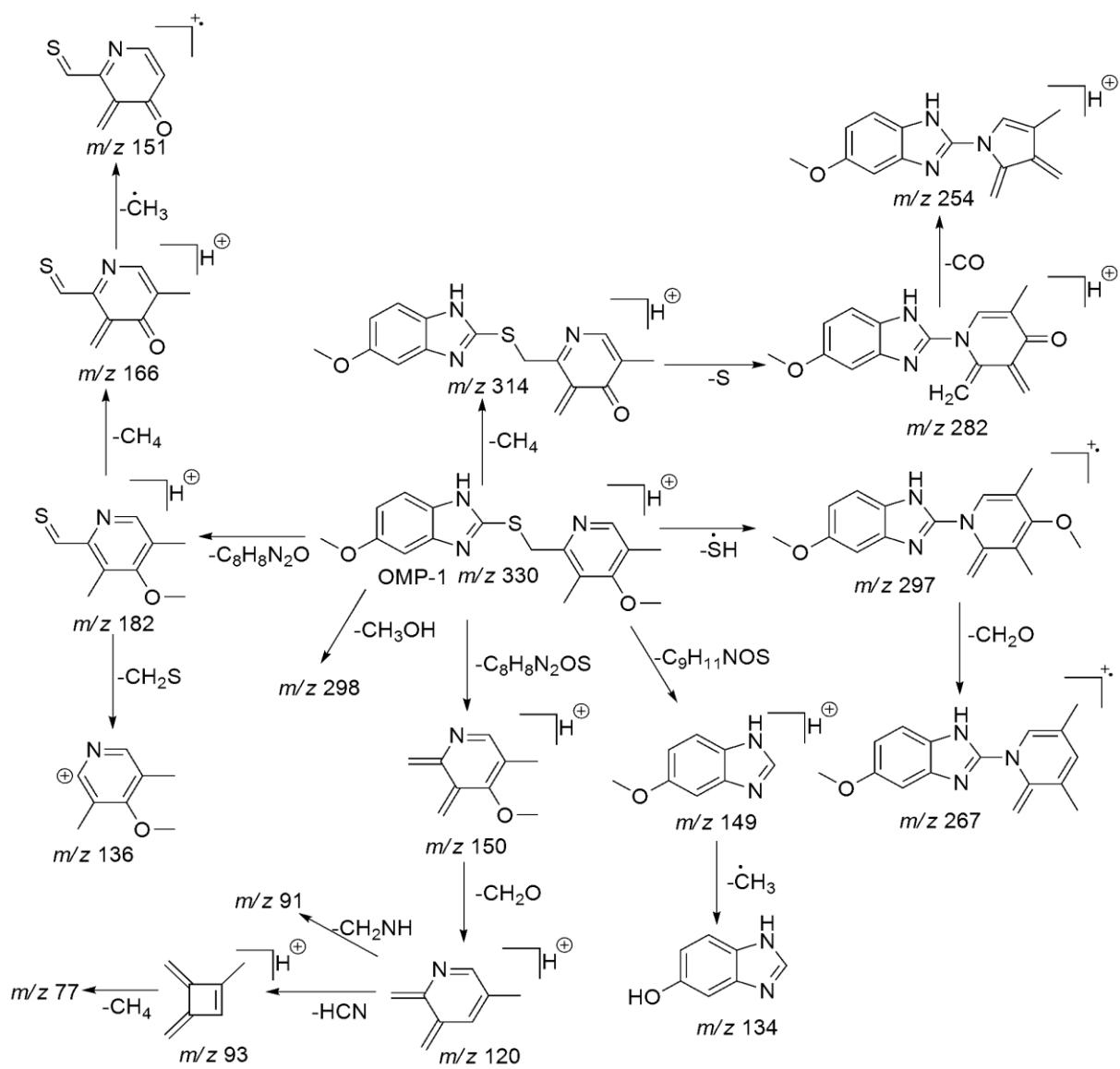
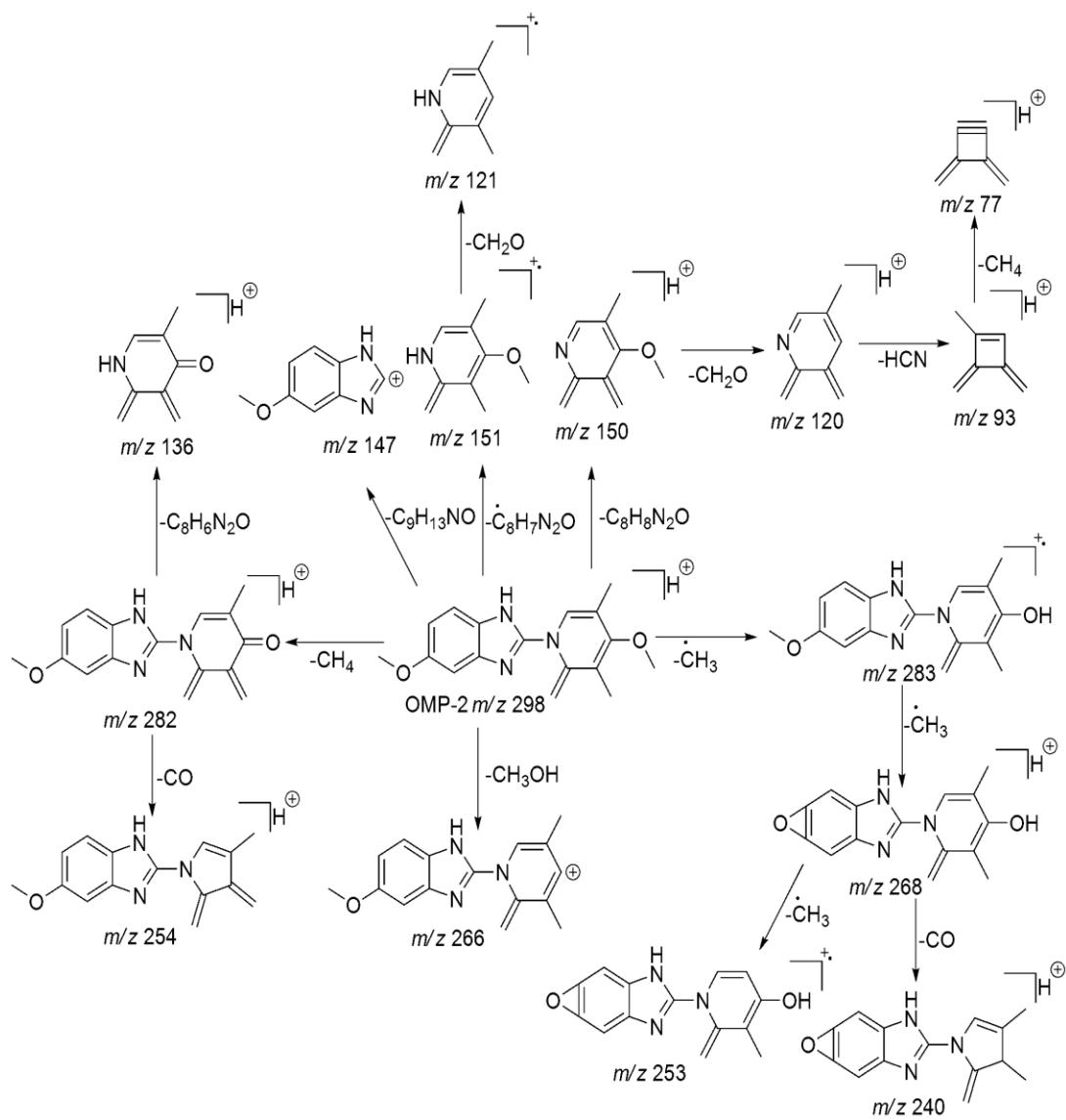


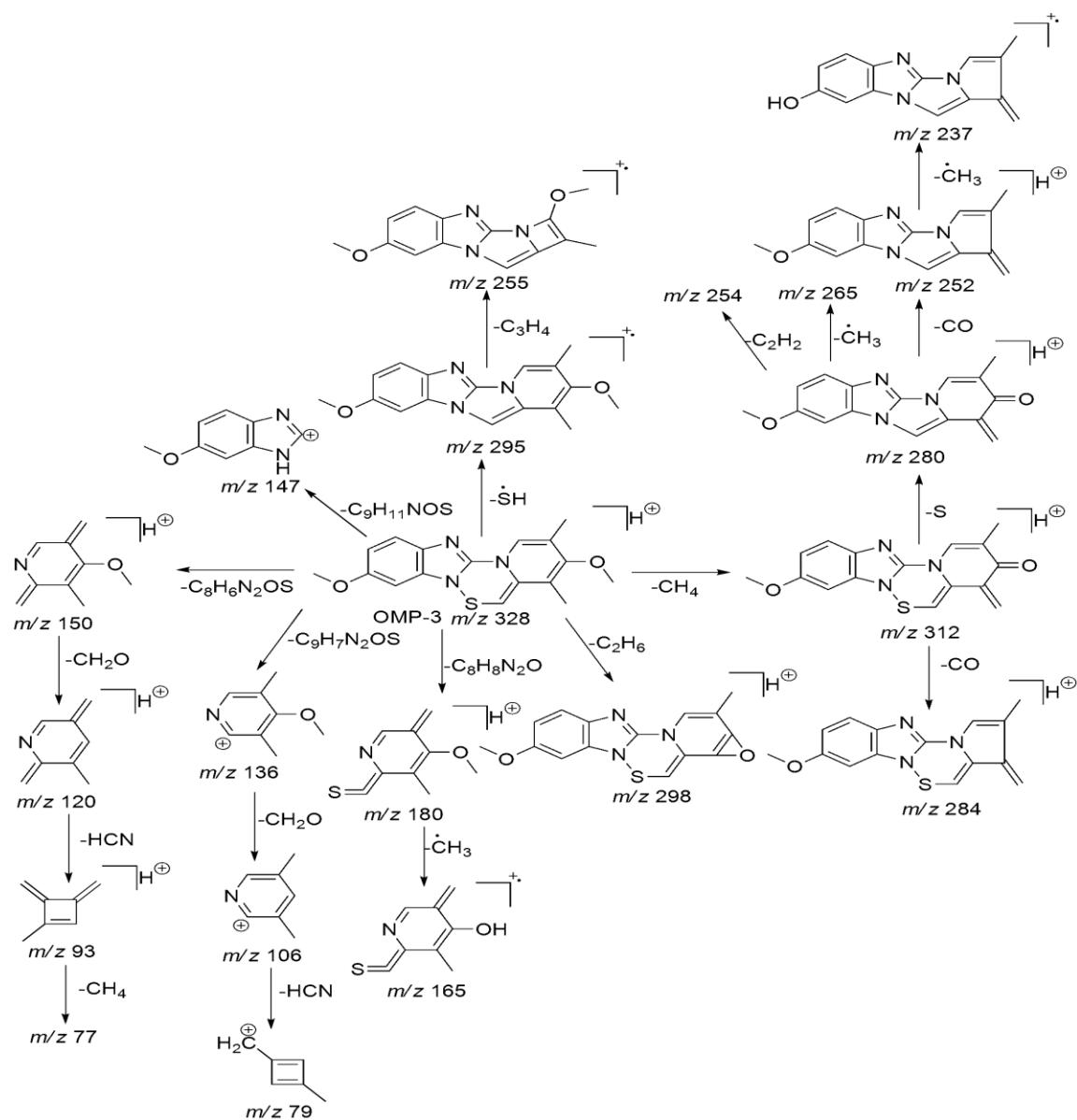
Scheme S1: Proposed fragmentation pathway of the protonated OMP (m/z 346)



