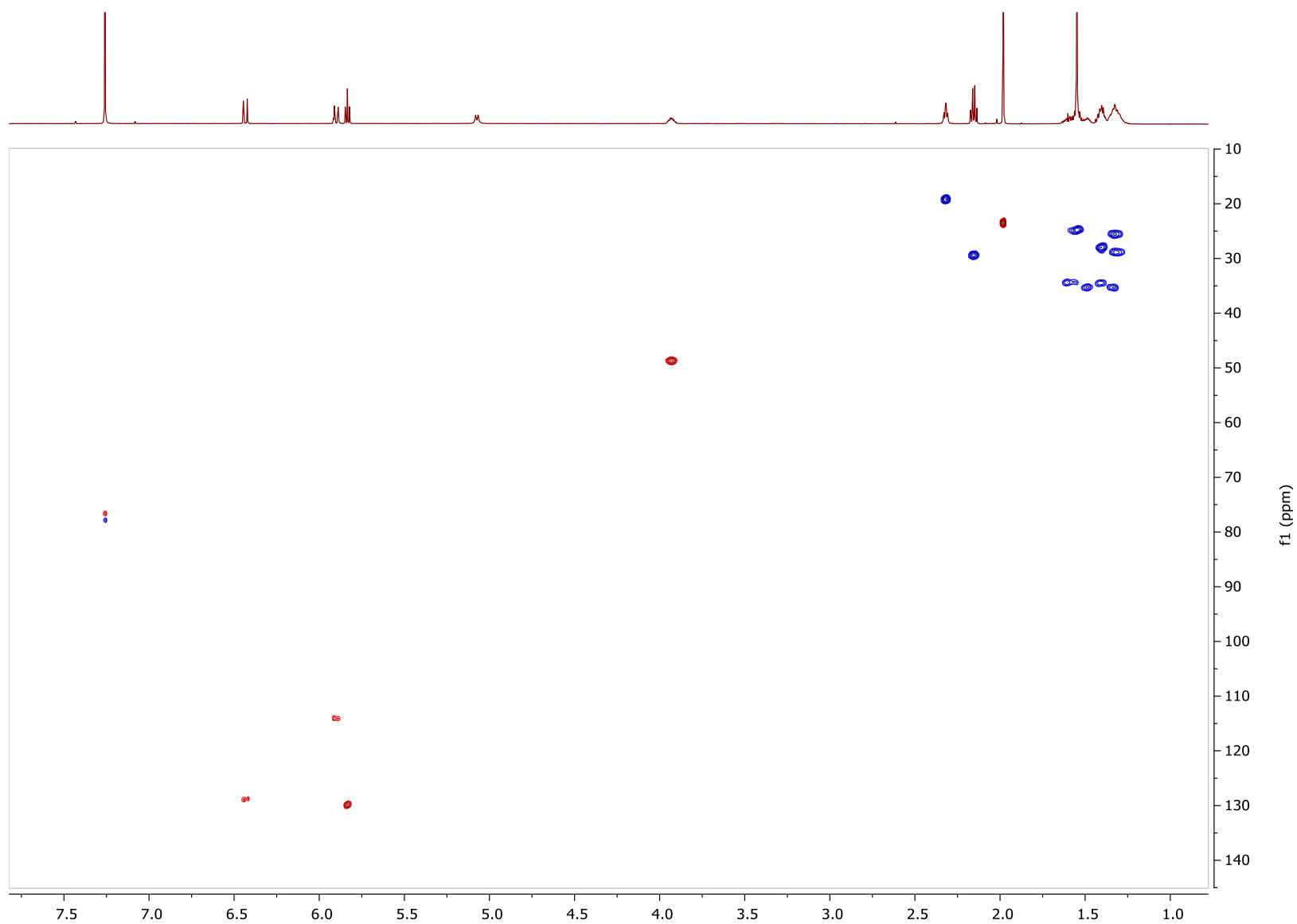


Figure S3: HSQC (600 MHz, CDCl_3) of taveuniamide L (1).

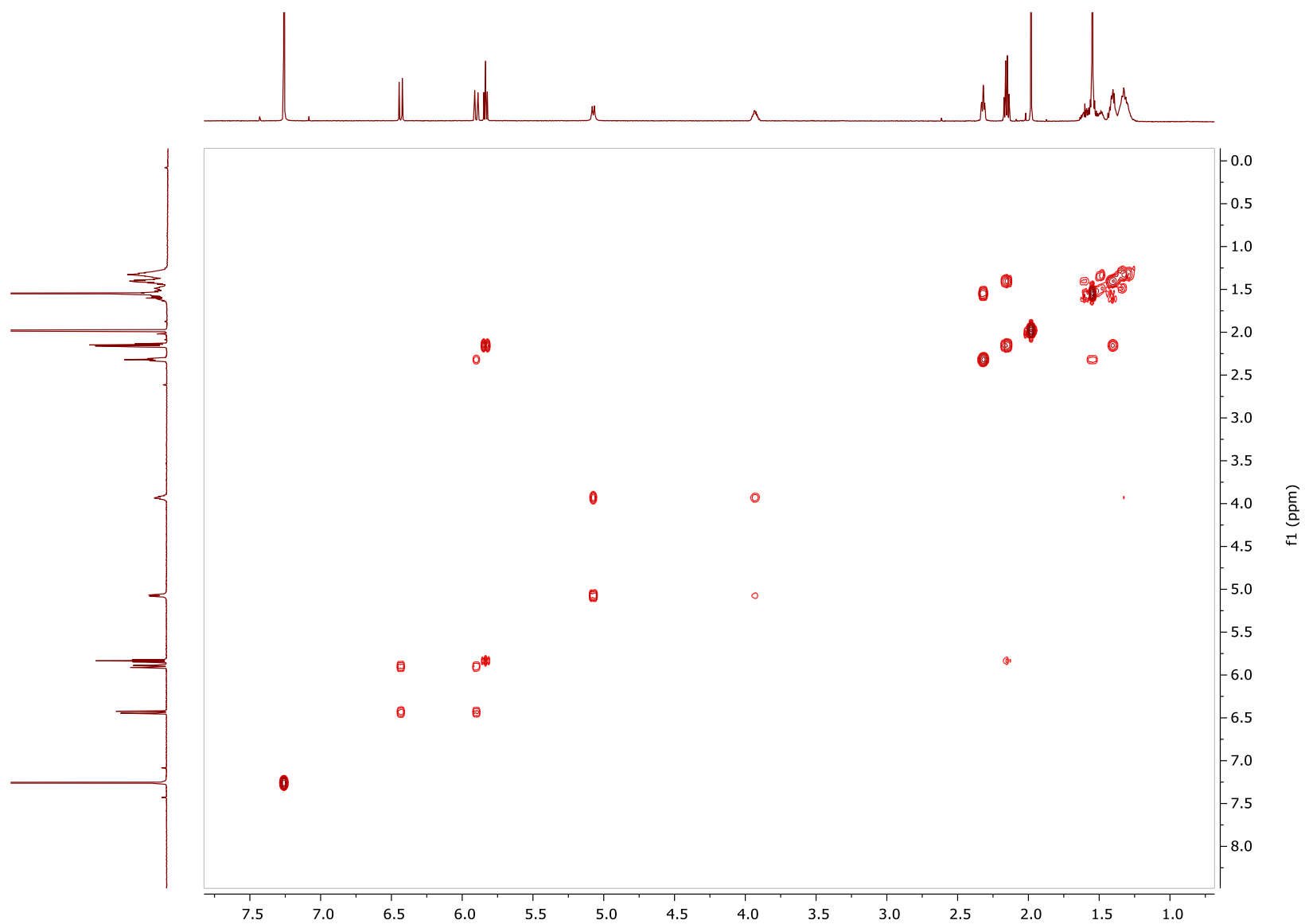


Figure S4: COSY (600 MHz, CDCl_3) of taveuniamide L (**1**).

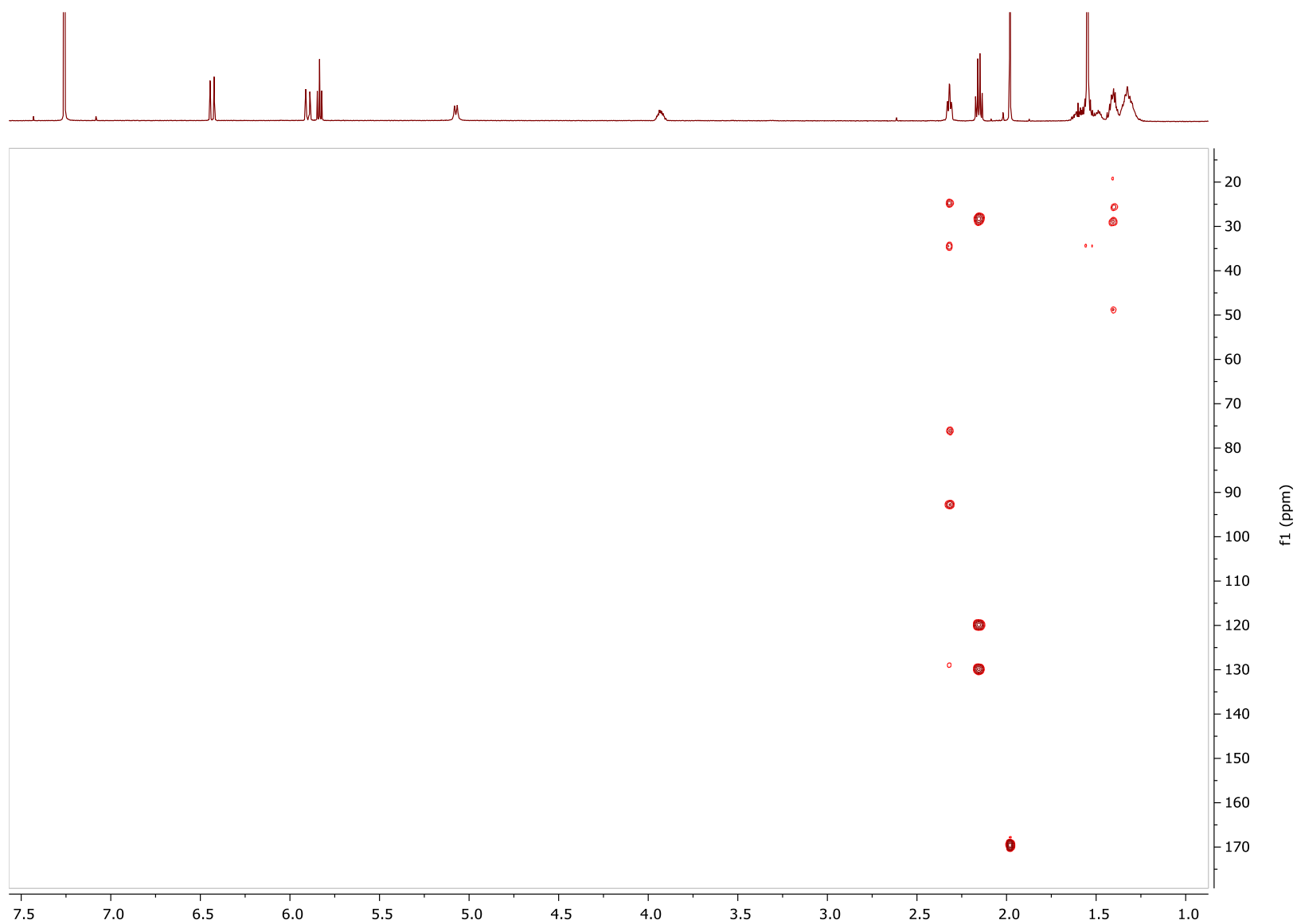


Figure S5: HMBC (600 MHz, CDCl_3) of taveuniamide L (**1**). The number of increments = 320

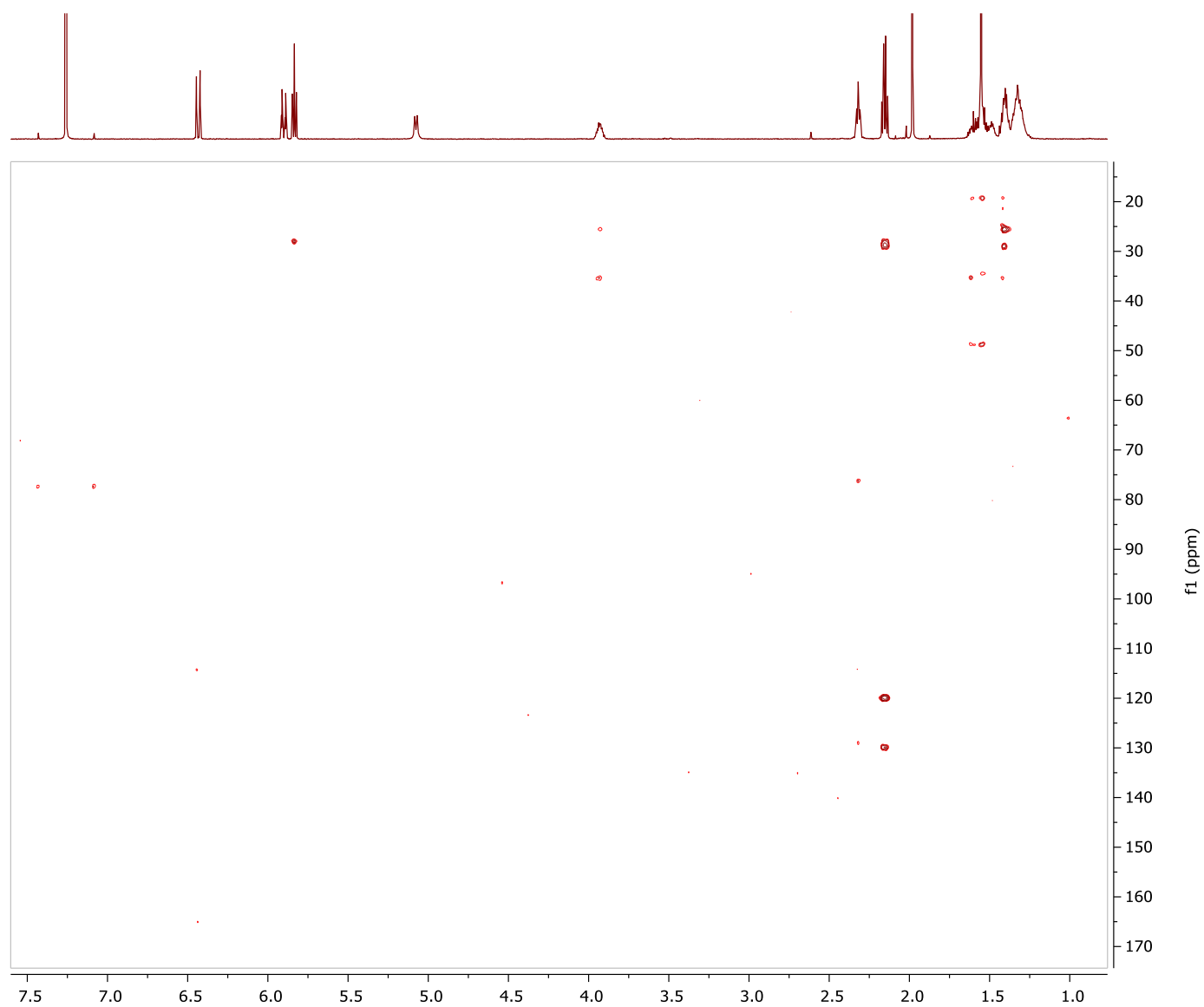


Figure S6: HMBC (600 MHz, CDCl₃) of taveuniamide L (**1**). The number of increments = 512.

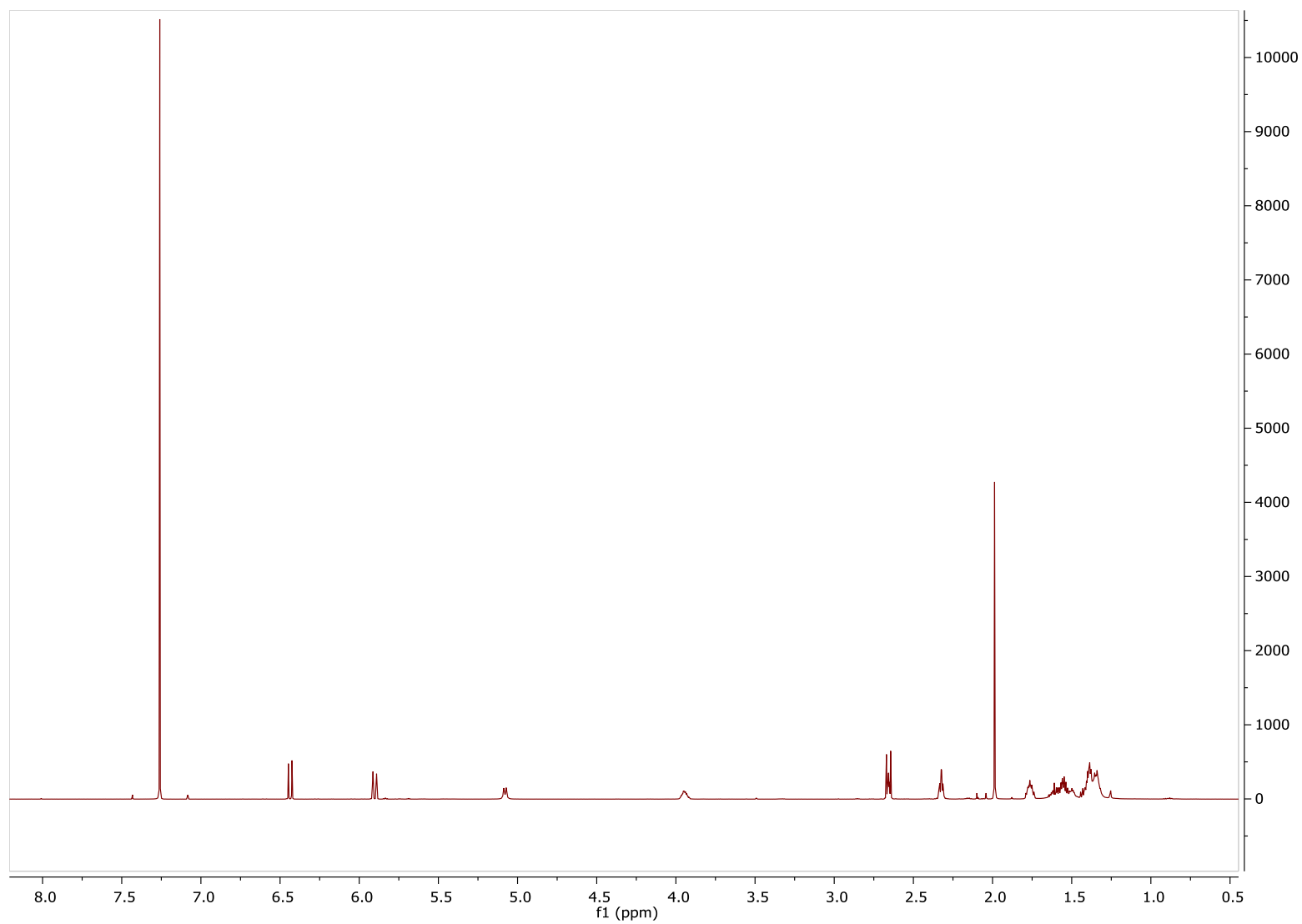


Figure S7: ^1H NMR (600 MHz, CDCl_3) of taveuniamide M (**2**).

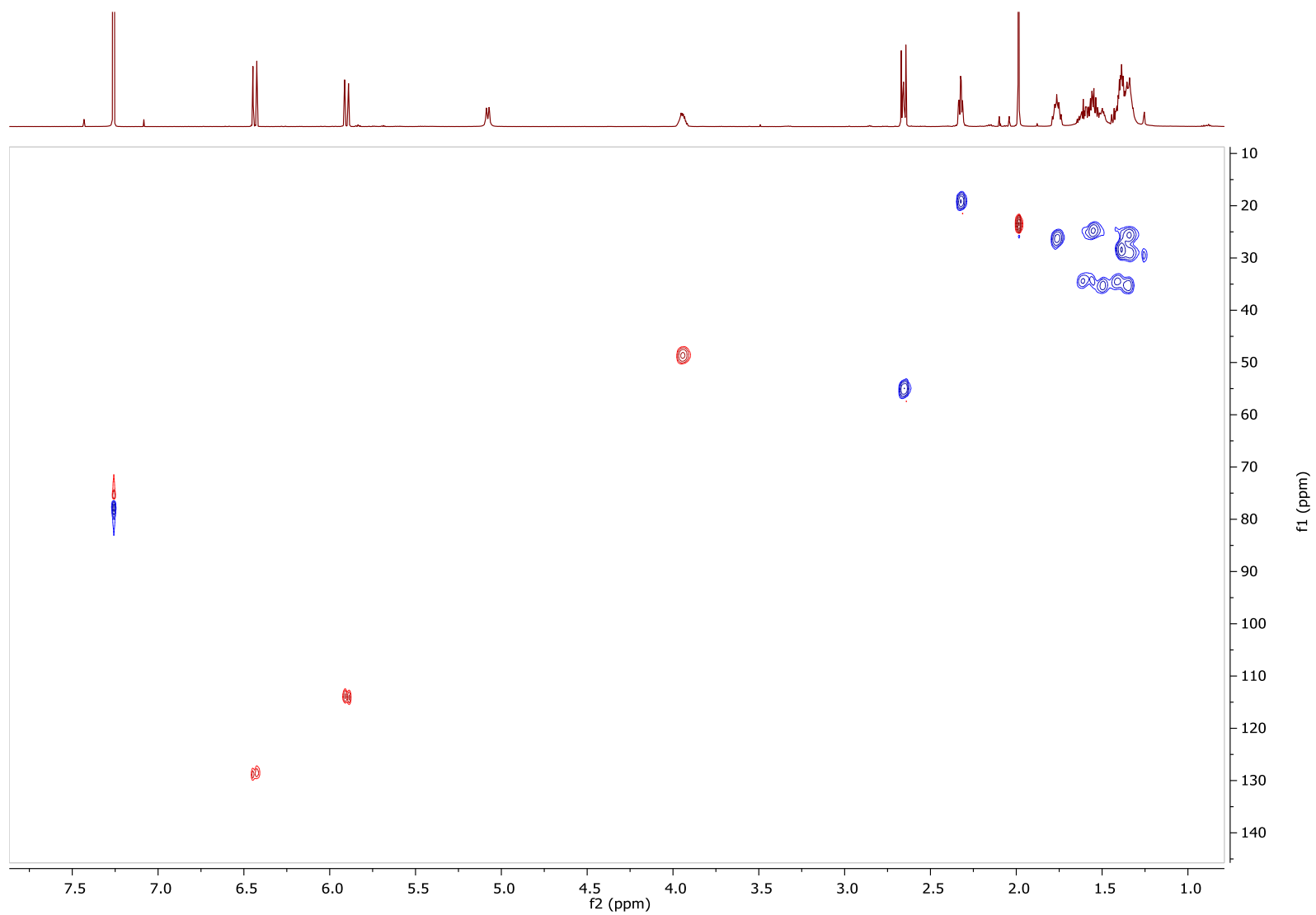


Figure S8: HSQC (600 MHz, CDCl_3) of taveuniamide M (**2**).

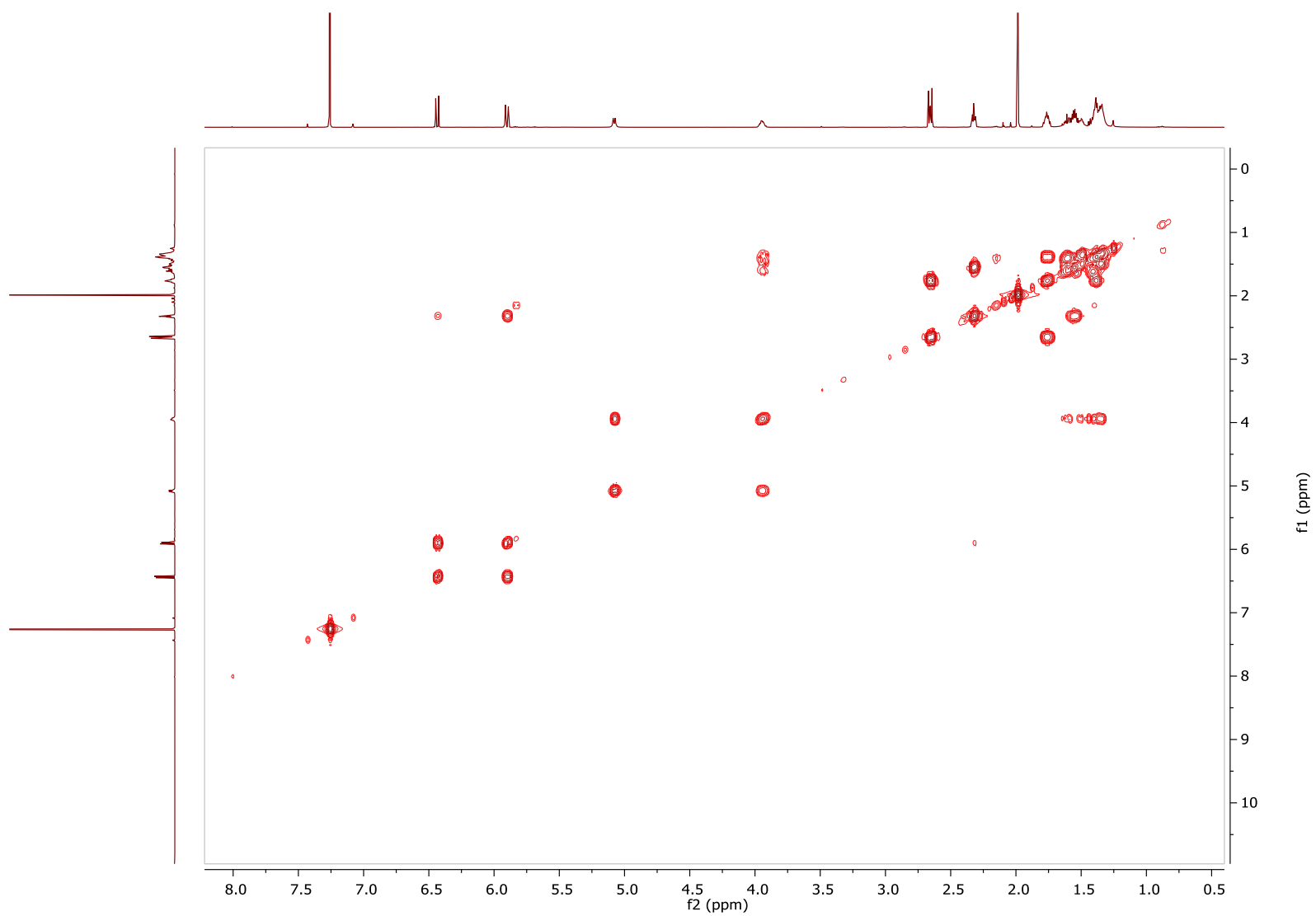


Figure S9: COSY (600 MHz, CDCl₃) of taveuniamide M (**2**).

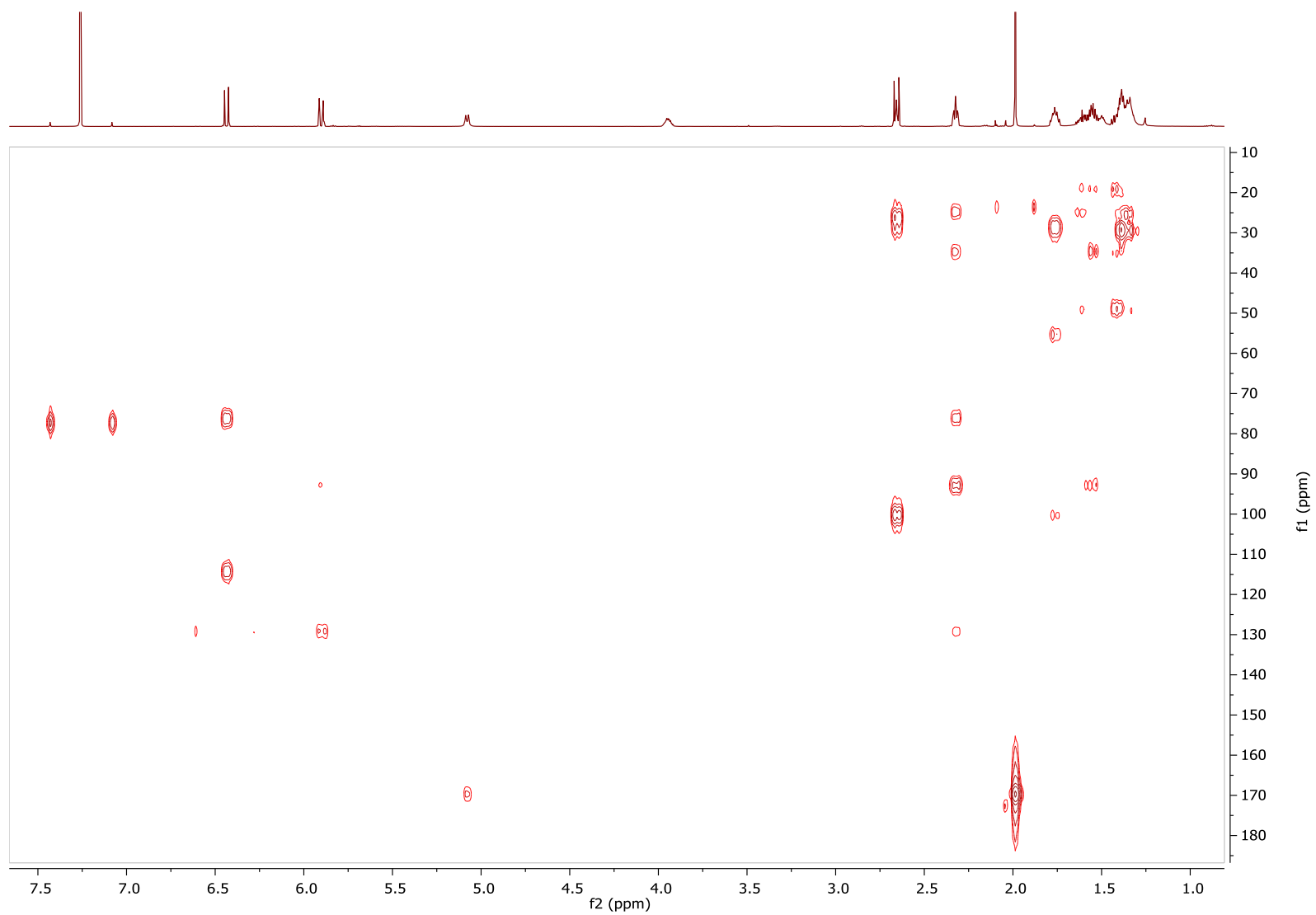


Figure S10: HMBC (600 MHz, CDCl_3) of taveuniamide M (**2**).

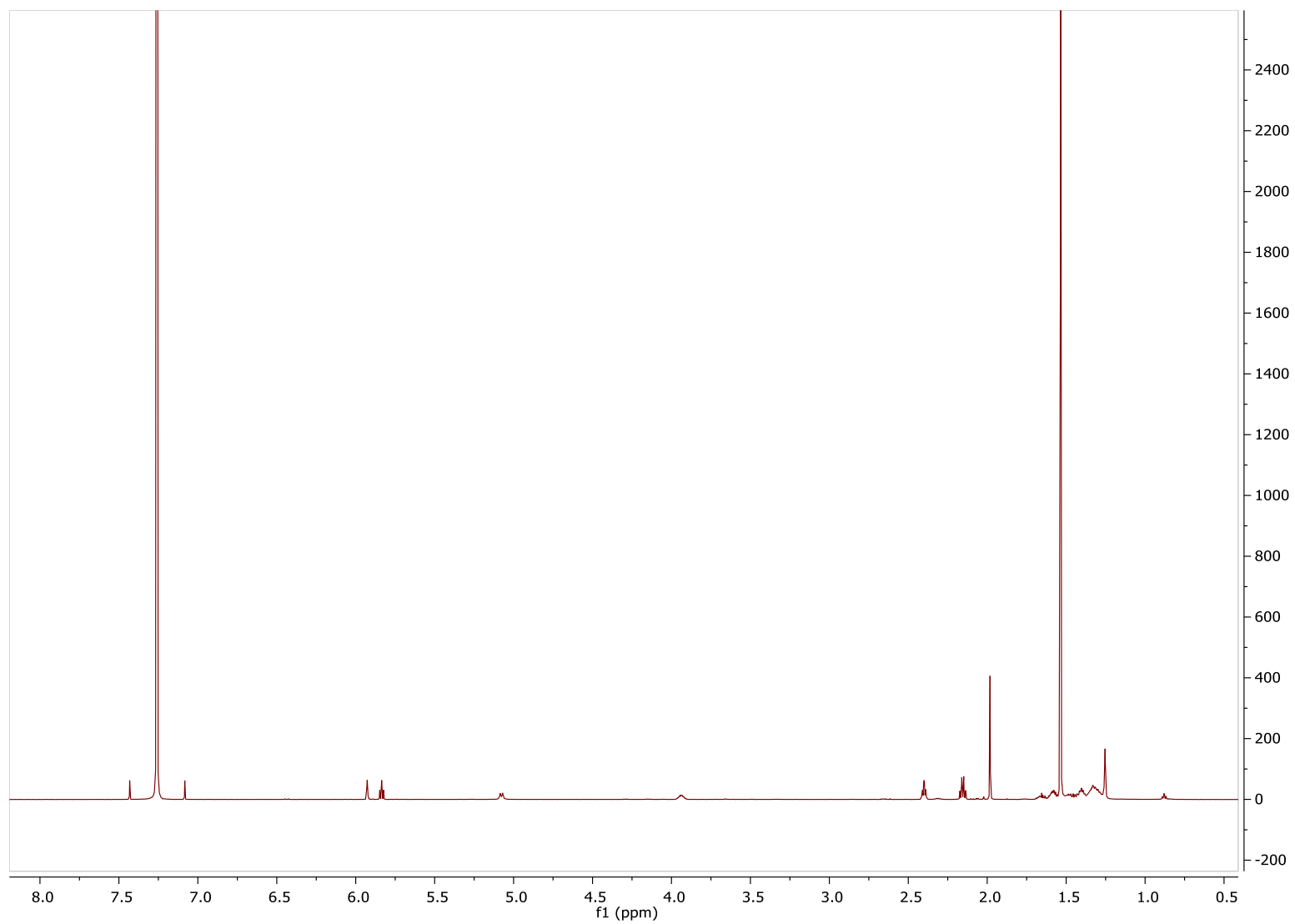


Figure S11: ^1H NMR (600 MHz, CDCl_3) of taveuniamide N (**3**).