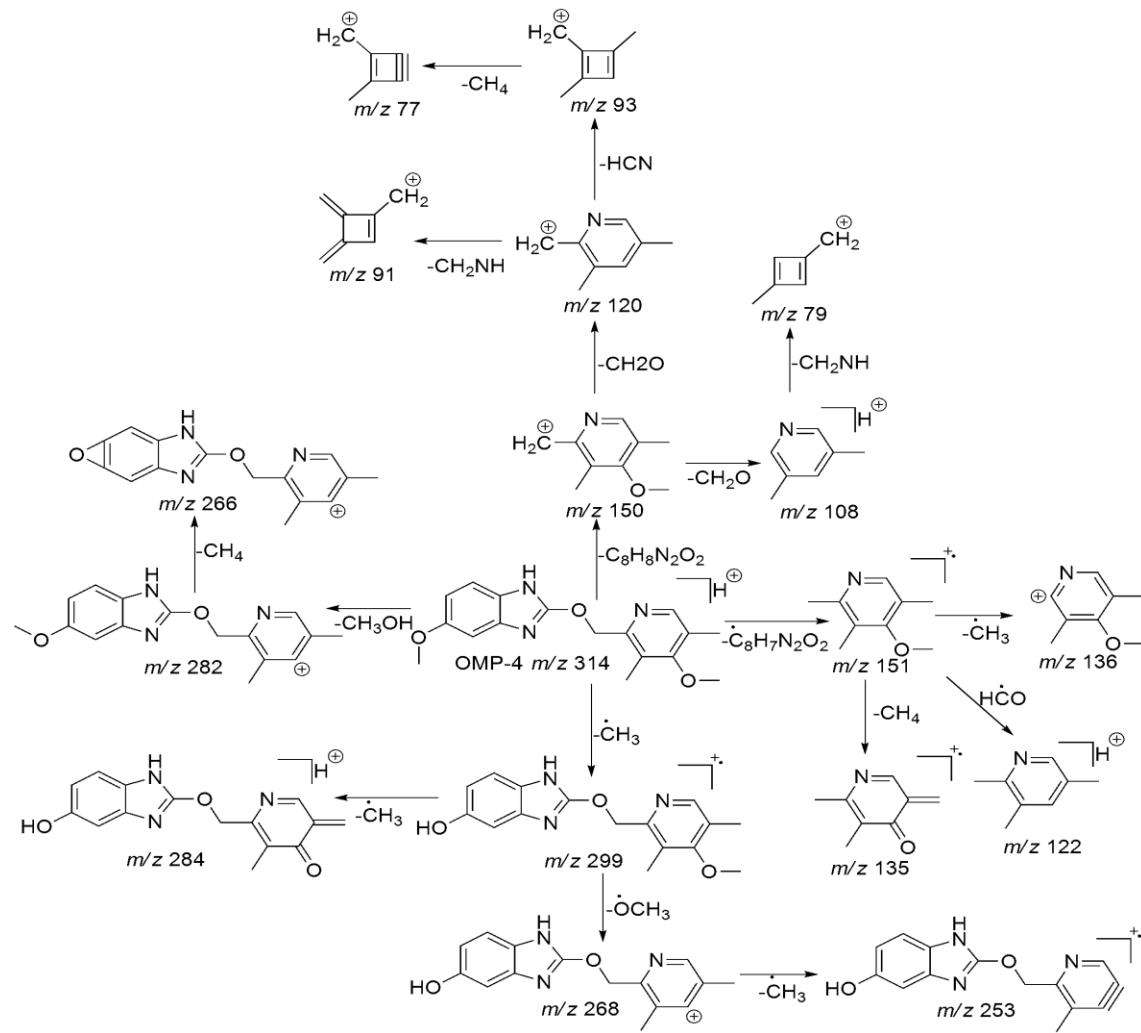
Scheme S2: Proposed fragmentation pathway of the protonated OMP-1(m/z 330)



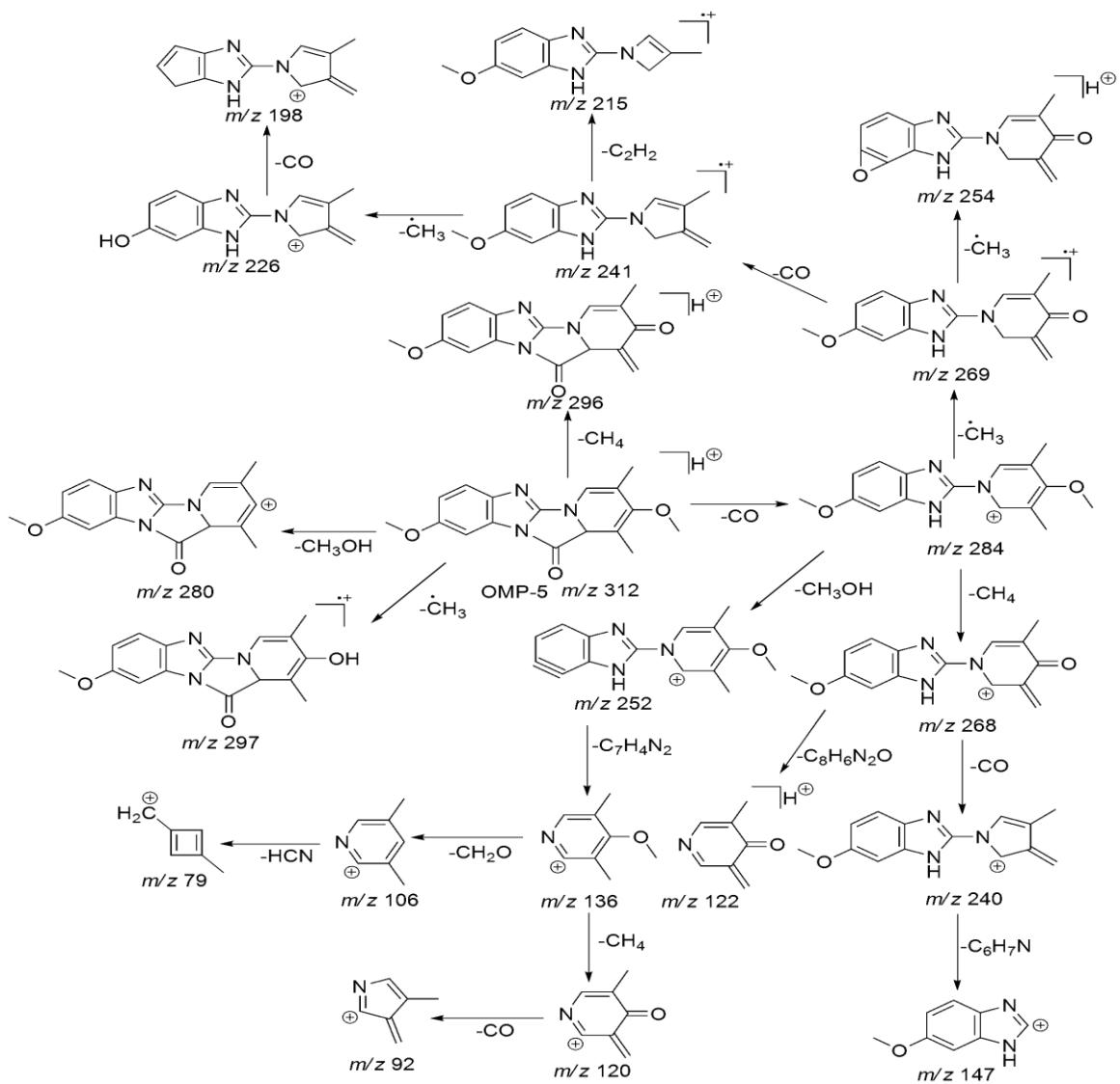
Scheme S3: Proposed fragmentation pathway of the protonated OMP-2(m/z 298)



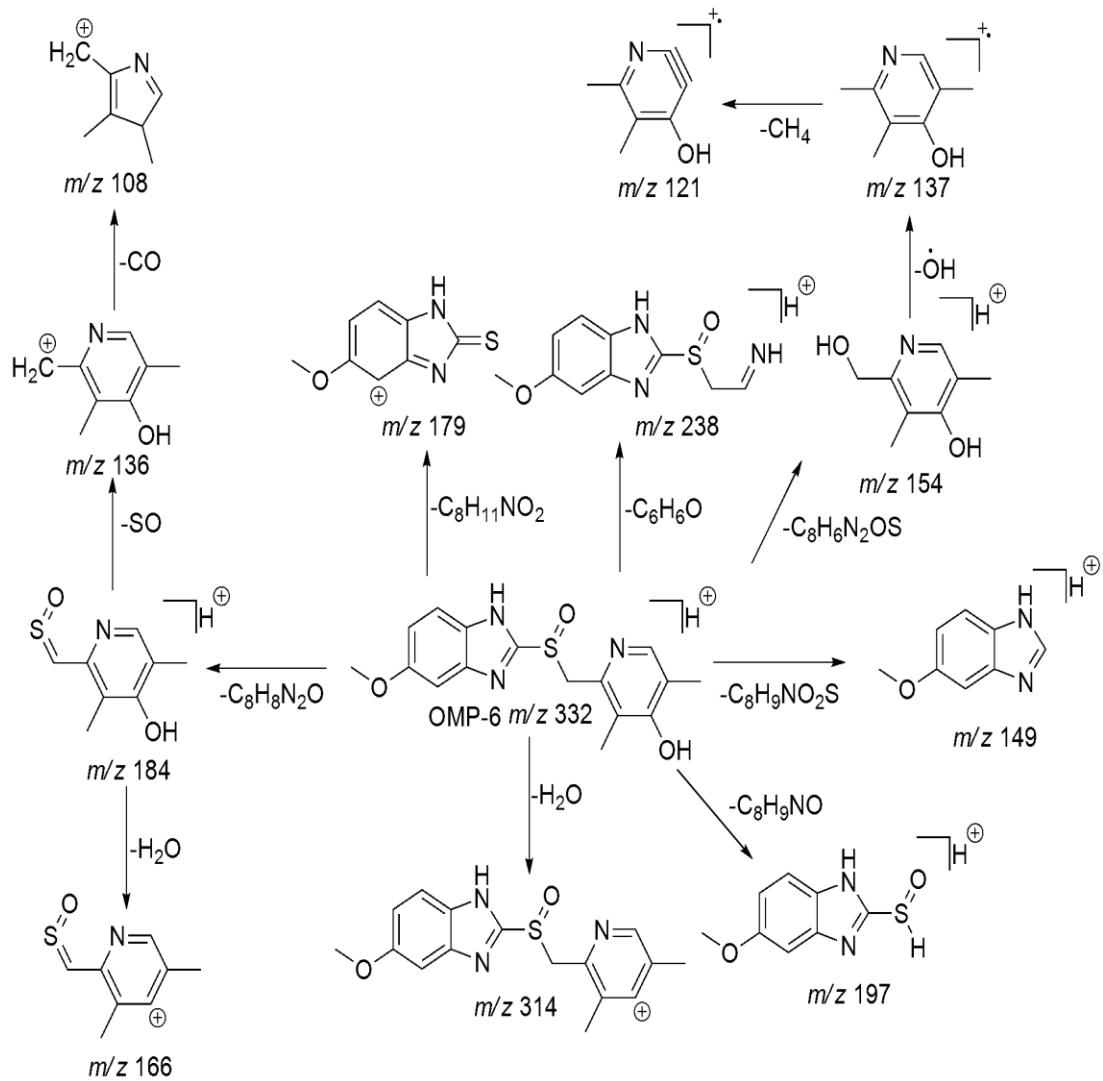
Scheme S4: Proposed fragmentation pathway of the protonated OMP-3(m/z 328)



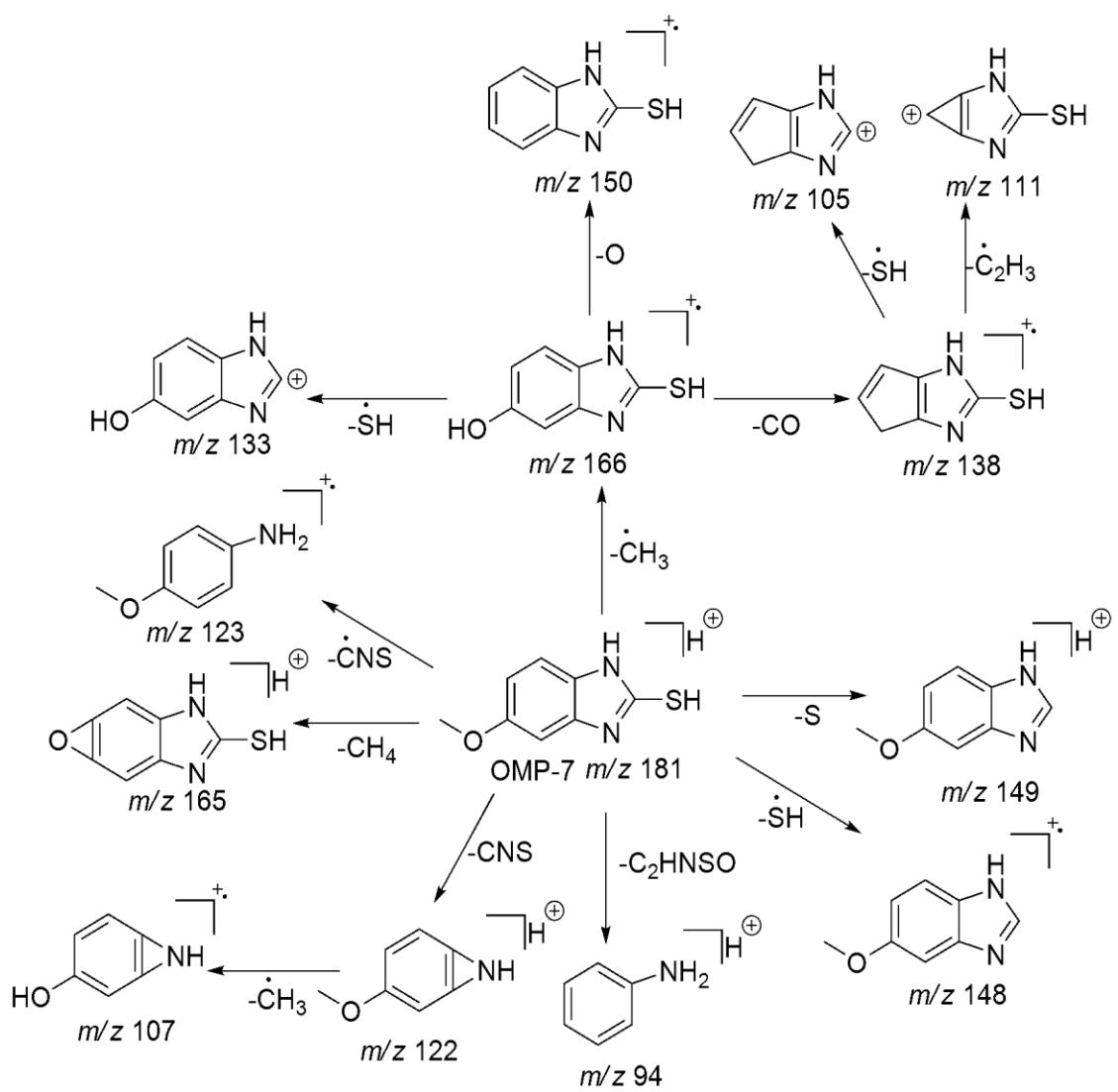
Scheme S5: Proposed fragmentation pathway of the protonated OMP-4(m/z 314)



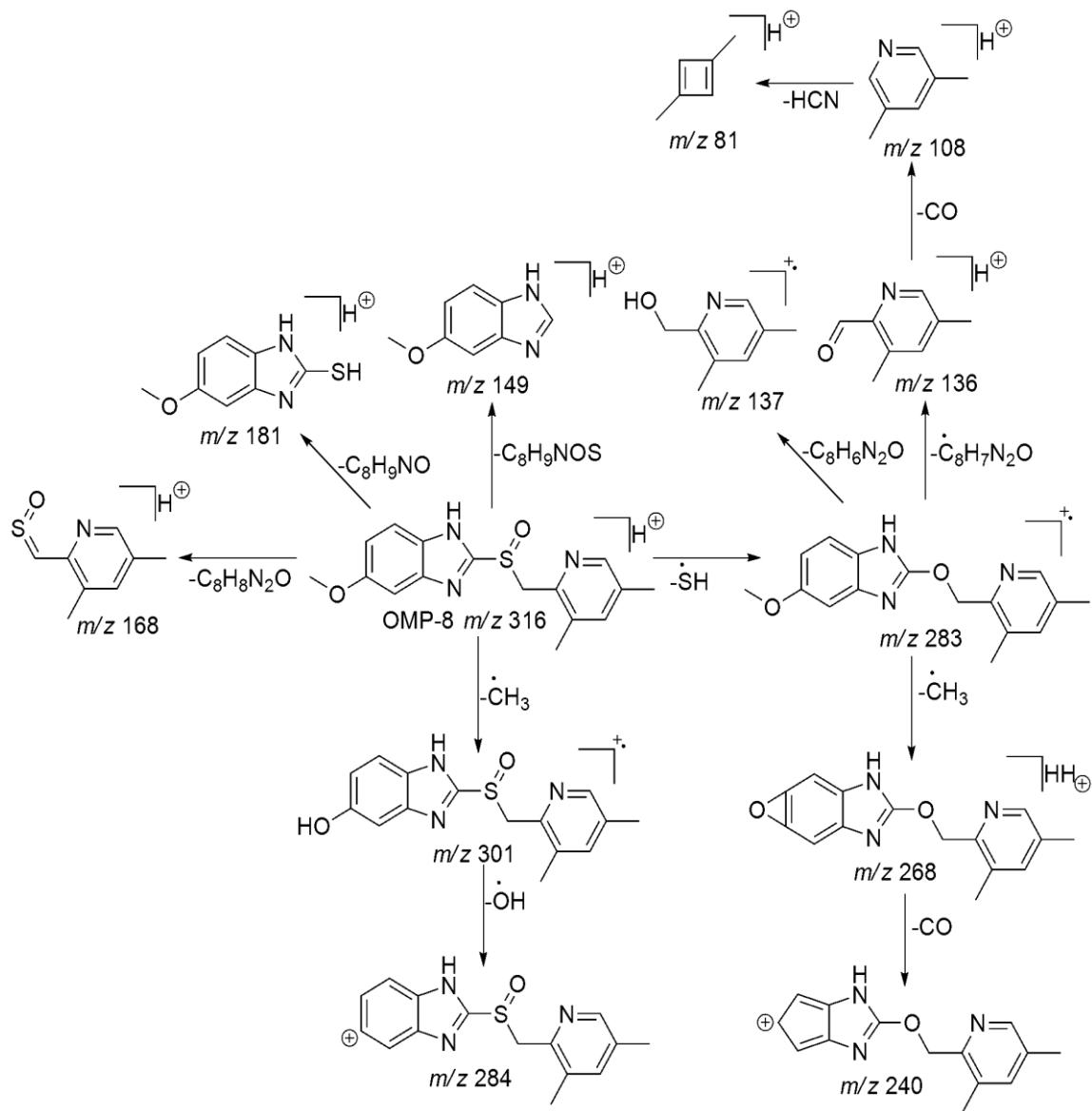
Scheme S6: Proposed fragmentation pathway of the protonated OMP-5(m/z 312)