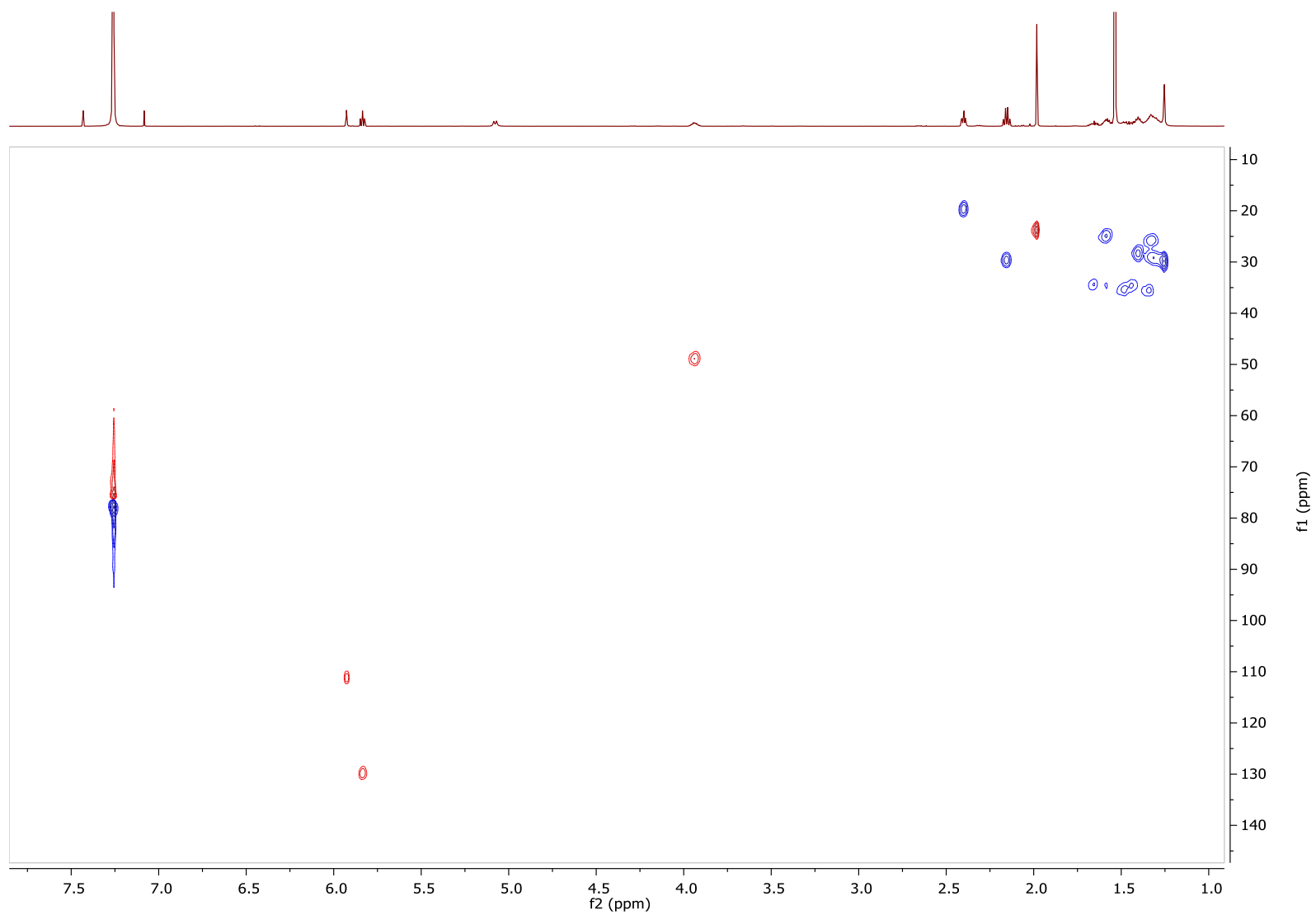


Figure S12: HSQC (600 MHz, CDCl_3) of taveuniamide N (**3**).

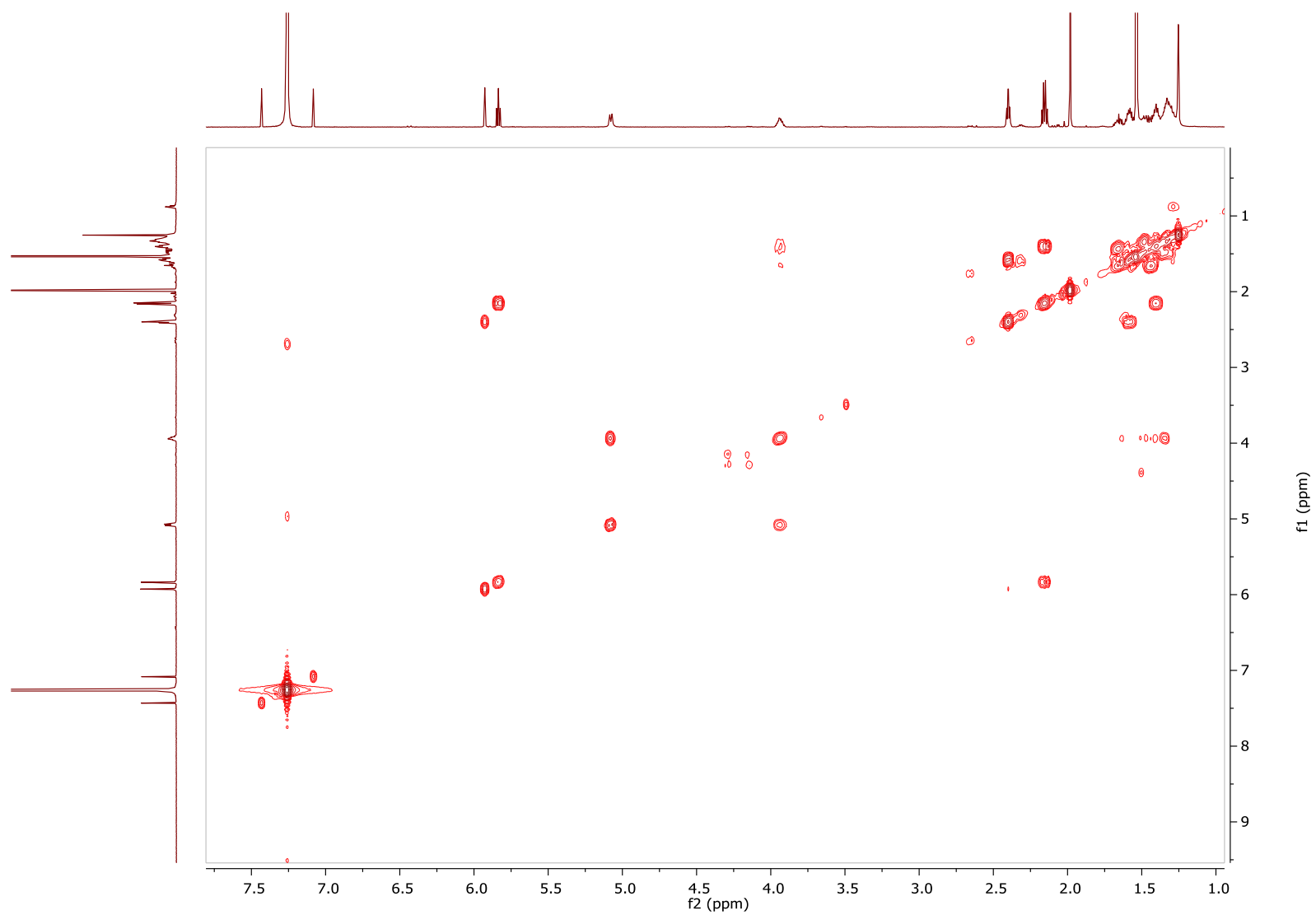


Figure S13: COSY (600 MHz, CDCl₃) of taveuniamide N (**3**).

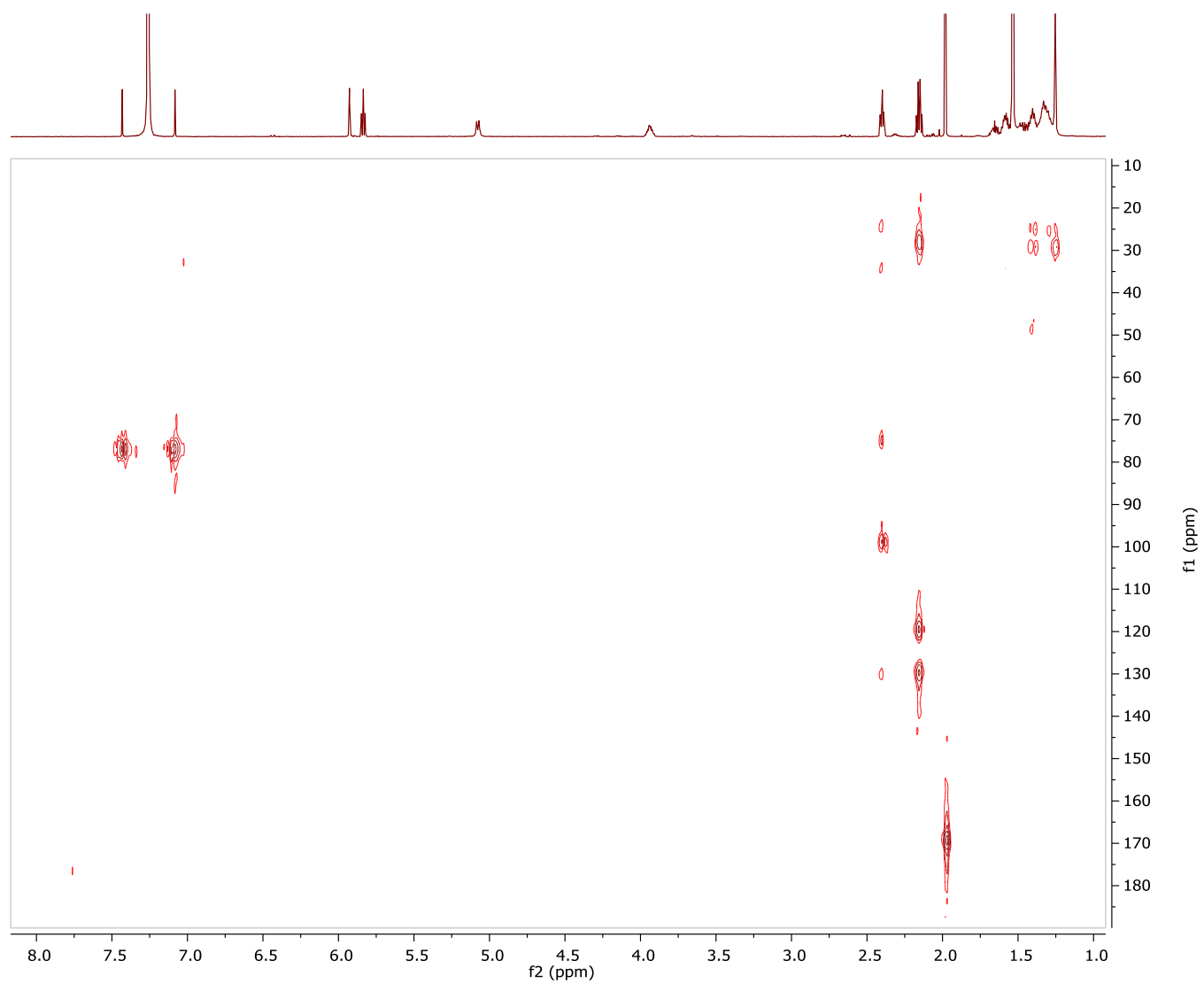


Figure S14: HMBC (600 MHz, CDCl_3) of taveuniamide N (**3**).

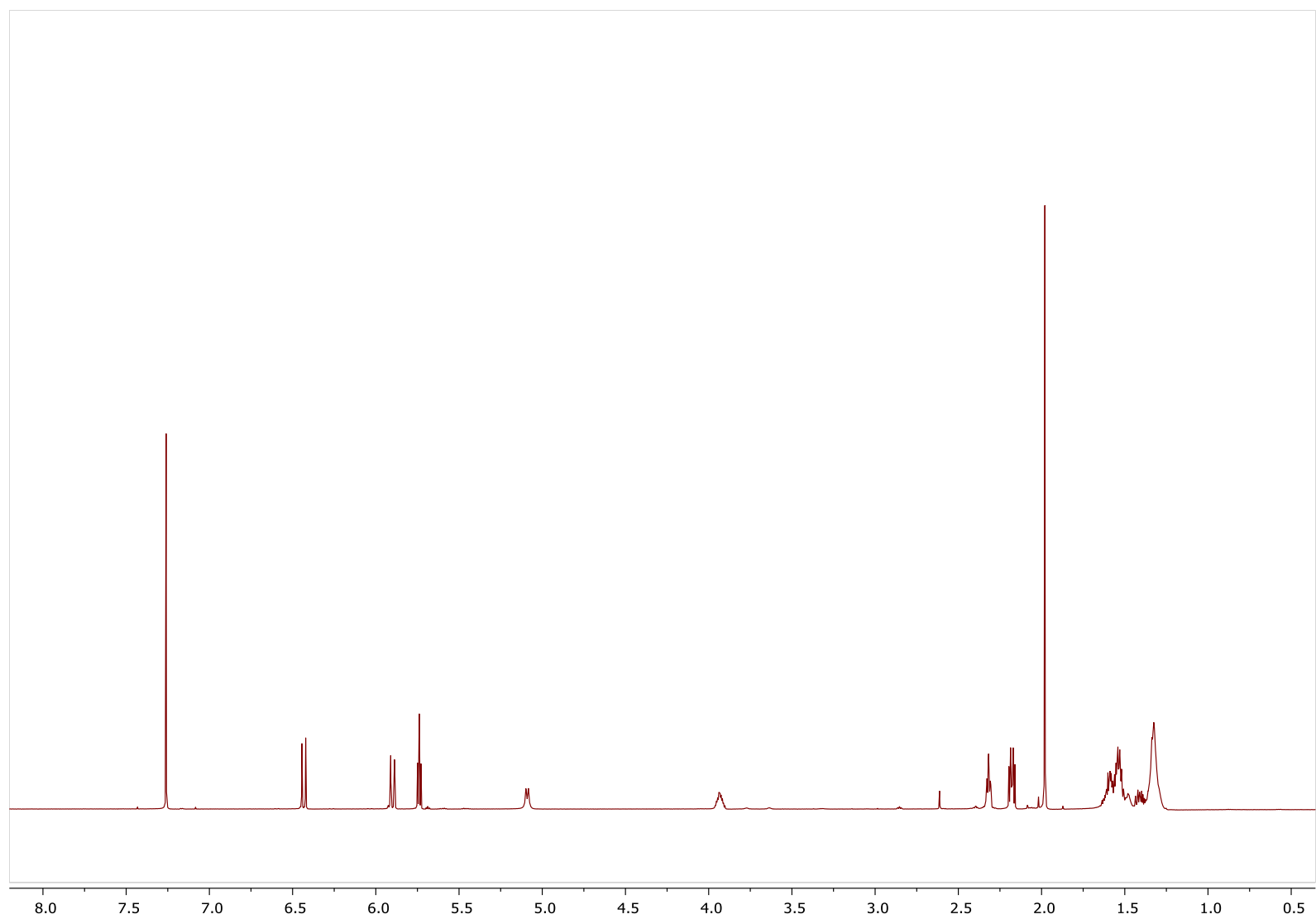


Figure S15: ^1H NMR (600 MHz, CDCl_3) of taveuniamide F (**4**).

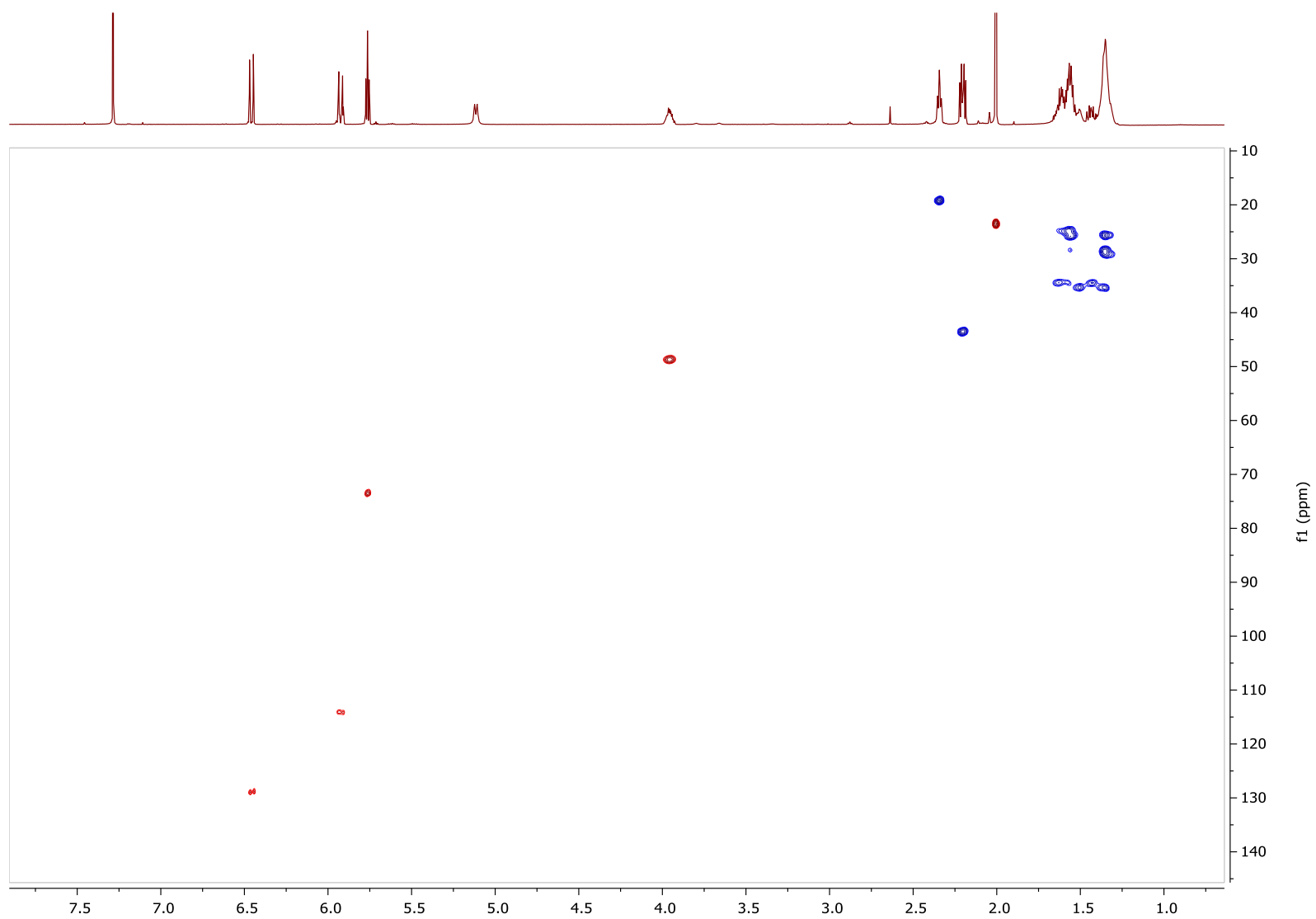


Figure S16: HSQC (600 MHz, CDCl_3) of taveuniamide F (**4**).