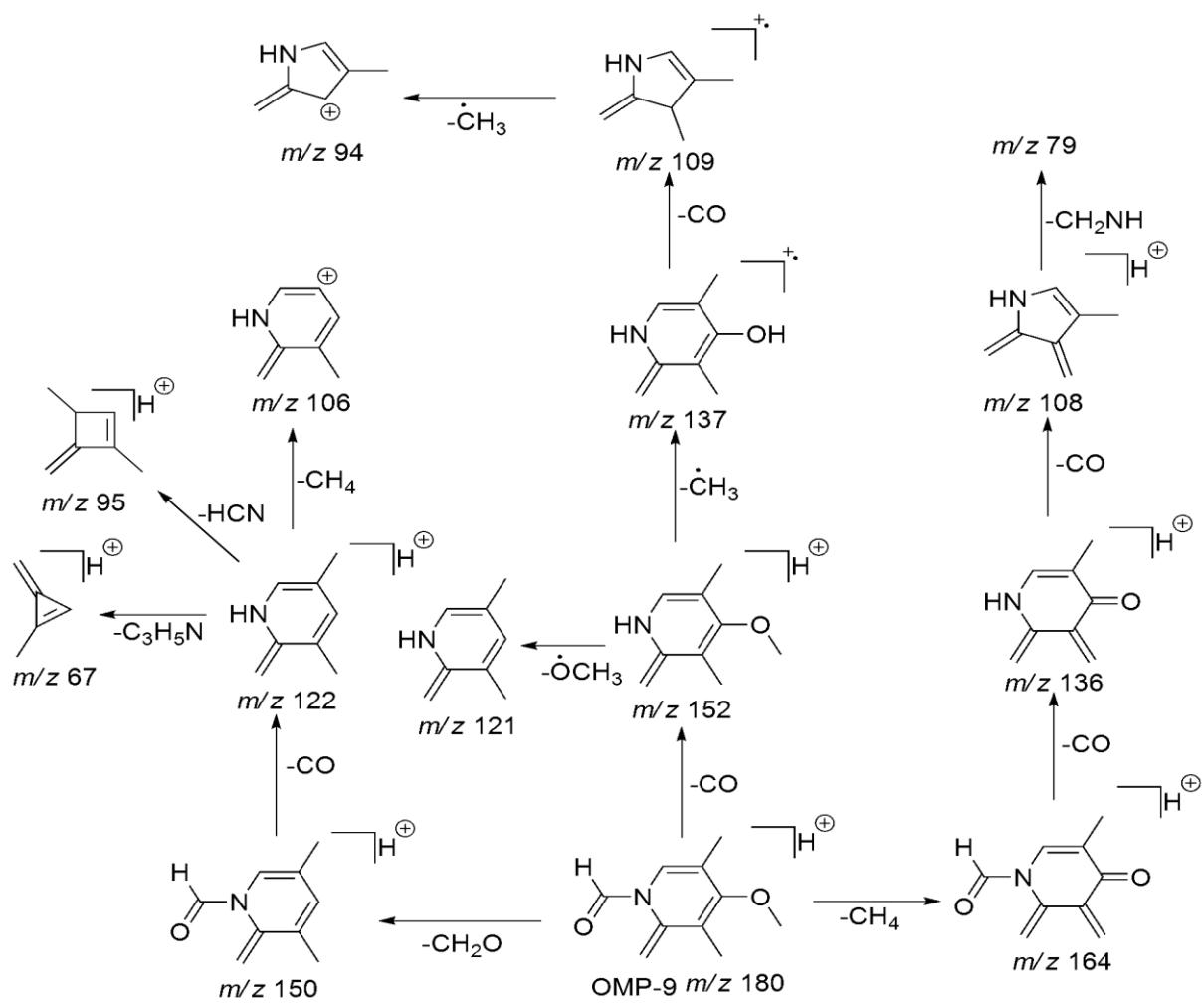
Scheme S7: Proposed fragmentation pathway of the protonated OMP-6(m/z 332)



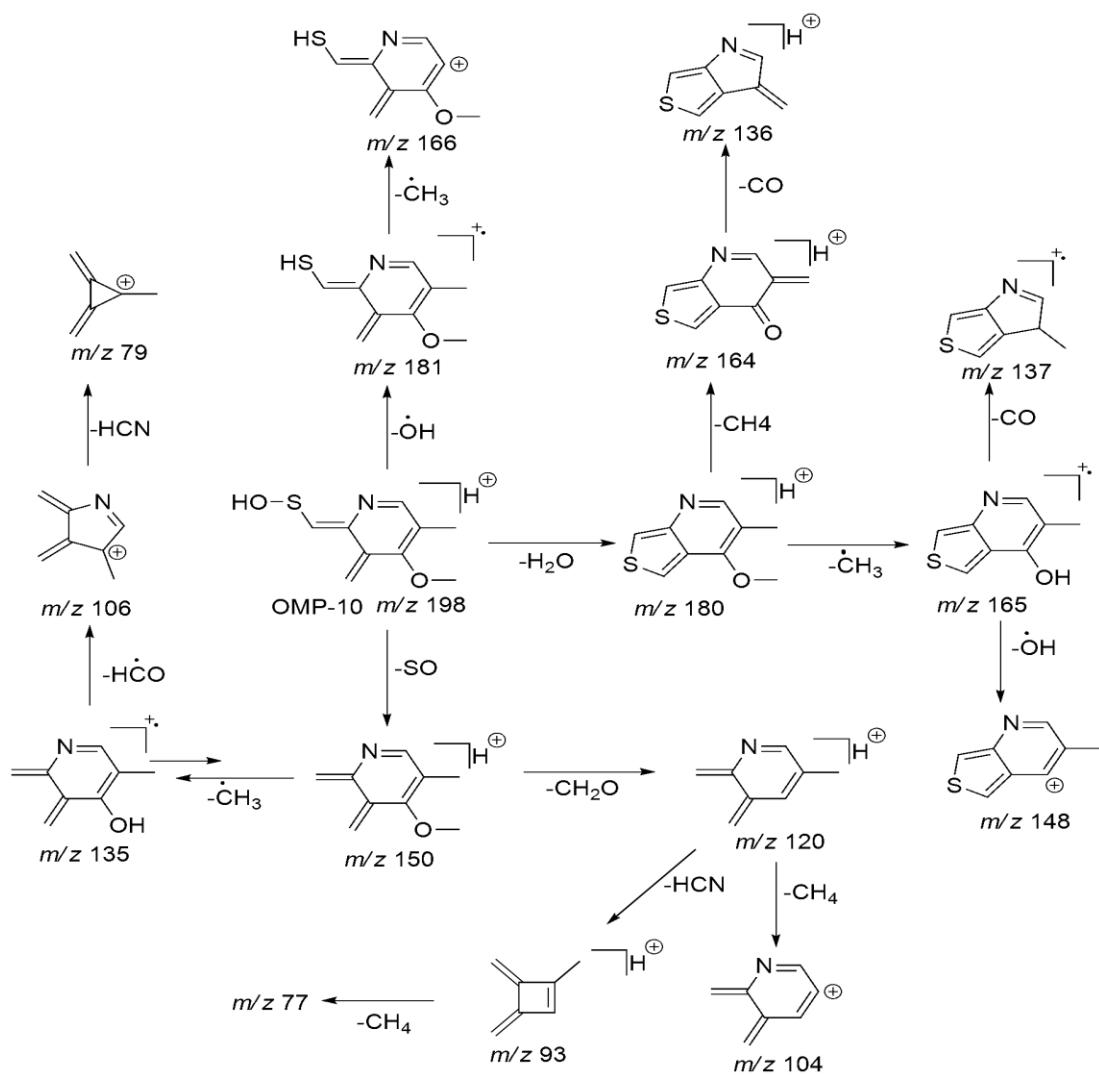
Scheme S8: Proposed fragmentation pathway of the protonated OMP-7(m/z 181)