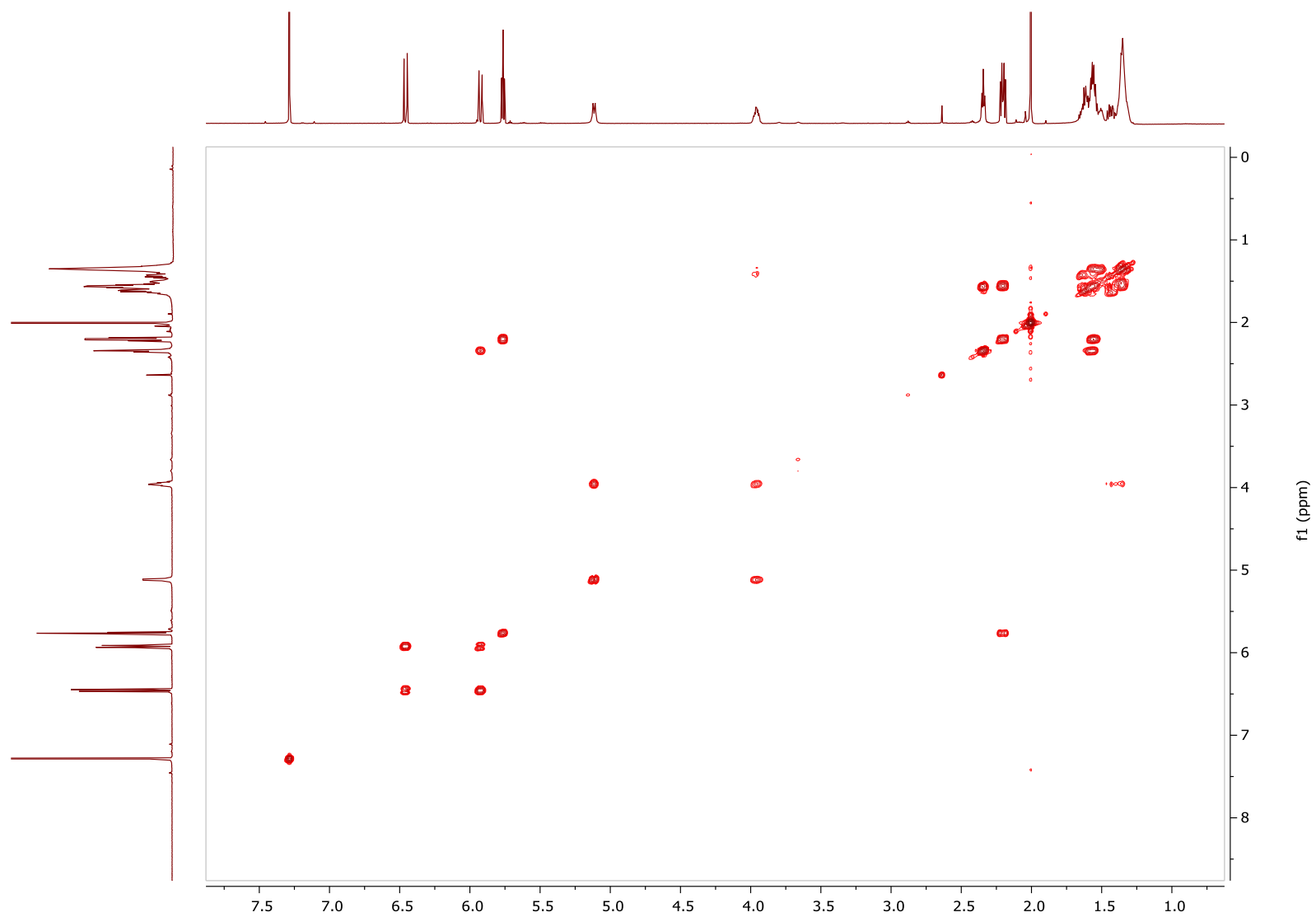


Figure S17: COSY (600 MHz, CDCl₃) of taveuniamide F (**4**).

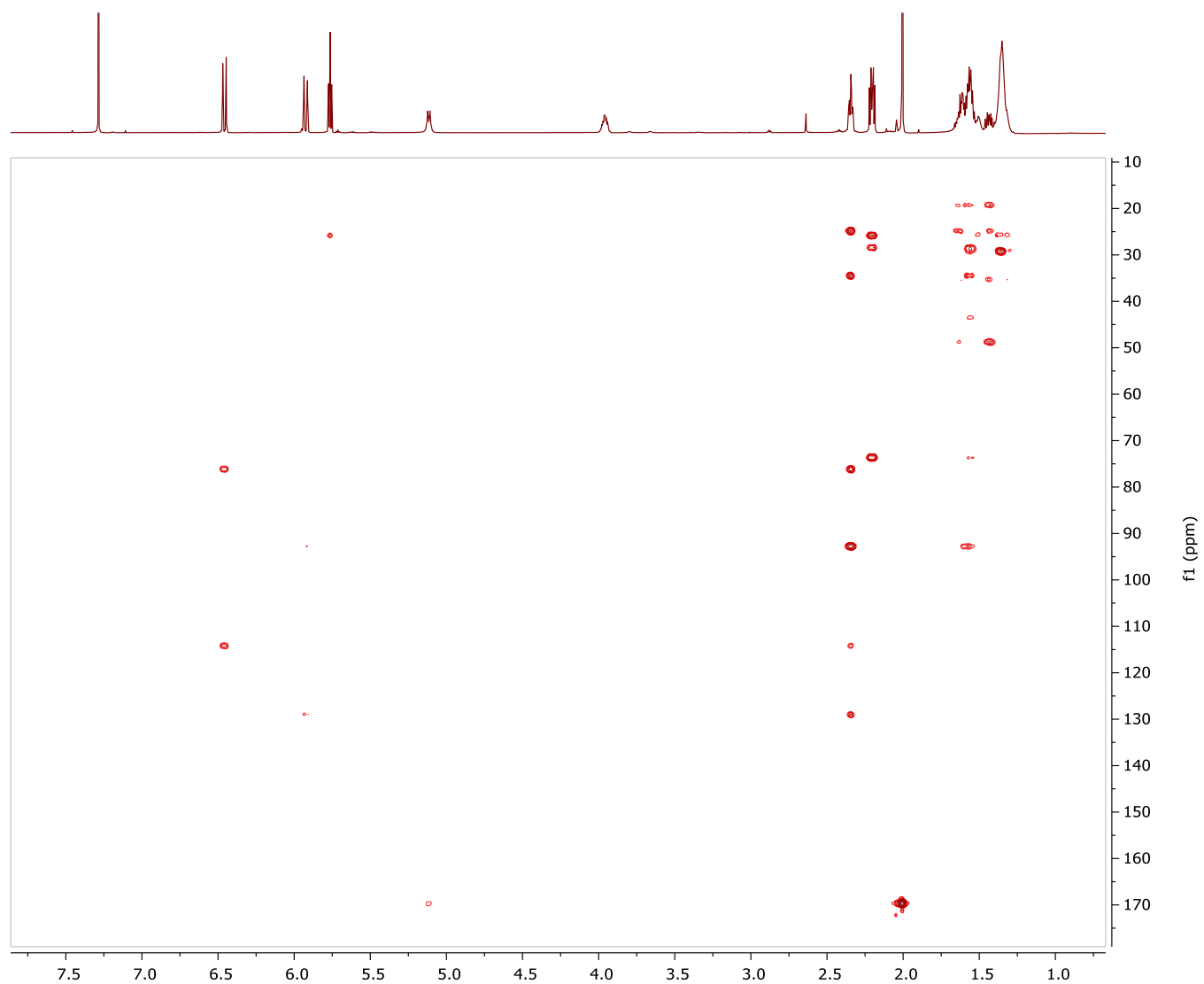


Figure S18: HMBC (600 MHz, CDCl_3) of taveuniamide F (**4**).

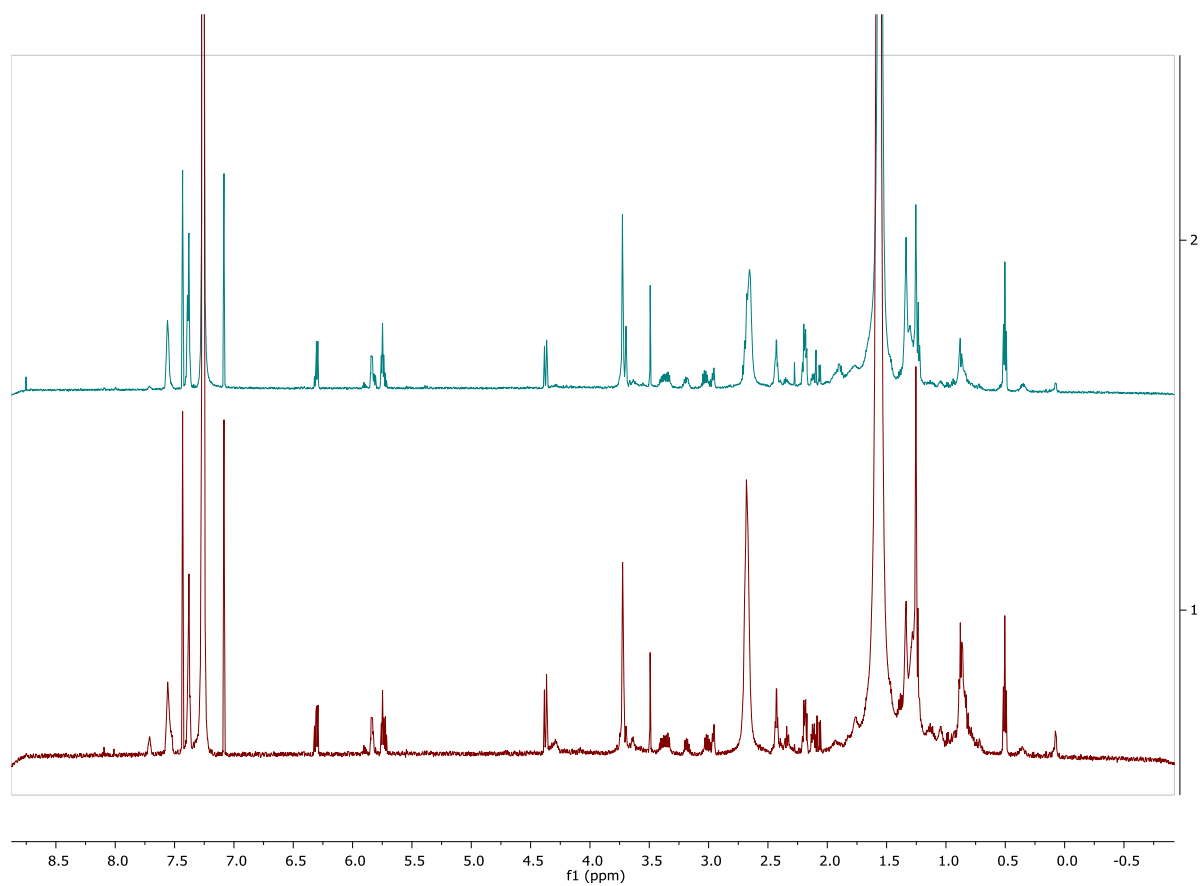


Figure S19. ^1H NMR (600 MHz, CDCl_3) of (S)-MTPA amide (top, **6a**) and (R)-MTPA amide (bottom, **6b**).

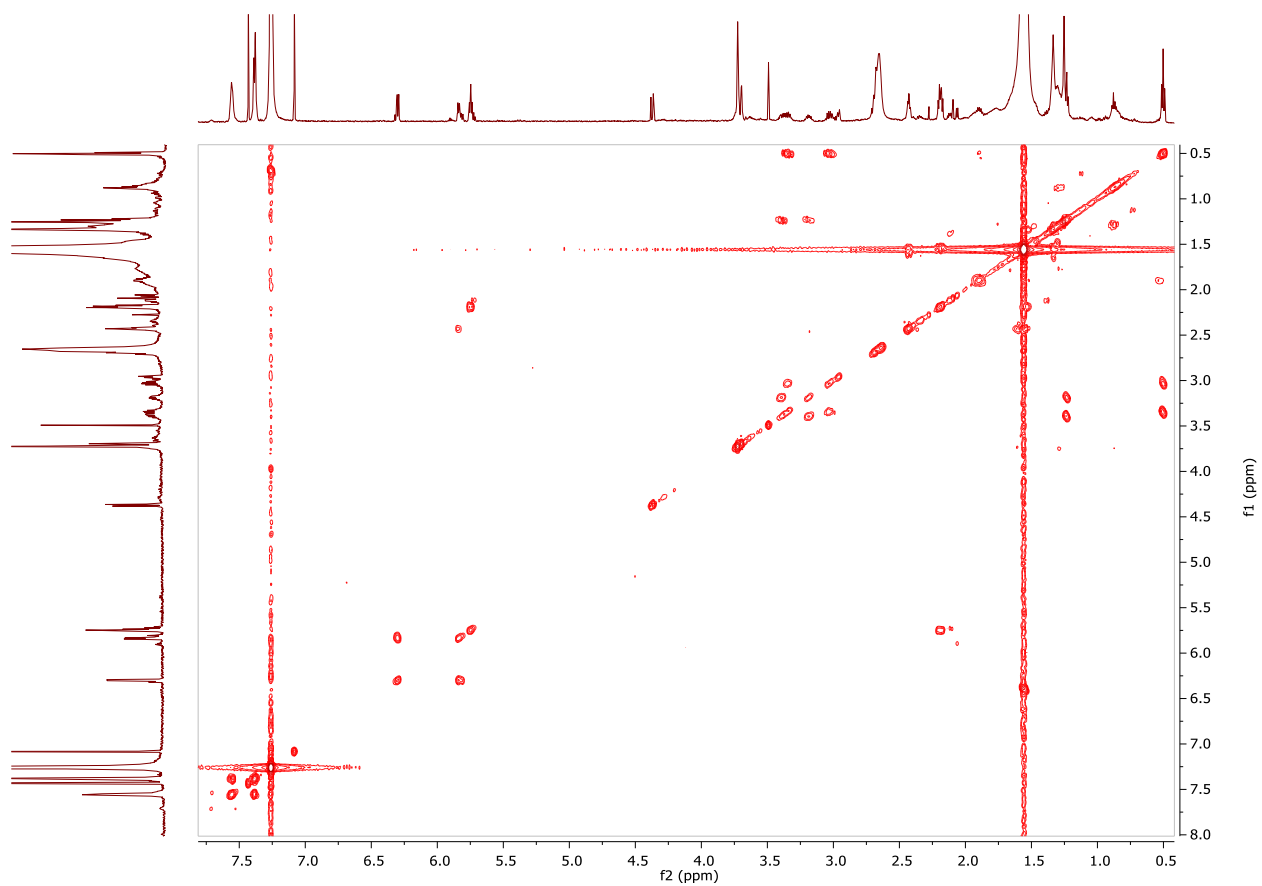


Figure S20. COSY (600 MHz, CDCl₃) of the (*S*)-MTPA amide (**6a**).