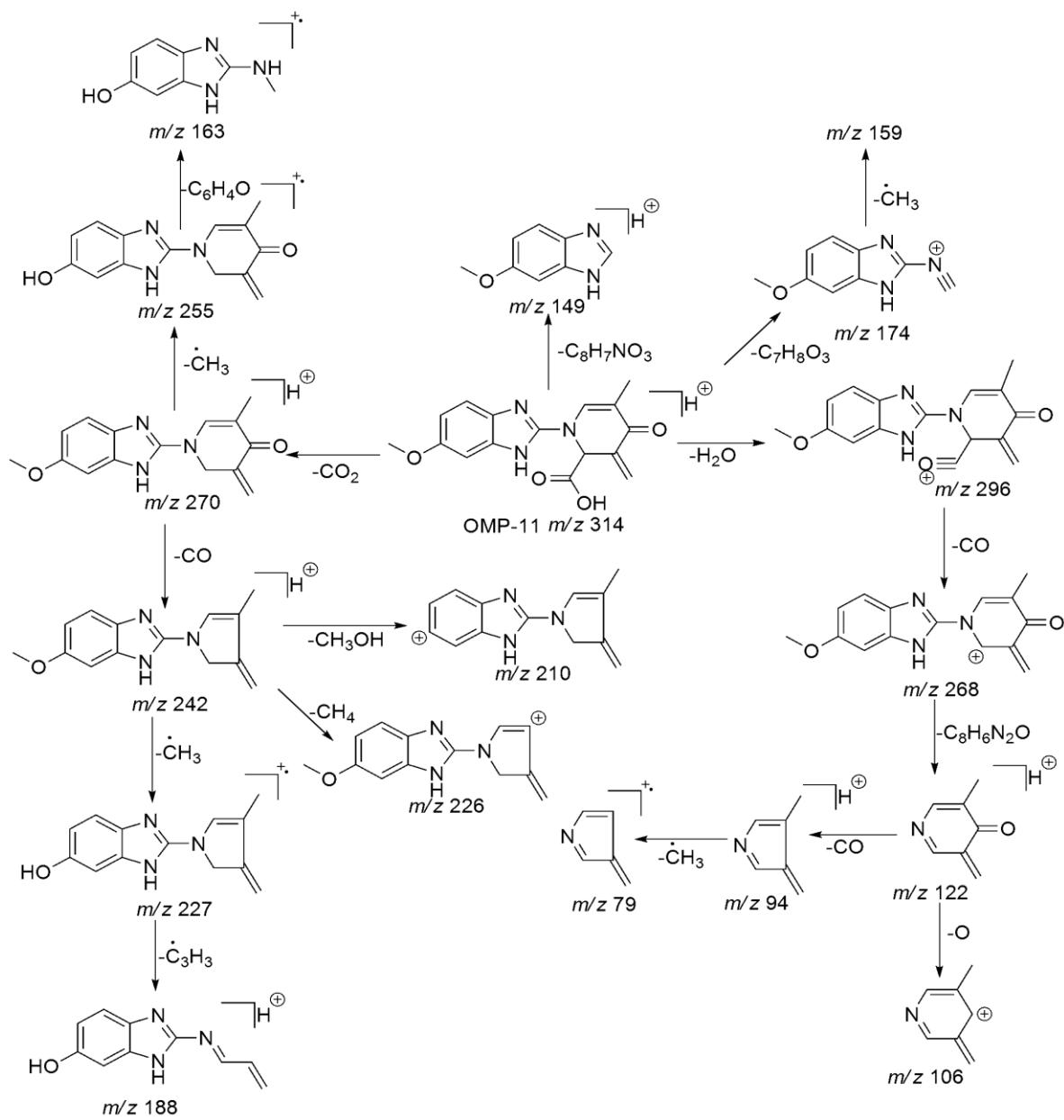
Scheme S9: Proposed fragmentation pathway of the protonated OMP-8(m/z 316)



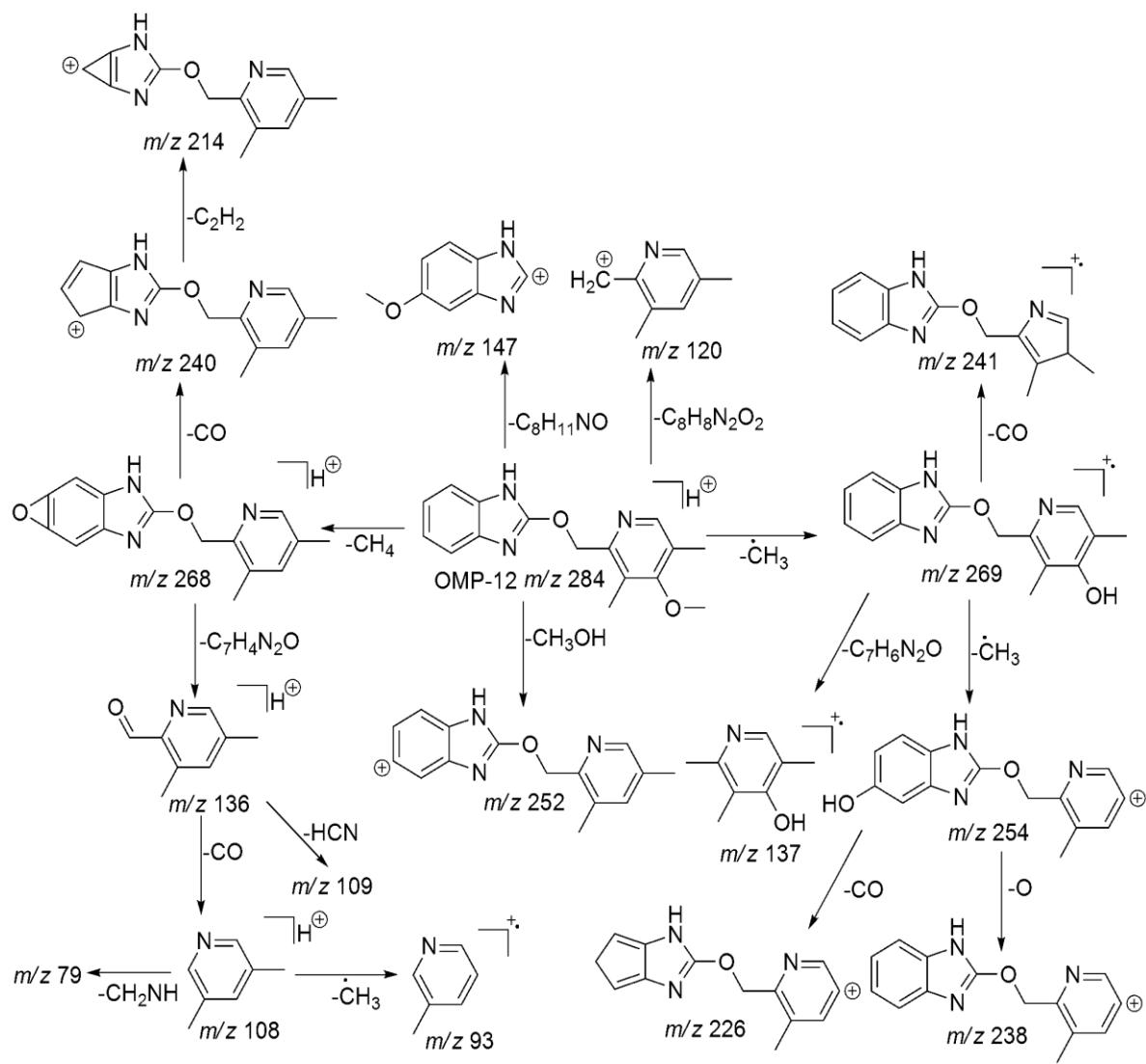
Scheme S10: Proposed fragmentation pathway of the protonated OMP-9(m/z 180)



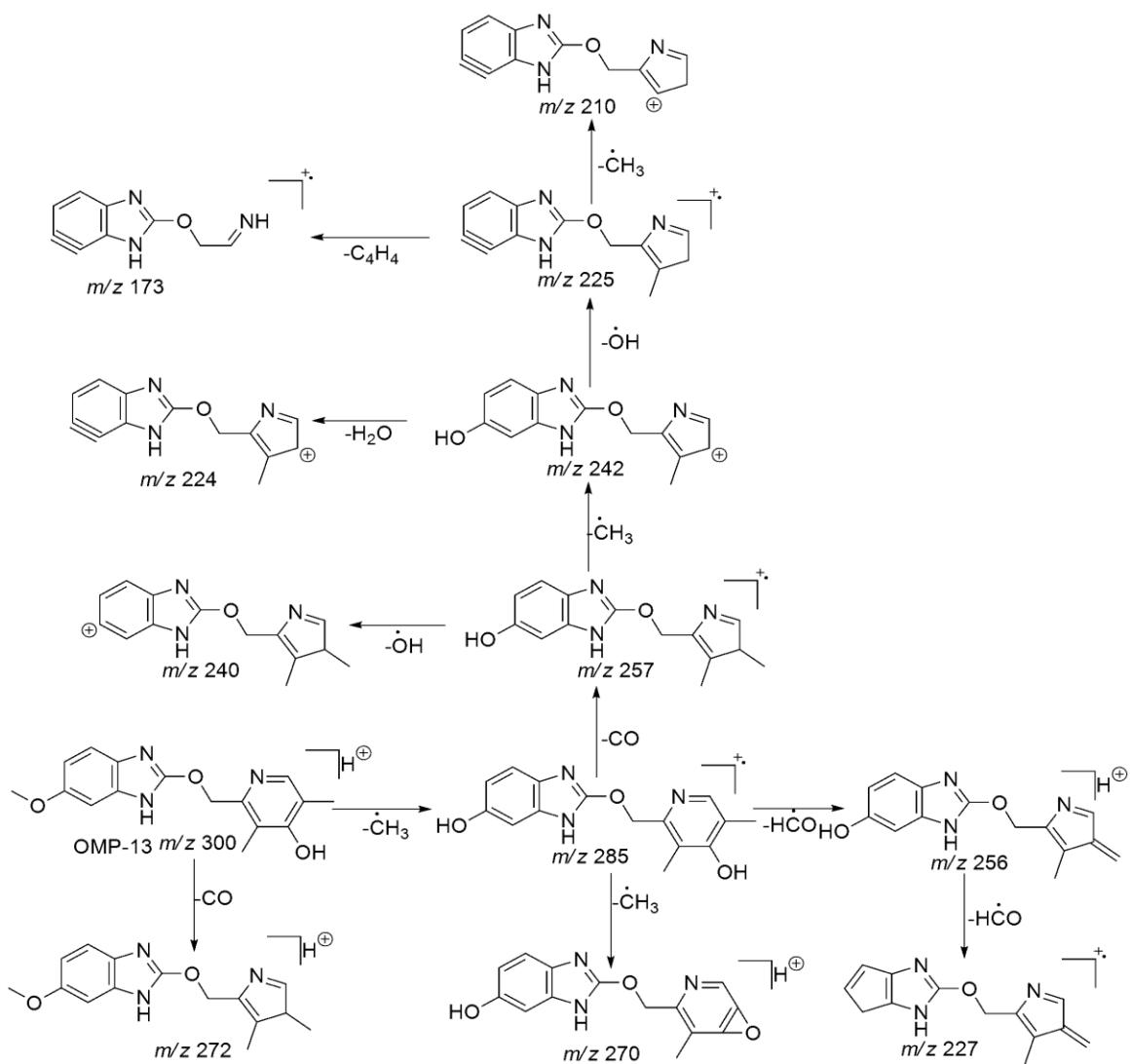
Scheme S11: Proposed fragmentation pathway of the protonated OMP-10(m/z 198)



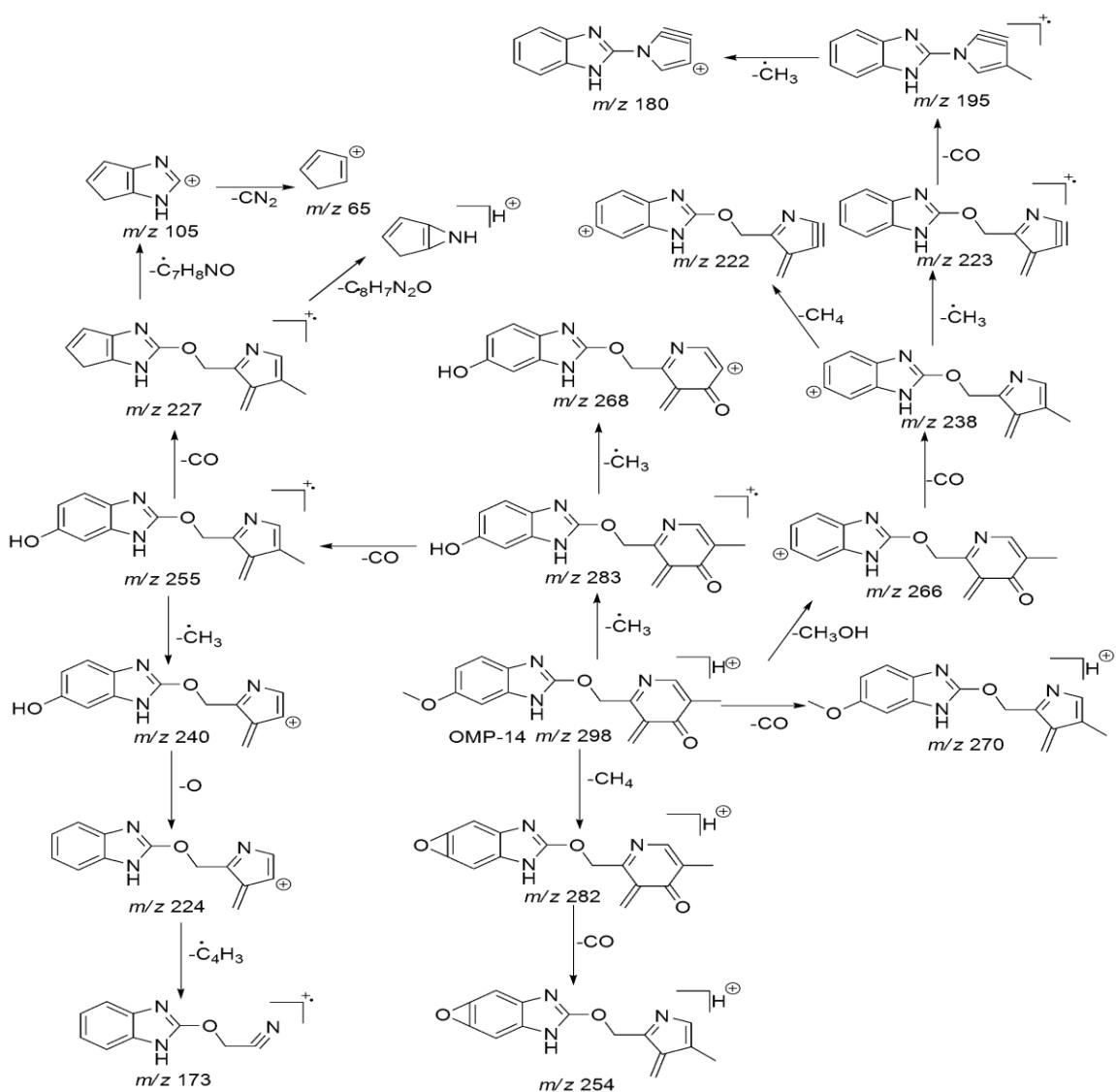
Scheme S12: Proposed fragmentation pathway of the protonated OMP-11(m/z 314)



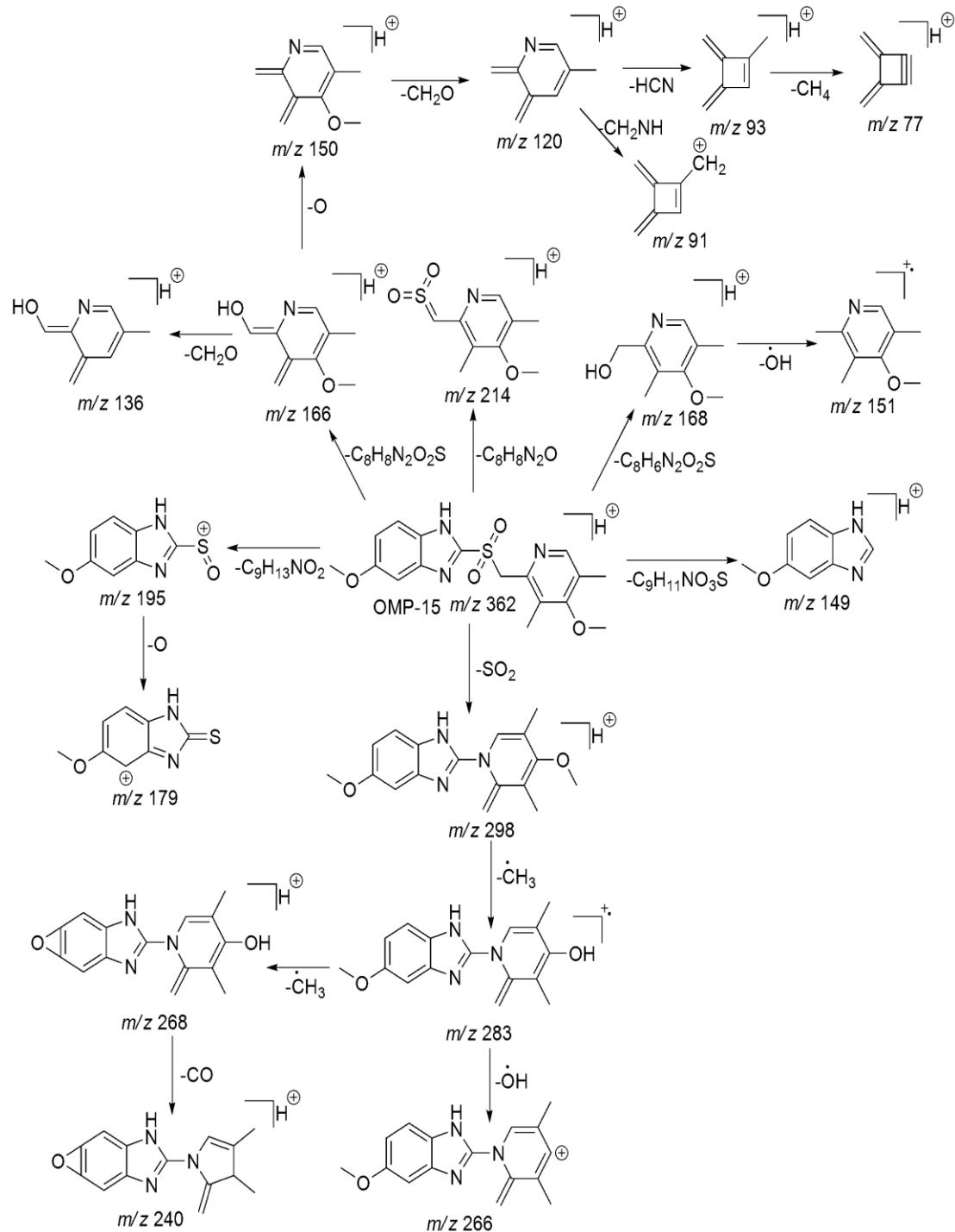
Scheme S13: Proposed fragmentation pathway of the protonated OMP-12(m/z 284)