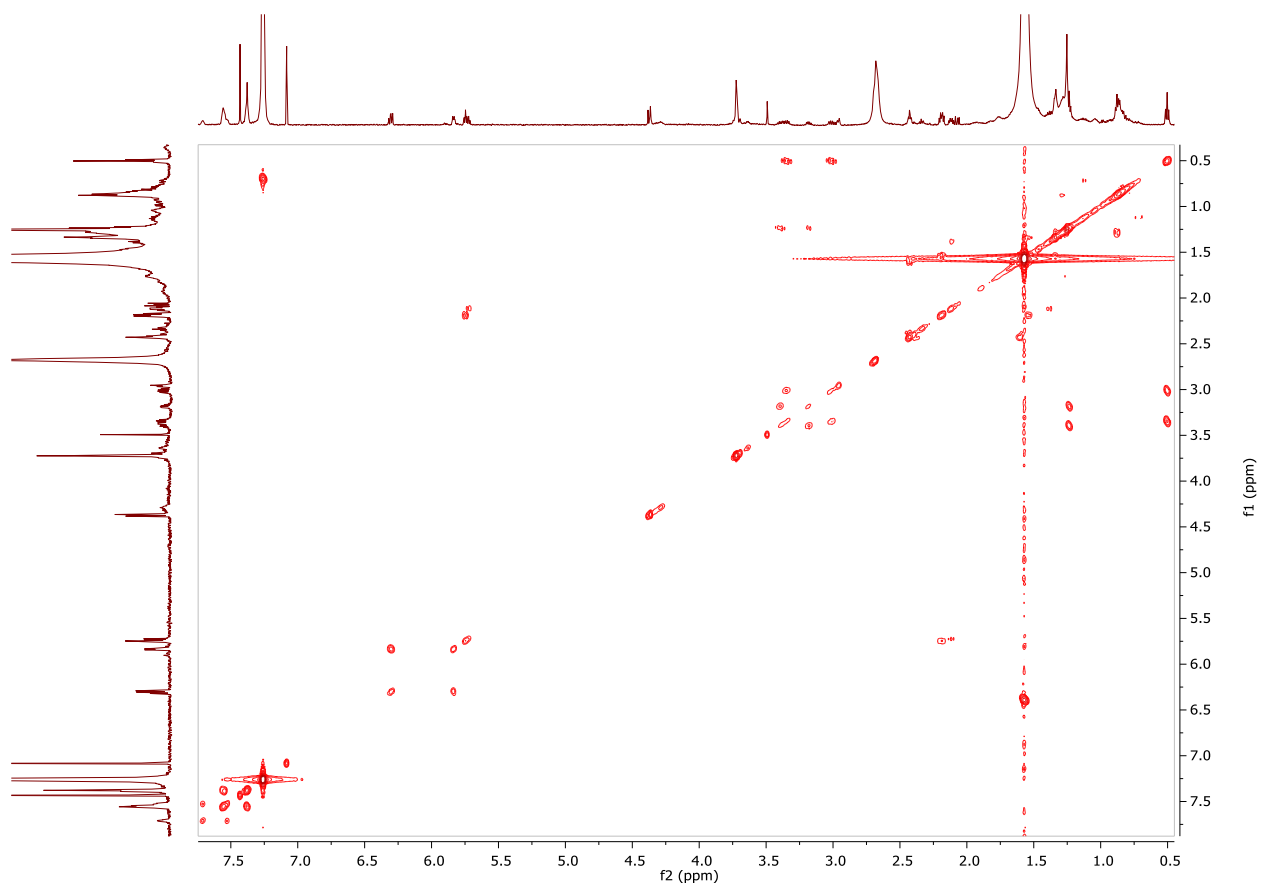


Figure S21. COSY (600 MHz, CDCl_3) of the (*R*)-MTPA amide (**6b**).

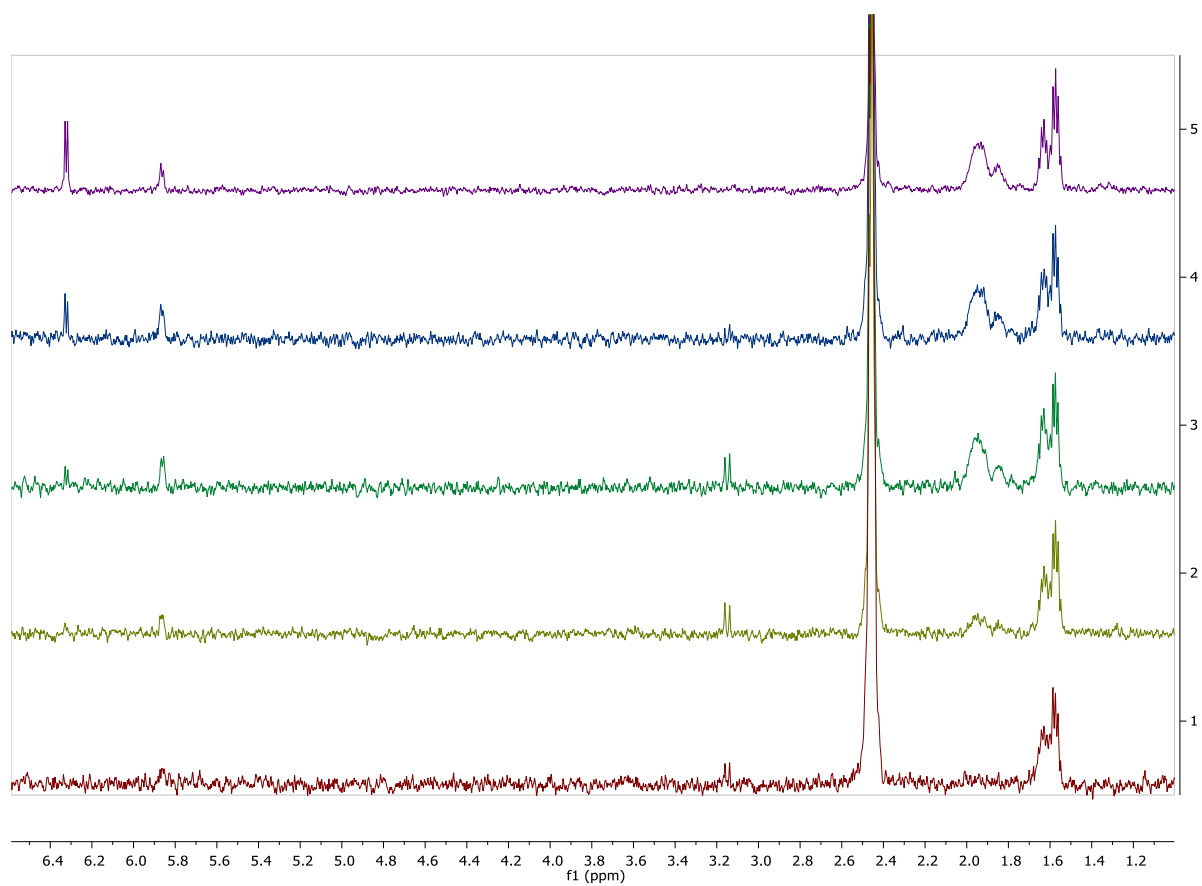


Figure S22. 1D TOCSY irradiating H-5 of the (*S*)-MTPA amide (**6a**) at 80 ms, 60 ms, 45 ms, 30 ms, and 15 ms (bottom to top)

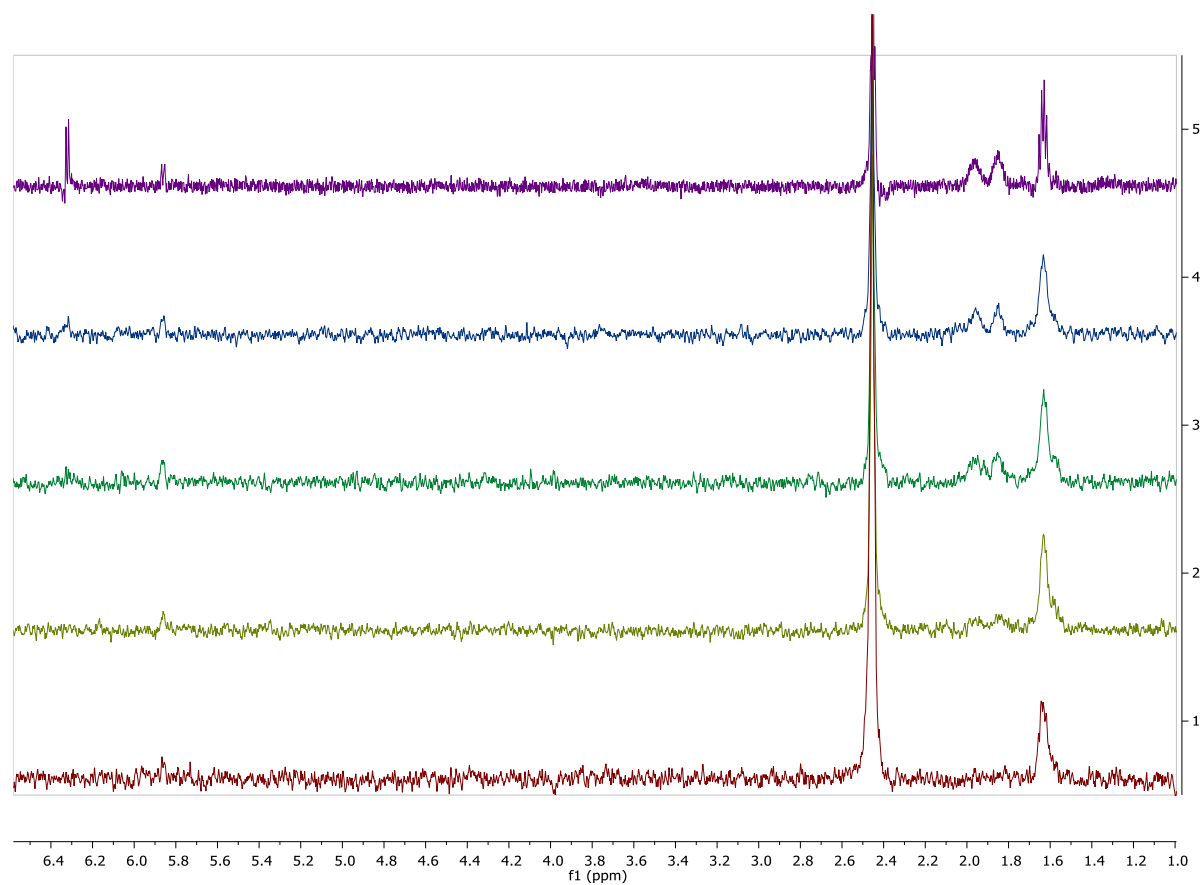


Figure S23. 1D TOCSY irradiating H-5 of the (*R*)-MTPA amide (**6b**) at 80 ms, 60 ms, 45 ms, 30 ms, and 15 ms (bottom to top).

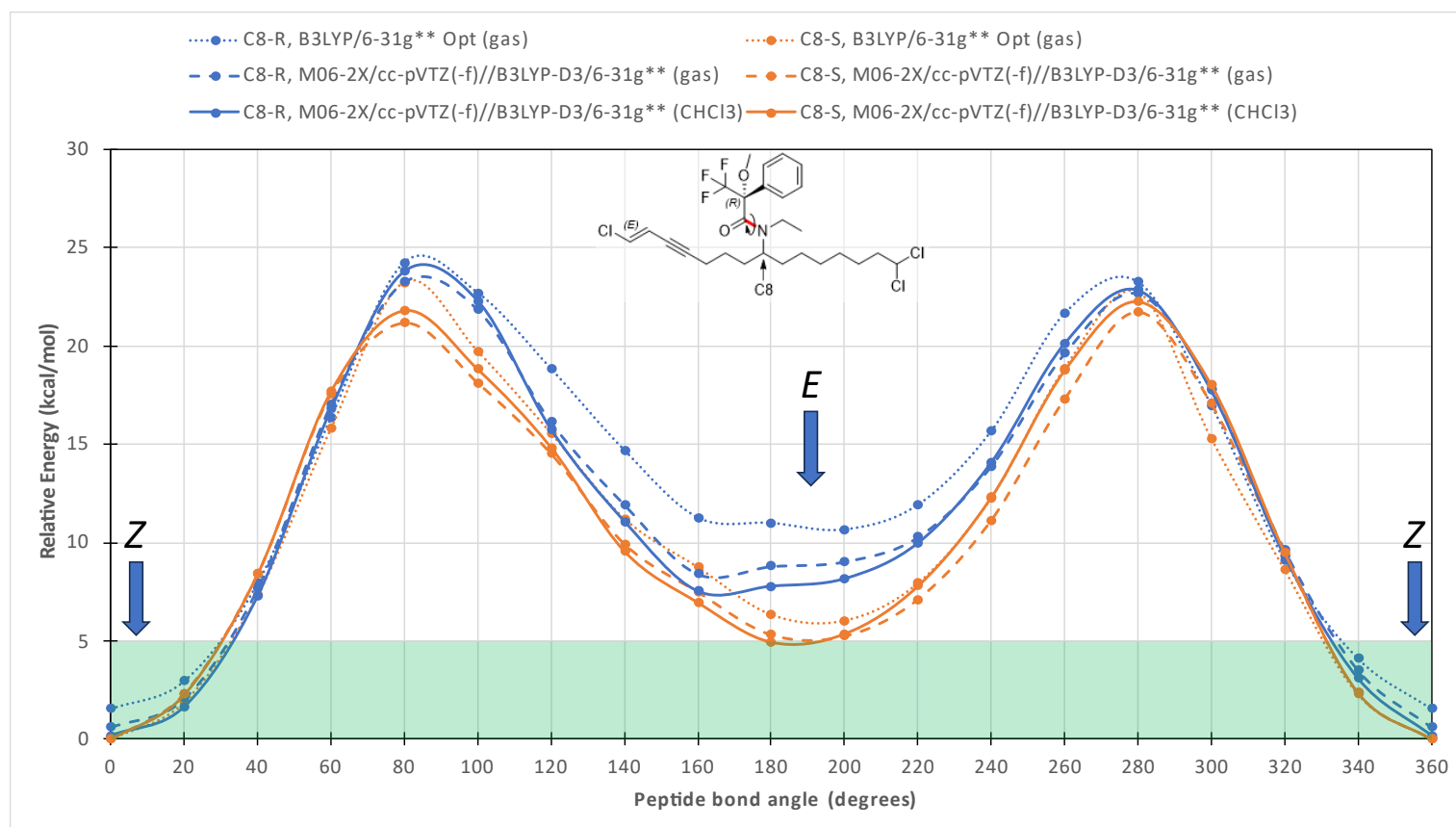


Figure S24. Results of DFT coordinate scan for the preferred configuration at the amide bond of the (*R*)-MTPA derivative of taveuniamide F. Both possibilities for the configuration of C8 were considered. The green shading indicates the thermally accessible energy range at room temperature (approximately 5 kcal/mol).

Figure S25. Results of Taveuniamide F (4) in GPCR MAX Panel Primary screen (β -arrestin) at 20 μ M in agonist and antagonist mode

GPCR ID	Control 1	Mean RLU	SD	%CV	Control 2	Mean RLU	SD	%CV	Assay Mode	Rep 1 RLU	Rep 2 RLU	Mean RLU	SD	% Activity
ADCYAP1R1	Baseline	48455.00	8172.4	0.169	Max	476480.00	23407.9	0.049	Agonist	53640	55040	54340.00	990	1.4
ADORA3	Baseline	13725.00	800.4	0.058	Max	58280.00	4382.6	0.075	Agonist	12600	13120	12860.00	367.7	-1.9
ADRA1B	Baseline	58745.00	6223	0.106	Max	476710.00	34646.7	0.073	Agonist	48760	48520	48640.00	169.7	-2.4
ADRA2A	Baseline	56390.00	5469.2	0.097	Max	146810.00	4133.8	0.028	Agonist	61120	58240	59680.00	2036.5	3.6
ADRA2B	Baseline	11975.00	1578.4	0.132	Max	85490.00	6551.8	0.077	Agonist	36960	33400	35180.00	2517.3	31.6
ADRA2C	Baseline	25345.00	3078.3	0.121	Max	145830.00	12233.8	0.084	Agonist	34640	33680	34160.00	678.8	7.3
ADRB1	Baseline	29773.33	6177.2	0.207	Max	107980.00	9560.7	0.089	Agonist	28680	27200	27940.00	1046.5	-2.3
ADRB2	Baseline	14160.00	5769.4	0.407	Max	85670.00	7898.8	0.092	Agonist	20120	19040	19580.00	763.7	7.6
AGTR1	Baseline	131700.00	11668.6	0.089	Max	527280.00	35677.6	0.068	Agonist	141760	145320	143540.00	2517.3	3
AGTRL1	Baseline	65185.00	7297.2	0.112	Max	323080.00	29207.1	0.09	Agonist	55880	57480	56680.00	1131.4	-3.3
AVPR1A	Baseline	6135.00	819.5	0.134	Max	92580.00	5198.4	0.056	Agonist	5360	4720	5040.00	452.6	-1.3
AVPR1B	Baseline	3865.00	607.7	0.157	Max	35340.00	2784.8	0.079	Agonist	3600	4600	4100.00	707.1	0.7
AVPR2	Baseline	96240.00	11511.2	0.12	Max	438250.00	41276.8	0.094	Agonist	92000	93200	92600.00	848.5	-1.1
BDKRB1	Baseline	3765.00	519.1	0.138	Max	27660.00	2108.1	0.076	Agonist	2920	3440	3180.00	367.7	-2.4
BDKRB2	Baseline	157840.00	17681.3	0.112	Max	741100.00	57942.2	0.078	Agonist	143000	144240	143620.00	876.8	-2.4
BRS3	Baseline	68210.00	10803.1	0.158	Max	286270.00	22749.2	0.079	Agonist	60960	62000	61480.00	735.4	-3.1
C3AR1	Baseline	7025.00	1182.1	0.168	Max	260740.00	36854.4	0.141	Agonist	6520	7280	6900.00	537.4	0
C5aR1	Baseline	22190.00	1610.4	0.073	Max	272890.00	15421.4	0.057	Agonist	16560	16800	16680.00	169.7	-2.2
C5L2	Baseline	56200.00	3618.9	0.064	Max	166520.00	15394.4	0.092	Agonist	55040	64040	59540.00	6364	3
CALCR	Baseline	6145.00	397.1	0.065	Max	28170.00	2917.6	0.104	Agonist	4960	5000	4980.00	28.3	-5.3
CALCRL-RAMP1	Baseline	10360.00	1635.5	0.158	Max	128370.00	9444.8	0.074	Agonist	8840	10480	9660.00	1159.7	-0.6
CALCRL-RAMP2	Baseline	240725.00	17081.4	0.071	Max	810580.00	33357.2	0.041	Agonist	207960	222440	215200.00	10238.9	-4.5
CALCRL-RAMP3	Baseline	25505.00	3852.8	0.151	Max	298400.00	31137.1	0.104	Agonist	21120	25080	23100.00	2800.1	-0.9
CALCR-RAMP2	Baseline	9425.00	1506.6	0.16	Max	53090.00	2352	0.044	Agonist	9120	9320	9220.00	141.4	-0.5
CALCR-RAMP3	Baseline	2200.00	219.1	0.1	Max	6480.00	250.9	0.039	Agonist	1920	1880	1900.00	28.3	-7

CCKAR	Baseline	6970.00	903.3	0.13	Max	96290.00	4141.7	0.043	Agonist	5880	7200	6540.00	933.4	-0.5
CCKBR	Baseline	133635.00	14906.3	0.112	Max	437560.00	9533.7	0.022	Agonist	146360	151000	148680.00	3281	5
CCR1	Baseline	202600.00	10293.4	0.051	Max	362733.33	12049	0.033	Agonist	170560	178640	174600.00	5713.4	-17.5
CCR10	Baseline	4585.00	555.9	0.121	Max	54220.00	5307.6	0.098	Agonist	3160	3880	3520.00	509.1	-2.1
CCR2	Baseline	8990.00	1478.5	0.164	Max	164080.00	10292.9	0.063	Agonist	6360	7440	6900.00	763.7	-1.3
CCR3	Baseline	24045.00	2346.4	0.098	Max	67840.00	4755.9	0.07	Agonist	20960	20320	20640.00	452.6	-7.8
CCR4	Baseline	31690.00	6179.2	0.195	Max	344000.00	37277.4	0.108	Agonist	29560	28920	29240.00	452.6	-0.8
CCR5	Baseline	7405.00	1291.3	0.174	Max	163030.00	8707.4	0.053	Agonist	6000	6000	6000.00	0	-0.9
CCR6	Baseline	9625.00	1376.5	0.143	Max	134000.00	5976	0.045	Agonist	11320	12240	11780.00	650.5	1.7
CCR7	Baseline	194430.00	12963.9	0.067	Max	811160.00	52830.4	0.065	Agonist	178800	172200	175500.00	4666.9	-3.1
CCR8	Baseline	3875.00	407	0.105	Max	132560.00	10424	0.079	Agonist	2120	2360	2240.00	169.7	-1.3
CCR9	Baseline	9390.00	1456.7	0.155	Max	256980.00	37816.1	0.147	Agonist	4040	4520	4280.00	339.4	-2.1
CHRM1	Baseline	30595.00	3665.1	0.12	Max	95640.00	6499.2	0.068	Agonist	22000	22560	22280.00	396	-12.8
CHRM2	Baseline	20840.00	3378.2	0.162	Max	147780.00	13905.2	0.094	Agonist	21440	20240	20840.00	848.5	0
CHRM3	Baseline	11890.00	1913.8	0.161	Max	51506.67	2491.7	0.048	Agonist	11200	11560	11380.00	254.6	-1.3
CHRM4	Baseline	35520.00	2549.3	0.072	Max	95910.00	6155.2	0.064	Agonist	26520	26000	26260.00	367.7	-15.3
CHRM5	Baseline	298306.67	29897.9	0.1	Max	748550.00	45923.8	0.061	Agonist	244400	244960	244680.00	396	-11.9
CMKLR1	Baseline	20775.00	2241.7	0.108	Max	308390.00	18748.1	0.061	Agonist	21480	20240	20860.00	876.8	0
CNR1	Baseline	10730.00	2086.7	0.194	Max	108010.00	8658.7	0.08	Agonist	11000	10640	10820.00	254.6	0.1
CNR2	Baseline	68815.00	7746.6	0.113	Max	158906.67	5397.7	0.034	Agonist	50920	54200	52560.00	2319.3	-18
CRHR1	Baseline	51755.00	7468	0.144	Max	643040.00	59389.6	0.092	Agonist	43240	43920	43580.00	480.8	-1.4
CRHR2	Baseline	13645.00	1893	0.139	Max	381810.00	38733.3	0.101	Agonist	11360	13240	12300.00	1329.4	-0.4
CRT2	Baseline	20290.00	1506.7	0.074	Max	115370.00	8278.4	0.072	Agonist	18720	21200	19960.00	1753.6	-0.3
CX3CR1	Baseline	78110.00	7825	0.1	Max	1259580.00	56995.3	0.045	Agonist	55720	56520	56120.00	565.7	-1.9
CXCR1	Baseline	8015.00	1298.8	0.162	Max	181400.00	12026.7	0.066	Agonist	6400	8120	7260.00	1216.2	-0.4
CXCR2	Baseline	30225.00	2298.3	0.076	Max	206060.00	11417.4	0.055	Agonist	28040	24640	26340.00	2404.2	-2.2
CXCR3	Baseline	41720.00	4595.8	0.11	Max	126946.67	8894.4	0.07	Agonist	39240	39120	39180.00	84.8	-3
CXCR4	Baseline	4775.00	532.4	0.111	Max	19653.33	1575	0.08	Agonist	4720	4440	4580.00	198	-1.3
CXCR5	Baseline	16165.00	1385.6	0.086	Max	72410.00	6365.4	0.088	Agonist	13920	16440	15180.00	1781.9	-1.8
CXCR6	Baseline	800.00	145	0.181	Max	5720.00	360.7	0.063	Agonist	1040	1040	1040.00	0	4.9

CXCR7	Baseline	21475.00	1376.1	0.064	Max	148030.00	3033.4	0.02	Agonist	20960	20960	20960.00	0	-0.4
DRD1	Baseline	5505.00	758.6	0.138	Max	91970.00	12562.1	0.137	Agonist	5760	5240	5500.00	367.7	0
DRD2L	Baseline	8090.00	789.9	0.098	Max	42500.00	3713.3	0.087	Agonist	7840	8560	8200.00	509.1	0.3
DRD2S	Baseline	31560.00	4041	0.128	Max	166980.00	8897.1	0.053	Agonist	31200	32880	32040.00	1187.9	0.4
DRD3	Baseline	37573.33	5119.6	0.136	Max	119610.00	4432	0.037	Agonist	38320	36960	37640.00	961.7	0.1
DRD4	Baseline	1435.00	162	0.113	Max	8830.00	277.8	0.031	Agonist	1640	1280	1460.00	254.6	0.3
DRD5	Baseline	4765.00	832.3	0.175	Max	64370.00	2501.1	0.039	Agonist	8240	8280	8260.00	28.3	5.9
EBI2	Baseline	73285.00	6612.4	0.09	Max	934050.00	38150.7	0.041	Agonist	51600	50280	50940.00	933.4	-2.6
EDG1	Baseline	6235.00	954.4	0.153	Max	90510.00	11112.7	0.123	Agonist	8120	9560	8840.00	1018.2	3.1
EDG3	Baseline	213755.00	37042.8	0.173	Max	1180390.00	54040.5	0.046	Agonist	166840	164440	165640.00	1697.1	-5
EDG4	Baseline	148775.00	10759.3	0.072	Max	378960.00	32300.6	0.085	Agonist	137240	145200	141220.00	5628.6	-3.3
EDG5	Baseline	55855.00	8967.6	0.161	Max	650120.00	16484.1	0.025	Agonist	38600	38960	38780.00	254.6	-2.9
EDG6	Baseline	49355.00	3594.8	0.073	Max	106120.00	3518	0.033	Agonist	54720	57800	56260.00	2177.9	12.2
EDG7	Baseline	78730.00	12251.4	0.156	Max	400750.00	10072.4	0.025	Agonist	117520	119160	118340.00	1159.7	12.3
EDNRA	Baseline	2820.00	307.6	0.109	Max	47850.00	1843.9	0.039	Agonist	2600	2680	2640.00	56.6	-0.4
EDNRB	Baseline	7520.00	719	0.096	Max	112280.00	8494.1	0.076	Agonist	6000	6120	6060.00	84.8	-1.4
F2R	Baseline	4210.00	1205.1	0.286	Max	48720.00	6982	0.143	Agonist	6080	6920	6500.00	594	5.1
F2RL1	Baseline	137280.00	8748	0.064	Max	604070.00	46341	0.077	Agonist	144680	146640	145660.00	1385.9	1.8
F2RL3	Baseline	234745.00	9614.2	0.041	Max	605700.00	25682.7	0.042	Agonist	251240	239760	245500.00	8117.6	2.9
FFAR1	Baseline	29440.00	1713.4	0.058	Max	82530.00	6397	0.078	Agonist	29000	29560	29280.00	396	-0.3
FPR1	Baseline	126415.00	12685.5	0.1	Max	445390.00	31902.7	0.072	Agonist	132440	129880	131160.00	1810.2	1.5
FPRL1	Baseline	9800.00	711.1	0.073	Max	274620.00	17632.2	0.064	Agonist	10320	9000	9660.00	933.4	-0.1
FSHR	Baseline	7725.00	544.4	0.07	Max	42130.00	4273.1	0.101	Agonist	7160	7360	7260.00	141.4	-1.4
GALR1	Baseline	117125.00	16278	0.139	Max	731290.00	32376.5	0.044	Agonist	86680	86440	86560.00	169.7	-5
GALR2	Baseline	76130.00	6887.4	0.09	Max	168420.00	4693.3	0.028	Agonist	73480	79000	76240.00	3903.2	0.1
GCGR	Baseline	32320.00	2272.6	0.07	Max	307560.00	8233.1	0.027	Agonist	44840	39560	42200.00	3733.5	3.6
GHSR	Baseline	49220.00	5747.4	0.117	Max	183490.00	13491.6	0.074	Agonist	45480	48560	47020.00	2177.9	-1.6
GIPR	Baseline	680.00	88.2	0.13	Max	4510.00	535	0.119	Agonist	400	560	480.00	113.1	-5.2
GLP1R	Baseline	5190.00	992.3	0.191	Max	212790.00	20291.5	0.095	Agonist	4240	4040	4140.00	141.4	-0.5
GLP2R	Baseline	8440.00	1364.9	0.162	Max	65270.00	2579.6	0.04	Agonist	8560	9760	9160.00	848.5	1.3

GPR1	Baseline	8595.00	675.3	0.079	Max	143240.00	3199.3	0.022	Agonist	6960	7320	7140.00	254.6	-1.1
GPR103	Baseline	7120.00	537.5	0.075	Max	19480.00	1519	0.078	Agonist	5400	5160	5280.00	169.7	-14.9
GPR109A	Baseline	48250.00	4465.6	0.093	Max	202900.00	13075.6	0.064	Agonist	45480	48200	46840.00	1923.3	-0.9
GPR109B	Baseline	59180.00	6502.9	0.11	Max	485300.00	23787.1	0.049	Agonist	42320	46720	44520.00	3111.3	-3.4
GPR119	Baseline	41740.00	3222.5	0.077	Max	84450.00	1687.1	0.02	Agonist	36480	37920	37200.00	1018.2	-10.6
GPR120	Baseline	5360.00	607.8	0.113	Max	20550.00	1502.8	0.073	Agonist	3280	2920	3100.00	254.6	-14.9
GPR35	Baseline	12600.00	2040.8	0.162	Max	98350.00	6179.1	0.063	Agonist	10760	10680	10720.00	56.6	-2.2
GPR92	Baseline	91360.00	11602.1	0.127	Max	250240.00	10830.2	0.043	Agonist	89200	90000	89600.00	565.7	-1.1
GRPR	Baseline	5005.00	572.3	0.114	Max	115450.00	7294.2	0.063	Agonist	3960	4640	4300.00	480.8	-0.6
HCRT1	Baseline	12040.00	1724.2	0.143	Max	349540.00	36498.8	0.104	Agonist	13040	12880	12960.00	113.1	0.3
HCRT2	Baseline	5555.00	1060.1	0.191	Max	497870.00	32276.8	0.065	Agonist	6200	5800	6000.00	282.8	0.1
HRH1	Baseline	49585.00	4519.1	0.091	Max	181180.00	12977.8	0.072	Agonist	46320	49320	47820.00	2121.3	-1.3
HRH2	Baseline	11720.00	1363.4	0.116	Max	38293.33	2758.9	0.072	Agonist	10240	10680	10460.00	311.1	-4.7
HRH3	Baseline	4490.00	534.8	0.119	Max	29220.00	1686.2	0.058	Agonist	3640	4520	4080.00	622.2	-1.7
HRH4	Baseline	33580.00	2426.5	0.072	Max	147290.00	3252.3	0.022	Agonist	31880	29400	30640.00	1753.6	-2.6
HTR1A	Baseline	177580.00	24198	0.136	Max	689960.00	49142.8	0.071	Agonist	155640	178760	167200.00	16348.3	-2
HTR1B	Baseline	48313.33	1464.3	0.03	Max	131333.33	12112.8	0.092	Agonist	47320	48880	48100.00	1103.1	-0.3
HTR1E	Baseline	5828.57	422.5	0.072	Max	14840.00	1109.2	0.075	Agonist	4840	5040	4940.00	141.4	-9.9
HTR1F	Baseline	13348.57	864.3	0.065	Max	40226.67	3456.3	0.086	Agonist	12200	11680	11940.00	367.7	-5.2
HTR2A	Baseline	40855.00	6454.4	0.158	Max	285440.00	17703.1	0.062	Agonist	29960	28000	28980.00	1385.9	-4.9
HTR2C	Baseline	74966.67	6137.6	0.082	Max	181160.00	11558.8	0.064	Agonist	70840	70920	70880.00	56.6	-3.8
HTR5A	Baseline	66653.33	9131	0.137	Max	276500.00	24512	0.089	Agonist	58000	56200	57100.00	1272.8	-4.6
KISS1R	Baseline	5640.00	811.1	0.144	Max	32500.00	995.2	0.031	Agonist	3880	3840	3860.00	28.3	-6.6
LHCGR	Baseline	1650.00	264.2	0.16	Max	10920.00	56.6	0.005	Agonist	1200	1480	1340.00	198	-3.3
LTB4R	Baseline	17770.00	2040	0.115	Max	174940.00	6873.1	0.039	Agonist	16840	15920	16380.00	650.5	-0.9
MC1R	Baseline	1355.00	154.8	0.114	Max	5386.67	622.7	0.116	Agonist	920	1120	1020.00	141.4	-8.3
MC3R	Baseline	1765.00	163.4	0.093	Max	8870.00	706.1	0.08	Agonist	1120	1040	1080.00	56.6	-9.6
MC4R	Baseline	5370.00	921.6	0.172	Max	38050.00	2697.2	0.071	Agonist	4320	4040	4180.00	198	-3.6
MC5R	Baseline	9335.00	608.1	0.065	Max	23960.00	1723.9	0.072	Agonist	8800	9400	9100.00	424.3	-1.6
MCHR1	Baseline	1240.00	205.1	0.165	Max	7620.00	311.1	0.041	Agonist	920	920	920.00	0	-5

MCHR2	Baseline	8160.00	699.1	0.086	Max	61980.00	4047.2	0.065	Agonist	6080	6880	6480.00	565.7	-3.1
MLNR	Baseline	15335.00	1588.5	0.104	Max	119100.00	3901.5	0.033	Agonist	15800	14800	15300.00	707.1	0
MRGPRX1	Baseline	129240.00	8157.5	0.063	Max	398066.67	26576.8	0.067	Agonist	119120	118400	118760.00	509.1	-3.9
MRGPRX2	Baseline	34325.00	3647.3	0.106	Max	138800.00	10423.7	0.075	Agonist	29480	31560	30520.00	1470.8	-3.6
MTNR1A	Baseline	5845.00	546.1	0.093	Max	21300.00	652	0.031	Agonist	4240	4600	4420.00	254.6	-9.2
NMBR	Baseline	10420.00	796	0.076	Max	185470.00	14493.8	0.078	Agonist	8920	8600	8760.00	226.3	-0.9
NMU1R	Baseline	8865.00	851.2	0.096	Max	135540.00	8982.5	0.066	Agonist	10240	9760	10000.00	339.4	0.9
NPBWR1	Baseline	8833.33	585.4	0.066	Max	22546.67	2021.6	0.09	Agonist	7880	8280	8080.00	282.8	-5.5
NPBWR2	Baseline	10920.00	1029.8	0.094	Max	94360.00	6116	0.065	Agonist	8960	9560	9260.00	424.3	-2
NPFFR1	Baseline	7145.00	1438.4	0.201	Max	35826.67	2374	0.066	Agonist	5160	5680	5420.00	367.7	-6
NPSR1b	Baseline	6380.00	704.3	0.11	Max	58550.00	2734.7	0.047	Agonist	4920	5240	5080.00	226.3	-2.5
NPY1R	Baseline	21985.00	2480.5	0.113	Max	98830.00	6298.6	0.064	Agonist	19880	18920	19400.00	678.8	-3.4
NPY2R	Baseline	25340.00	4057.2	0.16	Max	484220.00	22268.9	0.046	Agonist	22600	23240	22920.00	452.6	-0.5
NTSR1	Baseline	42885.00	3919.1	0.091	Max	176830.00	13815.8	0.078	Agonist	38080	39560	38820.00	1046.5	-3
OPRD1	Baseline	14980.00	977.2	0.065	Max	115630.00	5917.3	0.051	Agonist	12760	13280	13020.00	367.7	-1.9
OPRK1	Baseline	2195.00	370	0.169	Max	10210.00	567	0.056	Agonist	1600	1680	1640.00	56.6	-6.9
OPRL1	Baseline	37770.00	2578.2	0.068	Max	174950.00	6098	0.035	Agonist	35120	32440	33780.00	1895	-2.9
OPRM1	Baseline	24835.00	1861.3	0.075	Max	335400.00	32936.3	0.098	Agonist	20680	22320	21500.00	1159.7	-1.1
OXER1	Baseline	10665.00	757.4	0.071	Max	39520.00	1018.2	0.026	Agonist	9640	9520	9580.00	84.8	-3.8
OXTR	Baseline	5510.00	310.4	0.056	Max	98580.00	2696.7	0.027	Agonist	4720	4720	4720.00	0	-0.8
P2RY1	Baseline	38020.00	2568.2	0.068	Max	108630.00	7690	0.071	Agonist	37400	37600	37500.00	141.4	-0.7
P2RY11	Baseline	5940.00	666.9	0.112	Max	56760.00	4072.9	0.072	Agonist	5120	5320	5220.00	141.4	-1.4
P2RY12	Baseline	14310.00	770.2	0.054	Max	128750.00	10019.9	0.078	Agonist	11480	12160	11820.00	480.8	-2.2
P2RY2	Baseline	56130.00	6387.1	0.114	Max	232700.00	13330.8	0.057	Agonist	71440	68120	69780.00	2347.6	7.7
P2RY4	Baseline	54150.00	3440.1	0.064	Max	196280.00	17306.7	0.088	Agonist	56040	54080	55060.00	1385.9	0.6
P2RY6	Baseline	55320.00	6618.5	0.12	Max	261990.00	19680.8	0.075	Agonist	116200	140920	128560.00	17479.7	35.4
PPYR1	Baseline	4920.00	861.6	0.175	Max	57170.00	6062.4	0.106	Agonist	3920	3920	3920.00	0	-1.9
PRLHR	Baseline	1580.00	193.6	0.123	Max	13560.00	1525.6	0.113	Agonist	1360	1200	1280.00	113.1	-2.5
PROKR1	Baseline	6785.00	1009.6	0.149	Max	88870.00	8237.6	0.093	Agonist	6600	5520	6060.00	763.7	-0.9
PROKR2	Baseline	1715.00	204.4	0.119	Max	7350.00	435	0.059	Agonist	1600	1720	1660.00	84.8	-1