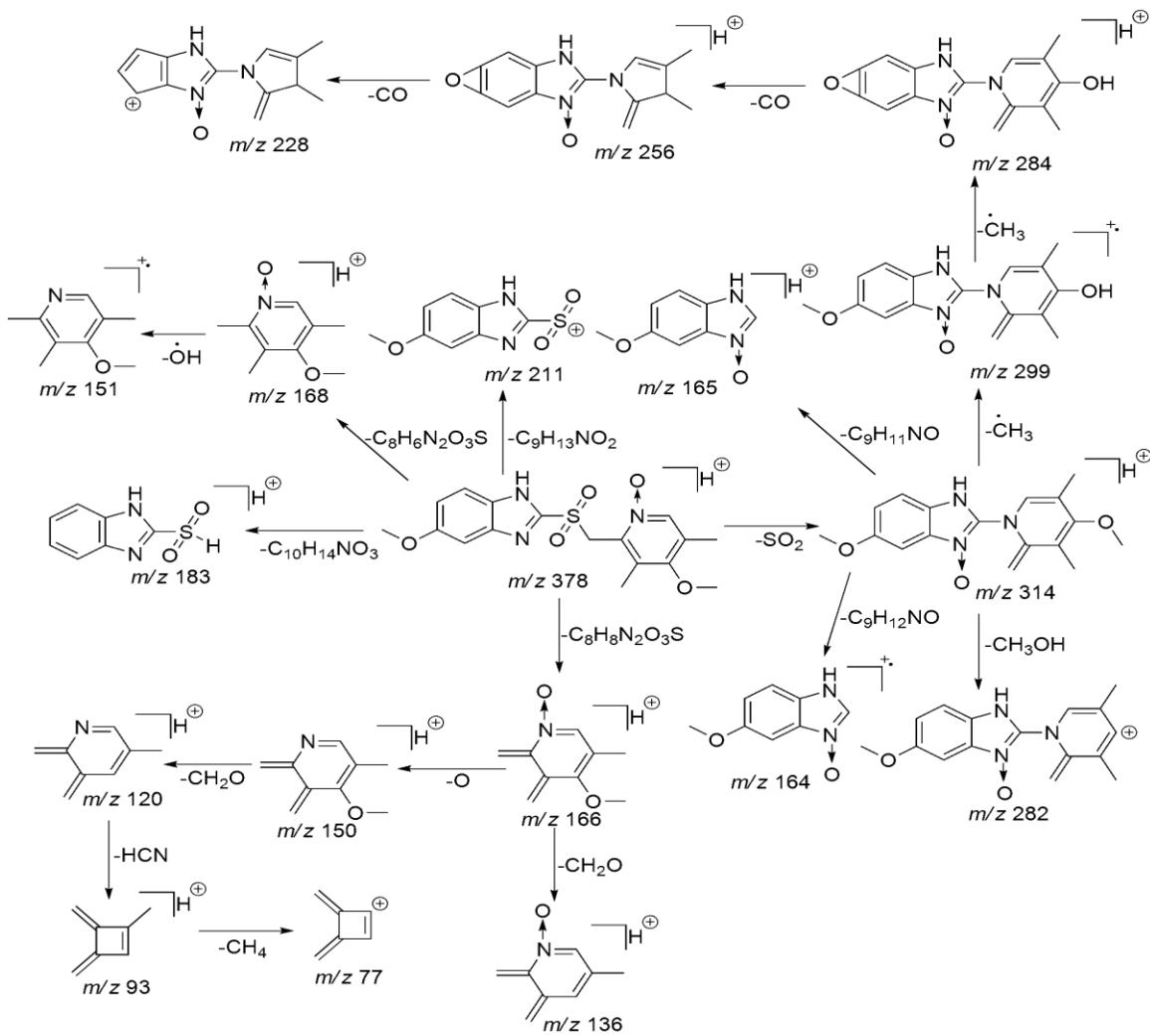
Scheme S14: Proposed fragmentation pathway of the protonated OMP-13(m/z 300)



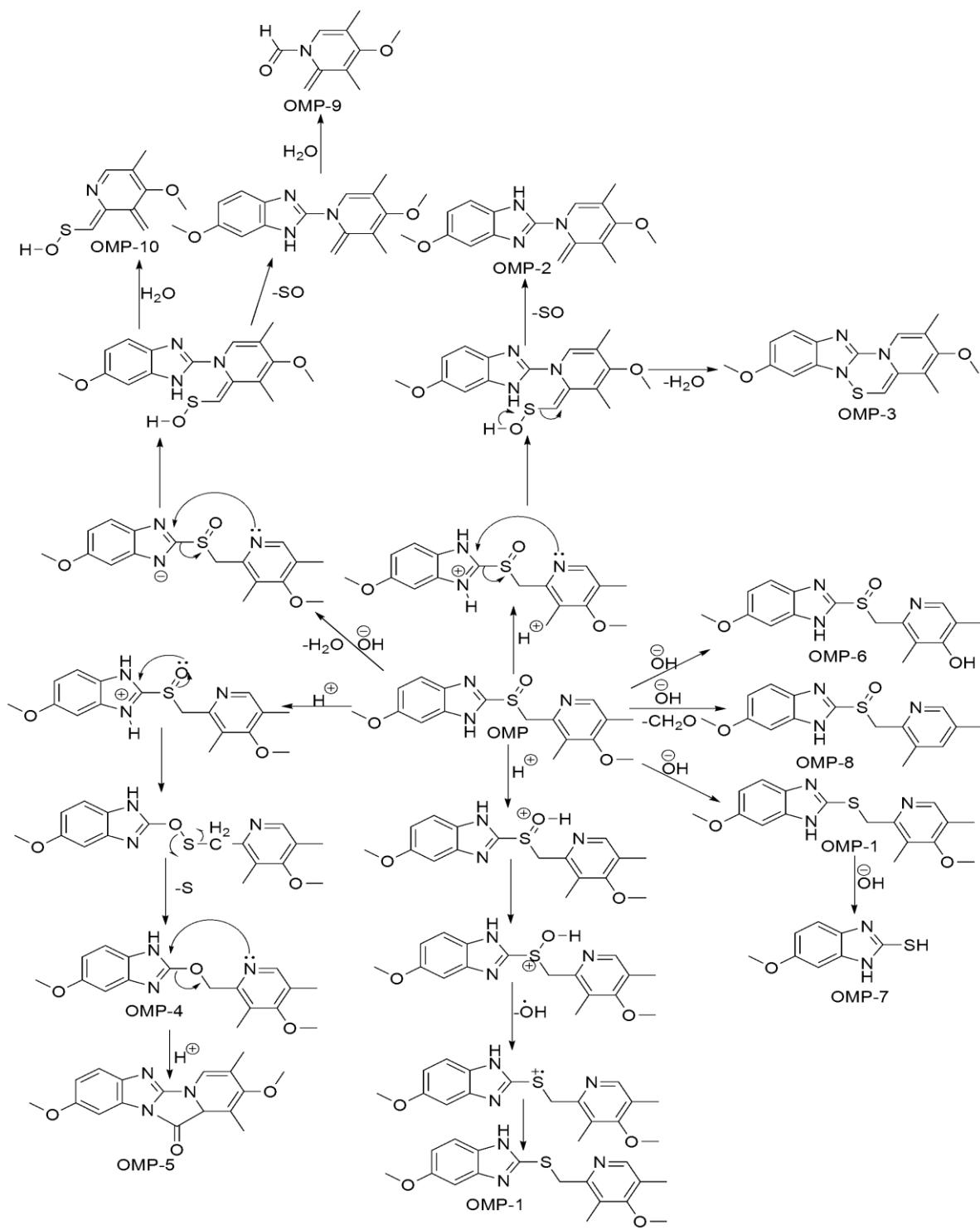
Scheme S15: Proposed fragmentation pathway of the protonated OMP-14(m/z 298)



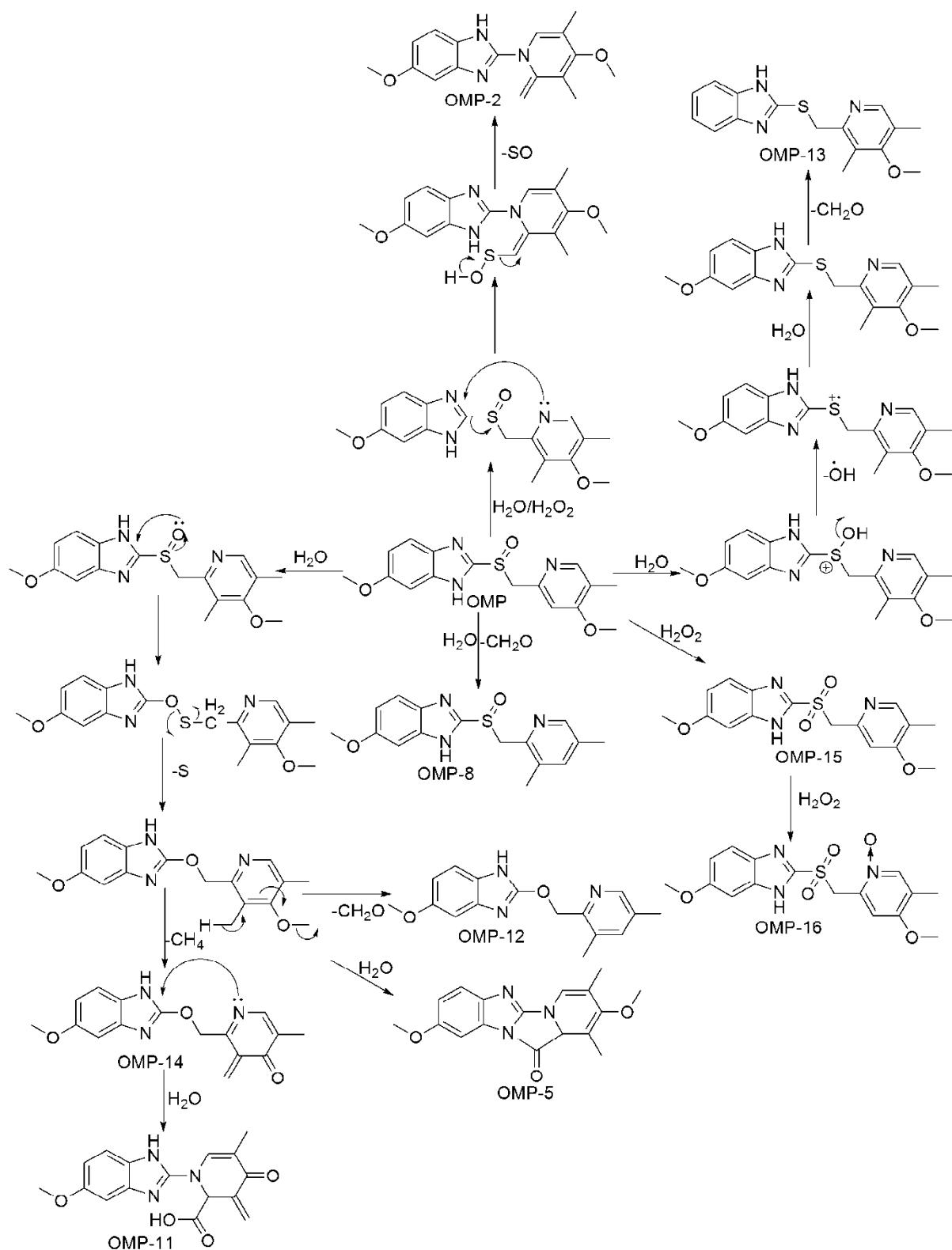
Scheme S16: Proposed fragmentation pathway of the protonated OMP-15(m/z 362)