PTAFR	Baseline	115470.00	12923.4	0.112	Max	542270.00	23979.3	0.044	Agonist	93160	92480	92820.00	480.8	-5.3
PTGER2	Baseline	2120.00	290.8	0.137	Max	12740.00	835.5	0.066	Agonist	1720	2080	1900.00	254.6	-2.1
PTGER3	Baseline	53680.00	5457.3	0.102	Max	171400.00	13649.1	0.08	Agonist	49680	53080	51380.00	2404.2	-2
PTGER4	Baseline	41730.00	4451.2	0.107	Max	165830.00	10930.5	0.066	Agonist	39760	41400	40580.00	1159.7	-0.9
PTGFR	Baseline	825.00	97.8	0.119	Max	22973.33	2077.4	0.09	Agonist	680	680	680.00	0	-0.7
PTGIR	Baseline	39465.00	3517.3	0.089	Max	118200.00	5572.2	0.047	Agonist	28160	28000	28080.00	113.1	-14.5
PTHR1	Baseline	30905.00	3143.3	0.102	Max	540020.00	31185.1	0.058	Agonist	28800	28000	28400.00	565.7	-0.5
PTHR2	Baseline	22515.00	3396.7	0.151	Max	373170.00	31305.7	0.084	Agonist	18360	19920	19140.00	1103.1	-1
RXFP3	Baseline	9040.00	831.7	0.092	Max	28590.00	2144.5	0.075	Agonist	7880	8280	8080.00	282.8	-4.9
SCTR	Baseline	67840.00	9948.8	0.147	Max	434620.00	45014.2	0.104	Agonist	62200	62360	62280.00	113.1	-1.5
SSTR1	Baseline	1390.00	219.9	0.158	Max	5830.00	367.2	0.063	Agonist	960	1200	1080.00	169.7	-7
SSTR2	Baseline	735.00	111	0.151	Max	48690.00	3807	0.078	Agonist	760	800	780.00	28.3	0.1
SSTR3	Baseline	9940.00	415.7	0.042	Max	68350.00	8435	0.123	Agonist	8120	9520	8820.00	990	-1.9
SSTR5	Baseline	11330.00	766.1	0.068	Max	77320.00	1768.8	0.023	Agonist	10360	12520	11440.00	1527.4	0.2
TACR1	Baseline	62555.00	5013.8	0.08	Max	365010.00	18214.3	0.05	Agonist	54560	57240	55900.00	1895	-2.2
TACR2	Baseline	101895.00	11584.7	0.114	Max	396170.00	32159.9	0.081	Agonist	111160	100680	105920.00	7410.5	1.4
TACR3	Baseline	11800.00	1535.7	0.13	Max	224430.00	13268.5	0.059	Agonist	9840	10440	10140.00	424.3	-0.8
TBXA2R	Baseline	21150.00	1641.6	0.078	Max	96190.00	8526.3	0.089	Agonist	19080	22400	20740.00	2347.6	-0.5
TRHR	Baseline	1380.00	326.4	0.237	Max	22400.00	487.7	0.022	Agonist	840	1000	920.00	113.1	-2.2
TSHR(L)	Baseline	685.00	142.5	0.208	Max	8220.00	779.4	0.095	Agonist	520	560	540.00	28.3	-1.9
UTR2	Baseline	7365.00	425.7	0.058	Max	22170.00	1585.4	0.072	Agonist	5960	5680	5820.00	198	-10.4
VIPR1	Baseline	48970.00	6735.7	0.138	Max	506870.00	31114.9	0.061	Agonist	45000	46200	45600.00	848.5	-0.7
VIPR2	Baseline	13385.00	2362.1	0.176	Max	375280.00	24813.8	0.066	Agonist	11520	11360	11440.00	113.1	-0.5
ADCYAP1R1	EC80	423837.50	22316.9	0.053	Basal	44205.00	6462.5	0.146	Antagonist	365600	356720	361160.00	6279.1	16.5
ADORA3	EC80	45735.00	1857.6	0.041	Basal	12565.00	922.5	0.073	Antagonist	45080	45720	45400.00	452.6	1
ADRA1B	EC80	335063.33	23114.6	0.069	Basal	57095.00	8248.3	0.144	Antagonist	281800	261040	271420.00	14679.5	22.9
ADRA2A	EC80	115402.50	8316.2	0.072	Basal	55520.00	3310.6	0.06	Antagonist	87760	92440	90100.00	3309.3	42.3
ADRA2B	EC80	74473.33	6770.4	0.091	Basal	12200.00	1141.2	0.094	Antagonist	71440	64240	67840.00	5091.2	10.7
ADRA2C	EC80	115636.67	10493.7	0.091	Basal	23925.00	1800.4	0.075	Antagonist	96240	89000	92620.00	5119.4	25.1
ADRB1	EC80	70425.00	4159.2	0.059	Basal	27220.00	2691.7	0.099	Antagonist	48080	47200	47640.00	622.2	52.7

ADRB2	EC80	53325.00	3185.7	0.06	Basal	12400.00	3371.3	0.272	Antagonist	43840	42080	42960.00	1244.5	25.3
AGTR1	EC80	441076.67	27079.6	0.061	Basal	118730.00	10590	0.089	Antagonist	393480	338240	365860.00	39060.6	23.3
AGTRL1	EC80	244297.78	25384	0.104	Basal	58640.00	4268	0.073	Antagonist	243840	219360	231600.00	17310	6.8
AVPR1A	EC80	83992.50	5761.3	0.069	Basal	5735.00	545.1	0.095	Antagonist	46040	46000	46020.00	28.3	48.5
AVPR1B	EC80	26416.67	1577.4	0.06	Basal	3725.00	356.8	0.096	Antagonist	13280	13440	13360.00	113.1	57.5
AVPR2	EC80	408021.82	27400.5	0.067	Basal	81685.00	7214.9	0.088	Antagonist	370240	352120	361180.00	12812.8	14.4
BDKRB1	EC80	20095.00	864.6	0.043	Basal	3765.00	535.6	0.142	Antagonist	15920	15720	15820.00	141.4	26.2
BDKRB2	EC80	683960.00	47719.1	0.07	Basal	146745.00	13372.6	0.091	Antagonist	668520	609560	639040.00	41691	8.4
BRS3	EC80	189566.67	10867.3	0.057	Basal	59295.00	6518	0.11	Antagonist	169760	167880	168820.00	1329.4	15.9
C3AR1	EC80	201870.00	22608.2	0.112	Basal	7550.00	808.2	0.107	Antagonist	184960	178840	181900.00	4327.5	10.3
C5aR1	EC80	252640.00	17133.4	0.068	Basal	20500.00	1709.9	0.083	Antagonist	255160	243800	249480.00	8032.7	1.4
C5L2	EC80	149397.50	10012.6	0.067	Basal	54575.00	4111.8	0.075	Antagonist	127440	125560	126500.00	1329.4	24.1
CALCR	EC80	22533.33	1841.7	0.082	Basal	5560.00	235.2	0.042	Antagonist	21120	19160	20140.00	1385.9	14.1
CALCRL-RAMP1	EC80	116753.33	5540.3	0.047	Basal	9555.00	899.6	0.094	Antagonist	82200	84400	83300.00	1555.6	31.2
CALCRL-RAMP2	EC80	727130.00	40944.4	0.056	Basal	234295.00	21364.1	0.091	Antagonist	672400	647640	660020.00	17508	13.6
CALCRL-RAMP3	EC80	285527.50	16504.6	0.058	Basal	31140.00	2294.9	0.074	Antagonist	234960	237880	236420.00	2064.8	19.3
CALCR-RAMP2	EC80	35923.33	2288.2	0.064	Basal	8340.00	572.1	0.069	Antagonist	19560	19960	19760.00	282.8	58.6
CALCR-RAMP3	EC80	4780.00	261.7	0.055	Basal	2160.00	161.4	0.075	Antagonist	4760	4640	4700.00	84.8	3.1
CCKAR	EC80	69102.50	3841.4	0.056	Basal	7100.00	765	0.108	Antagonist	60320	64320	62320.00	2828.4	10.9
CCKBR	EC80	438815.00	32448.5	0.074	Basal	122455.00	7736.5	0.063	Antagonist	420520	392520	406520.00	19799	10.2
CCR1	EC80	344914.67	11659.7	0.034	Basal	202930.00	8381.6	0.041	Antagonist	249840	253400	251620.00	2517.3	65.7
CCR10	EC80	48537.14	3100	0.064	Basal	4335.00	568.9	0.131	Antagonist	36000	31600	33800.00	3111.3	33.3
CCR2	EC80	136494.29	8308.4	0.061	Basal	9035.00	1068.9	0.118	Antagonist	129520	147920	138720.00	13010.8	-1.7
CCR3	EC80	61717.50	3680.3	0.06	Basal	22290.00	1084.3	0.049	Antagonist	54560	53720	54140.00	594	19.2
CCR4	EC80	267815.00	15218.2	0.057	Basal	32690.00	3014.9	0.092	Antagonist	117320	141320	129320.00	16970.6	58.9
CCR5	EC80	125094.29	11801.5	0.094	Basal	7015.00	752.6	0.107	Antagonist	104880	110560	107720.00	4016.4	14.7
CCR6	EC80	126082.50	8242.5	0.065	Basal	9725.00	562.2	0.058	Antagonist	56800	59880	58340.00	2177.9	58.2
CCR7	EC80	701982.50	27220.2	0.039	Basal	189910.00	11727.9	0.062	Antagonist	661800	657880	659840.00	2771.9	8.2
CCR8	EC80	119222.86	6359.2	0.053	Basal	3700.00	250.3	0.068	Antagonist	72120	66960	69540.00	3648.7	43

CCR9	EC80	197671.43	13649.6	0.069	Basal	9115.00	975.7	0.107	Antagonist	11520	10920	11220.00	424.3	98.9
CHRM1	EC80	73452.00	5070.3	0.069	Basal	26430.00	2451.9	0.093	Antagonist	57360	69000	63180.00	8230.7	21.8
CHRM2	EC80	97336.67	10757.4	0.111	Basal	17315.00	1261.4	0.073	Antagonist	69080	66800	67940.00	1612.2	36.7
CHRM3	EC80	43675.00	3294.8	0.075	Basal	11195.00	703.1	0.063	Antagonist	23320	25120	24220.00	1272.8	59.9
CHRM4	EC80	67905.00	4565.4	0.067	Basal	32840.00	3252.3	0.099	Antagonist	32600	34360	33480.00	1244.5	98.2
CHRM5	EC80	593597.50	28556	0.048	Basal	303653.33	19326.7	0.064	Antagonist	495440	508560	502000.00	9277.2	31.6
CMKLR1	EC80	268022.50	13770.7	0.051	Basal	21985.00	2120.8	0.096	Antagonist	217640	213120	215380.00	3196.1	21.4
CNR1	EC80	85346.67	8286	0.097	Basal	10945.00	1112	0.102	Antagonist	25200	20520	22860.00	3309.3	84
CNR2	EC80	126833.33	5553	0.044	Basal	61766.67	4825.2	0.078	Antagonist	98360	92120	95240.00	4412.4	48.6
CRHR1	EC80	551430.00	36651.1	0.066	Basal	44955.00	5872.2	0.131	Antagonist	554480	572720	563600.00	12897.6	-2.4
CRHR2	EC80	352313.33	33963.5	0.096	Basal	12740.00	1642	0.129	Antagonist	337480	285840	311660.00	36515	12
CRT2	EC80	96196.67	10524.9	0.109	Basal	18700.00	1632.5	0.087	Antagonist	85440	80760	83100.00	3309.3	16.9
CX3CR1	EC80	899682.50	43415.8	0.048	Basal	69140.00	4451.7	0.064	Antagonist	611560	597080	604320.00	10238.9	35.6
CXCR1	EC80	134005.00	16012	0.119	Basal	8205.00	741.4	0.09	Antagonist	105640	123960	114800.00	12954.2	15.3
CXCR2	EC80	140962.50	8618.7	0.061	Basal	29110.00	1894	0.065	Antagonist	115760	120280	118020.00	3196.1	20.5
CXCR3	EC80	117768.57	6046.2	0.051	Basal	41190.00	2352.9	0.057	Antagonist	116080	112440	114260.00	2573.9	4.6
CXCR4	EC80	13525.00	743.9	0.055	Basal	5114.29	550.1	0.108	Antagonist	10360	9320	9840.00	735.4	43.8
CXCR5	EC80	71762.50	5395.4	0.075	Basal	16110.00	1095.6	0.068	Antagonist	65960	71920	68940.00	4214.4	5.1
CXCR6	EC80	4537.14	456.8	0.101	Basal	740.00	146.6	0.198	Antagonist	2920	3640	3280.00	509.1	33.1
CXCR7	EC80	116335.00	10927.9	0.094	Basal	21795.00	3058	0.14	Antagonist	110480	115320	112900.00	3422.4	3.6
DRD1	EC80	56463.33	3593	0.064	Basal	5875.00	902.4	0.154	Antagonist	48880	45240	47060.00	2573.9	18.6
DRD2L	EC80	29013.33	2350.5	0.081	Basal	7545.00	614.8	0.081	Antagonist	29240	27160	28200.00	1470.8	3.8
DRD2S	EC80	120920.00	10324.9	0.085	Basal	27370.00	1975.8	0.072	Antagonist	127080	130000	128540.00	2064.8	-8.1
DRD3	EC80	90502.86	4357.6	0.048	Basal	34005.71	3509	0.103	Antagonist	89200	80960	85080.00	5826.6	9.6
DRD4	EC80	5220.00	394.7	0.076	Basal	1380.00	196	0.142	Antagonist	4520	4320	4420.00	141.4	20.8
DRD5	EC80	43350.00	4800.9	0.111	Basal	4255.00	775	0.182	Antagonist	45120	39480	42300.00	3988.1	2.7
EBI2	EC80	662472.50	42533.8	0.064	Basal	70230.00	4475.2	0.064	Antagonist	586000	525200	555600.00	42992.1	18
EDG1	EC80	79217.50	9644.5	0.122	Basal	6310.00	1078.4	0.171	Antagonist	54800	55360	55080.00	396	33.1
EDG3	EC80	855536.67	59647.2	0.07	Basal	182340.00	25822.2	0.142	Antagonist	726840	701840	714340.00	17677.7	21
EDG4	EC80	282340.00	16940.7	0.06	Basal	122394.29	7387.4	0.06	Antagonist	200200	184400	192300.00	11172.3	56.3

EDG5	EC80	527976.67	42337.7	0.08	Basal	51375.00	7620.5	0.148	Antagonist	537000	511520	524260.00	18017.1	0.8
EDG6	EC80	101812.50	3600.5	0.035	Basal	51000.00	2494.5	0.049	Antagonist	93400	90320	91860.00	2177.9	19.6
EDG7	EC80	288877.50	20897.2	0.072	Basal	66960.00	4768.8	0.071	Antagonist	180560	225880	203220.00	32046.1	38.6
EDNRA	EC80	39845.00	2752.9	0.069	Basal	2710.00	428.6	0.158	Antagonist	26640	30280	28460.00	2573.9	30.7
EDNRB	EC80	77350.00	7746.3	0.1	Basal	6825.00	591	0.087	Antagonist	68640	53640	61140.00	10606.6	23
F2R	EC80	45786.67	6729.6	0.147	Basal	4345.00	1025.6	0.236	Antagonist	38160	43720	40940.00	3931.5	11.7
F2RL1	EC80	425740.00	25412	0.06	Basal	128160.00	11969.6	0.093	Antagonist	413960	477160	445560.00	44689.2	-6.7
F2RL3	EC80	413546.67	8294.8	0.02	Basal	216060.00	14748.2	0.068	Antagonist	296880	296200	296540.00	480.8	59.2
FFAR1	EC80	79033.33	5619.9	0.071	Basal	30753.33	2144.2	0.07	Antagonist	57720	59800	58760.00	1470.8	42
FPR1	EC80	354696.67	23622.3	0.067	Basal	110240.00	10397.9	0.094	Antagonist	355160	377000	366080.00	15443.2	-4.7
FPRL1	EC80	203580.00	13764.8	0.068	Basal	9565.00	797.6	0.083	Antagonist	202760	194640	198700.00	5741.7	2.5
FSHR	EC80	31733.33	2559.9	0.081	Basal	6605.00	349.6	0.053	Antagonist	22320	20800	21560.00	1074.8	40.5
GALR1	EC80	581826.67	27328.1	0.047	Basal	101090.00	8194.9	0.081	Antagonist	551760	557440	554600.00	4016.4	5.7
GALR2	EC80	170114.29	10817	0.064	Basal	69940.00	5031.9	0.072	Antagonist	135720	158320	147020.00	15980.6	23.1
GCGR	EC80	273747.50	18275.8	0.067	Basal	31025.00	3179.7	0.102	Antagonist	264640	272120	268380.00	5289.2	2.2
GHSR	EC80	170132.50	13767	0.081	Basal	44640.00	5637.3	0.126	Antagonist	138440	124640	131540.00	9758.1	30.8
GIPR	EC80	3466.67	276.4	0.08	Basal	610.00	124.2	0.204	Antagonist	2920	2680	2800.00	169.7	23.3
GLP1R	EC80	127020.00	7078	0.056	Basal	4890.00	877.6	0.179	Antagonist	55320	52520	53920.00	1979.9	59.9
GLP2R	EC80	65210.00	4474.4	0.069	Basal	7795.00	1195.7	0.153	Antagonist	58160	48880	53520.00	6562	20.4
GPR1	EC80	126495.00	8552.7	0.068	Basal	8530.00	962.3	0.113	Antagonist	105200	103680	104440.00	1074.8	18.7
GPR103	EC80	17221.82	997.5	0.058	Basal	6895.00	652	0.095	Antagonist	8880	9080	8980.00	141.4	79.8
GPR109A	EC80	134956.67	8277.4	0.061	Basal	47385.00	2835.4	0.06	Antagonist	136000	124240	130120.00	8315.6	5.5
GPR109B	EC80	290945.00	33154.7	0.114	Basal	56205.00	6041.6	0.107	Antagonist	210680	201960	206320.00	6166	36.1
GPR119	EC80	68782.86	3192.6	0.046	Basal	41866.67	1844.6	0.044	Antagonist	37520	38560	38040.00	735.4	114.2
GPR120	EC80	13500.00	1044.4	0.077	Basal	4545.00	371.5	0.082	Antagonist	5040	4600	4820.00	311.1	96.9
GPR35	EC80	78077.50	4448.8	0.057	Basal	12005.00	1354.8	0.113	Antagonist	61000	59320	60160.00	1187.9	27.1
GPR92	EC80	198810.91	13873.8	0.07	Basal	75171.43	5296.7	0.07	Antagonist	135600	122360	128980.00	9362.1	56.5
GRPR	EC80	103252.50	5607.7	0.054	Basal	4740.00	206.2	0.044	Antagonist	94840	99360	97100.00	3196.1	6.2
HCRTR1	EC80	270310.00	25364.6	0.094	Basal	12050.00	1048	0.087	Antagonist	149840	159080	154460.00	6533.7	44.9
HCRTR2	EC80	352413.33	18255.4	0.052	Basal	7010.00	1144.2	0.163	Antagonist	358760	265600	312180.00	65874.1	11.6

HRH1	EC80	146909.09	14478.6	0.099	Basal	46640.00	1679.5	0.036	Antagonist	157400	130360	143880.00	19120.2	3
HRH2	EC80	28931.43	1672.5	0.058	Basal	10060.00	1442.2	0.143	Antagonist	23640	25120	24380.00	1046.5	24.1
HRH3	EC80	26307.50	1578.9	0.06	Basal	4285.00	237.6	0.055	Antagonist	25440	24960	25200.00	339.4	5
HRH4	EC80	98146.67	2505.5	0.026	Basal	34140.00	2253.3	0.066	Antagonist	75120	72440	73780.00	1895	38.1
HTR1A	EC80	625890.00	35525.3	0.057	Basal	165885.00	16908.1	0.102	Antagonist	583880	528120	556000.00	39428.3	15.2
HTR1B	EC80	101560.00	3314	0.033	Basal	43933.33	4744.1	0.108	Antagonist	78440	85560	82000.00	5034.6	33.9
HTR1E	EC80	12310.00	981	0.08	Basal	4890.00	178.6	0.037	Antagonist	10640	10000	10320.00	452.6	26.8
HTR1F	EC80	30300.00	1828.6	0.06	Basal	12393.33	737.7	0.06	Antagonist	23640	22040	22840.00	1131.4	41.7
HTR2A	EC80	182592.00	16704.8	0.091	Basal	35675.00	4876.3	0.137	Antagonist	56600	59040	57820.00	1725.3	84.9
HTR2C	EC80	134496.00	3643.4	0.027	Basal	73137.14	5732.4	0.078	Antagonist	77040	70320	73680.00	4751.8	99.1
HTR5A	EC80	200608.57	13854.9	0.069	Basal	64380.00	7510.7	0.117	Antagonist	136640	140320	138480.00	2602.2	45.6
KISS1R	EC80	25145.00	1071.2	0.043	Basal	4855.00	505.9	0.104	Antagonist	18200	19320	18760.00	792	31.5
LHCGR	EC80	6504.00	519.9	0.08	Basal	1315.00	308.7	0.235	Antagonist	3440	3720	3580.00	198	56.3
LTB4R	EC80	122916.67	8532.9	0.069	Basal	16025.00	2338.9	0.146	Antagonist	123120	112800	117960.00	7297.3	4.6
MC1R	EC80	4008.89	301.8	0.075	Basal	1360.00	130	0.096	Antagonist	3920	3560	3740.00	254.6	10.2
MC3R	EC80	7412.50	415.4	0.056	Basal	1345.00	171	0.127	Antagonist	5760	6680	6220.00	650.5	19.7
MC4R	EC80	22310.00	1191.2	0.053	Basal	4540.00	380.7	0.084	Antagonist	14520	12640	13580.00	1329.4	49.1
MC5R	EC80	19891.43	1070.6	0.054	Basal	9760.00	378.6	0.039	Antagonist	16320	15400	15860.00	650.5	39.8
MCHR1	EC80	4094.55	365.8	0.089	Basal	1065.00	120.8	0.113	Antagonist	3680	3520	3600.00	113.1	16.3
MCHR2	EC80	48872.50	3441.3	0.07	Basal	8080.00	528.1	0.065	Antagonist	38320	42000	40160.00	2602.2	21.4
MLNR	EC80	102612.50	5553.2	0.054	Basal	15075.00	567.5	0.038	Antagonist	55520	56720	56120.00	848.5	53.1
MRGPRX1	EC80	256573.33	17427.5	0.068	Basal	122771.43	8004.4	0.065	Antagonist	285440	284640	285040.00	565.7	-21.3
MRGPRX2	EC80	94786.67	4840.2	0.051	Basal	30545.00	3060	0.1	Antagonist	56600	49840	53220.00	4780	64.7
MTNR1A	EC80	15083.33	988.7	0.066	Basal	5260.00	297.8	0.057	Antagonist	13240	12960	13100.00	198	20.2
NMBR	EC80	144760.00	9565.5	0.066	Basal	10025.00	1086.2	0.108	Antagonist	84400	98240	91320.00	9786.4	39.7
NMU1R	EC80	116912.50	9622.9	0.082	Basal	8410.00	761	0.09	Antagonist	80880	87720	84300.00	4836.6	30.1
NPBWR1	EC80	18546.67	986.2	0.053	Basal	8154.29	345.2	0.042	Antagonist	19200	20400	19800.00	848.5	-12.1
NPBWR2	EC80	80557.50	3752	0.047	Basal	9270.00	1004.8	0.108	Antagonist	68160	73400	70780.00	3705.2	13.7
NPFFR1	EC80	19692.00	1431.6	0.073	Basal	6606.67	686	0.104	Antagonist	17000	15080	16040.00	1357.6	27.9
NPSR1b	EC80	41362.50	2971.2	0.072	Basal	6475.00	698.2	0.108	Antagonist	6080	5840	5960.00	169.7	101.5

NPY1R	EC80	76812.50	5288.8	0.069	Basal	18835.00	1287	0.068	Antagonist	74280	75400	74840.00	792	3.4
NPY2R	EC80	414473.33	30920.8	0.075	Basal	23865.00	1752.2	0.073	Antagonist	412160	412880	412520.00	509.1	0.5
NTSR1	EC80	143746.67	7587.3	0.053	Basal	44875.00	4524.5	0.101	Antagonist	124400	125920	125160.00	1074.8	18.8
OPRD1	EC80	78717.50	5825.8	0.074	Basal	14265.00	1372.7	0.096	Antagonist	72320	75880	74100.00	2517.3	7.2
OPRK1	EC80	7227.50	456.5	0.063	Basal	2010.00	201.4	0.1	Antagonist	5920	6440	6180.00	367.7	20.1
OPRL1	EC80	155233.33	13580.8	0.087	Basal	32410.00	3867.7	0.119	Antagonist	149480	147760	148620.00	1216.2	5.4
OPRM1	EC80	252777.50	18791.6	0.074	Basal	23360.00	1591.8	0.068	Antagonist	270880	239240	255060.00	22372.9	-1
OXER1	EC80	27008.00	2305.1	0.085	Basal	9925.00	1016.3	0.102	Antagonist	21840	26000	23920.00	2941.6	18.1
OXTR	EC80	75317.50	7372.1	0.098	Basal	5280.00	236.2	0.045	Antagonist	47400	55360	51380.00	5628.6	34.2
P2RY1	EC80	82880.00	5677	0.068	Basal	34880.00	2196.3	0.063	Antagonist	85440	75040	80240.00	7353.9	5.5
P2RY11	EC80	49650.00	4713.8	0.095	Basal	5495.00	850.9	0.155	Antagonist	47480	44560	46020.00	2064.8	8.2
P2RY12	EC80	77036.67	6270.9	0.081	Basal	17190.00	2571.7	0.15	Antagonist	80160	72280	76220.00	5572	1.4
P2RY2	EC80	247240.00	7868.1	0.032	Basal	63825.00	2070.8	0.032	Antagonist	248480	249920	249200.00	1018.2	-1.1
P2RY4	EC80	141303.33	6631.2	0.047	Basal	49380.00	2972	0.06	Antagonist	84280	71840	78060.00	8796.4	68.8
P2RY6	EC80	241502.50	14517.2	0.06	Basal	67900.00	14348.5	0.211	Antagonist	229120	249800	239460.00	14623	1.2
PPYR1	EC80	53132.50	2678.2	0.05	Basal	4905.00	745.9	0.152	Antagonist	29800	27560	28680.00	1583.9	50.7
PRLHR	EC80	9912.50	1022.5	0.103	Basal	1470.00	202.6	0.138	Antagonist	6680	5280	5980.00	990	46.6
PROKR1	EC80	67127.50	4899.8	0.073	Basal	6805.00	498.9	0.073	Antagonist	42960	45880	44420.00	2064.8	37.6
PROKR2	EC80	7217.50	471.5	0.065	Basal	1595.00	105.7	0.066	Antagonist	5880	5120	5500.00	537.4	30.5
PTAFR	EC80	448823.33	24786	0.055	Basal	102290.00	10183.8	0.1	Antagonist	409200	389680	399440.00	13802.7	14.3
PTGER2	EC80	10680.00	973.2	0.091	Basal	1995.00	233.7	0.117	Antagonist	10920	9680	10300.00	876.8	4.4
PTGER3	EC80	131887.50	6704.5	0.051	Basal	47590.00	1970.6	0.041	Antagonist	133560	152200	142880.00	13180.5	-13
PTGER4	EC80	134923.33	9982.5	0.074	Basal	37895.00	2004.2	0.053	Antagonist	102880	96120	99500.00	4780	36.5
PTGFR	EC80	16882.50	1141.9	0.068	Basal	830.00	186.1	0.224	Antagonist	9560	10360	9960.00	565.7	43.1
PTGIR	EC80	83133.33	5307.3	0.064	Basal	33020.00	2374.2	0.072	Antagonist	50120	55840	52980.00	4044.6	60.2
PTHR1	EC80	492882.50	21421.8	0.043	Basal	29490.00	2194.1	0.074	Antagonist	394120	429040	411580.00	24692.2	17.5
PTHR2	EC80	319283.33	22348.8	0.07	Basal	20530.00	2002.7	0.098	Antagonist	228040	229040	228540.00	707.1	30.4
RXFP3	EC80	25547.69	1344	0.053	Basal	8675.00	1471.6	0.17	Antagonist	20840	19200	20020.00	1159.7	32.8
SCTR	EC80	449982.50	23102	0.051	Basal	72850.00	5777.5	0.079	Antagonist	371480	401240	386360.00	21043.5	16.9
SSTR1	EC80	4366.15	254	0.058	Basal	1205.00	248.8	0.206	Antagonist	2880	3440	3160.00	396	38.2

SSTR2	EC80	30282.50	2545.1	0.084	Basal	910.00	79.3	0.087	Antagonist	31160	29440	30300.00	1216.2	-0.1
SSTR3	EC80	53875.00	3870.1	0.072	Basal	9565.00	963.2	0.101	Antagonist	34560	36560	35560.00	1414.2	41.3
SSTR5	EC80	64290.00	5738	0.089	Basal	10955.00	865.2	0.079	Antagonist	63520	62480	63000.00	735.4	2.4
TACR1	EC80	329806.67	23223	0.07	Basal	57515.00	4295	0.075	Antagonist	336200	320600	328400.00	11030.9	0.5
TACR2	EC80	297392.50	19064.6	0.064	Basal	95200.00	5660.5	0.059	Antagonist	183600	171240	177420.00	8739.8	59.3
TACR3	EC80	174465.00	8136.6	0.047	Basal	11005.00	884	0.08	Antagonist	142200	156960	149580.00	10436.9	15.2
TBXA2R	EC80	88775.00	9070	0.102	Basal	21575.00	1586.4	0.074	Antagonist	90800	92680	91740.00	1329.4	-4.4
TRHR	EC80	18463.33	2122.8	0.115	Basal	1240.00	157.1	0.127	Antagonist	11680	10520	11100.00	820.2	42.8
TSHR(L)	EC80	7243.33	810.6	0.112	Basal	645.00	125.5	0.195	Antagonist	7480	6000	6740.00	1046.5	7.6
UTR2	EC80	16910.00	1158.4	0.069	Basal	6695.00	489.4	0.073	Antagonist	15400	14800	15100.00	424.3	17.7
VIPR1	EC80	510297.50	27525.9	0.054	Basal	52490.00	1652.2	0.031	Antagonist	514480	532800	523640.00	12954.2	-2.9
VIPR2	EC80	356452.50	21961.6	0.062	Basal	14115.00	1306.9	0.093	Antagonist	349080	332200	340640.00	11936	4.6

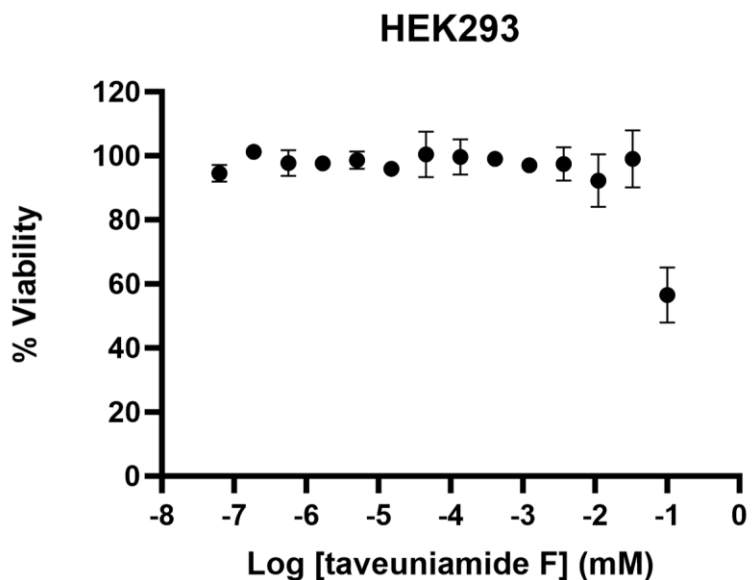


Figure S26. Cell viability assay of taveuniamide F using HEK293 cells. The experiment was done as technical triplicates. Data are presented as mean \pm SD (n=3).

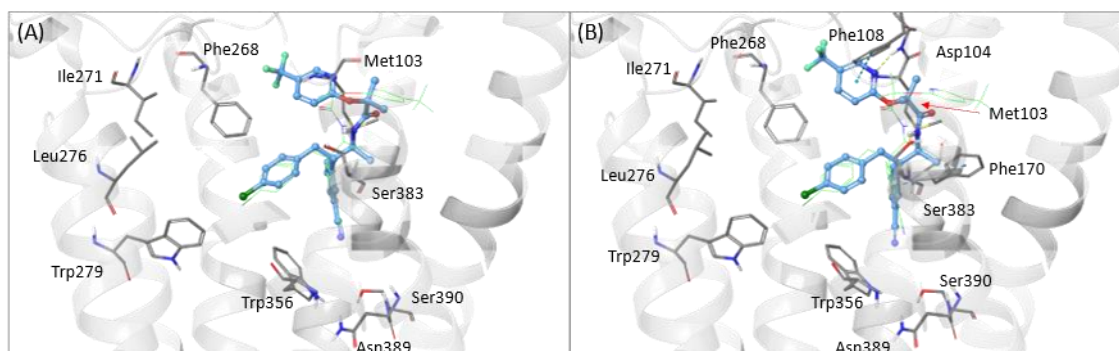


Figure S27. Docking poses obtained for taranabant. (A) Glide SP; (B) Induced Fit Docking with GlideSP precision. The determined crystal pose of taranabant (PDBID: 5U09) is overlaid in green lines.

Supplementary References

- (1) Williamson, T. S., Inder., Gerwick, W. Taveuniamides: new chlorinated toxins from a mixed assemblage of marine cyanobacteria. *Tetrahedron* **2004**, 60 (33), 7025-7033.
- (2) Orsini, M. A.; Pannell, L. K.; Erickson, K. L. Polychlorinated acetamides from the cyanobacterium *Microcoleus lyngbyaceus*. *J Nat Prod* **2001**, 64 (5), 572-577.