Scheme S17: Proposed fragmentation pathway of the protonated OMP-16(m/z 378)



Scheme S18: Proposed mechanism of the OMP degradation products in acidic and basic hydrolysis condition



Scheme S19: Proposed mechanism of the OMP degradation products in neutral hydrolysis and oxidation condition

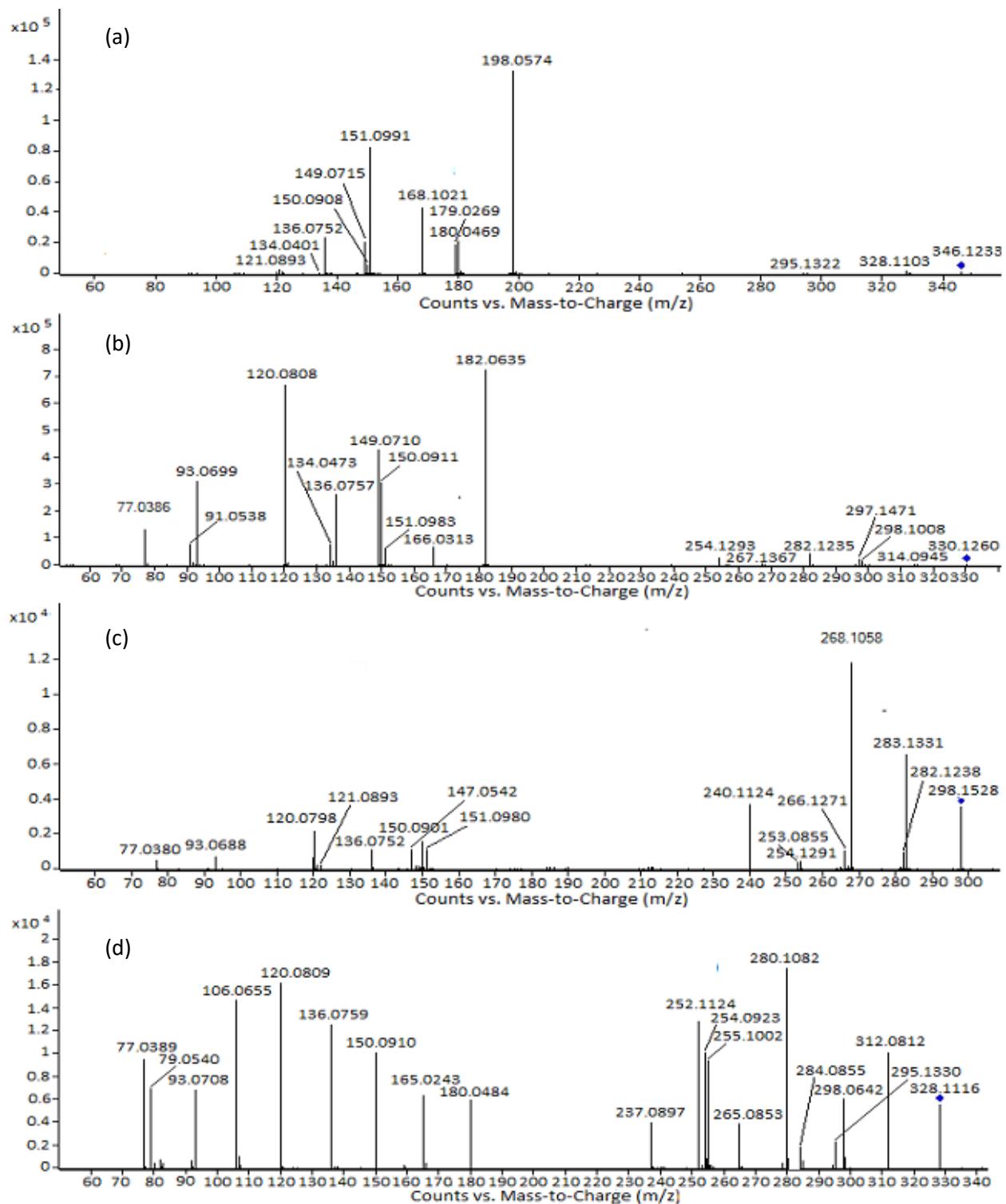


Figure.S1. UPLC/ESI/MS/MS Spectra of $[M+H]^+$ ions of OMP(a), OMP-1(b), OMP-2(c) and OMP-3(d) at 30 eV.

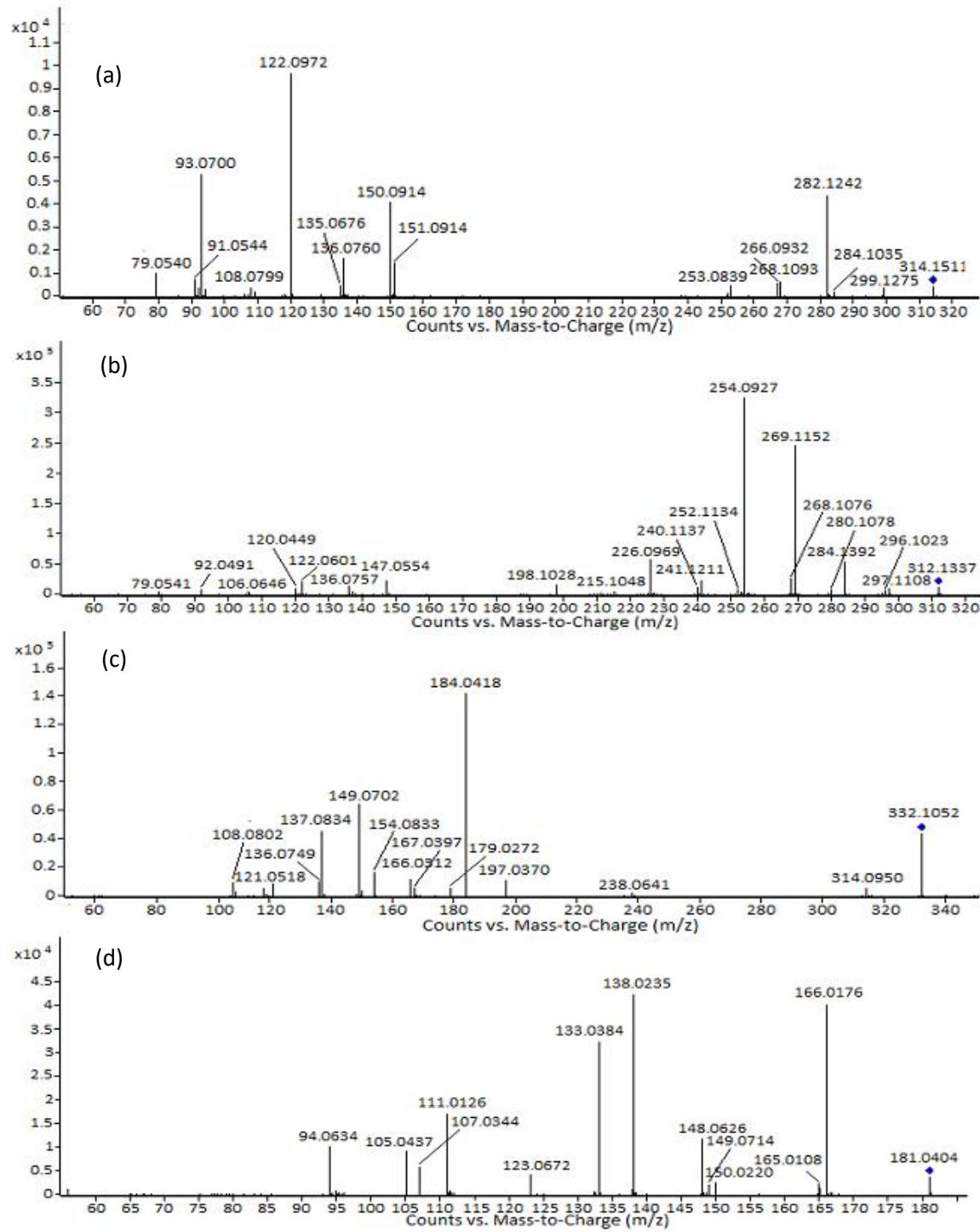


Figure.S2 UPLC/ESI/MS/MS Spectra of $[M+H]^+$ ions of OMP-4(a), OMP-5(b), OMP-6(c) and OMP-7(d) at 30 eV.

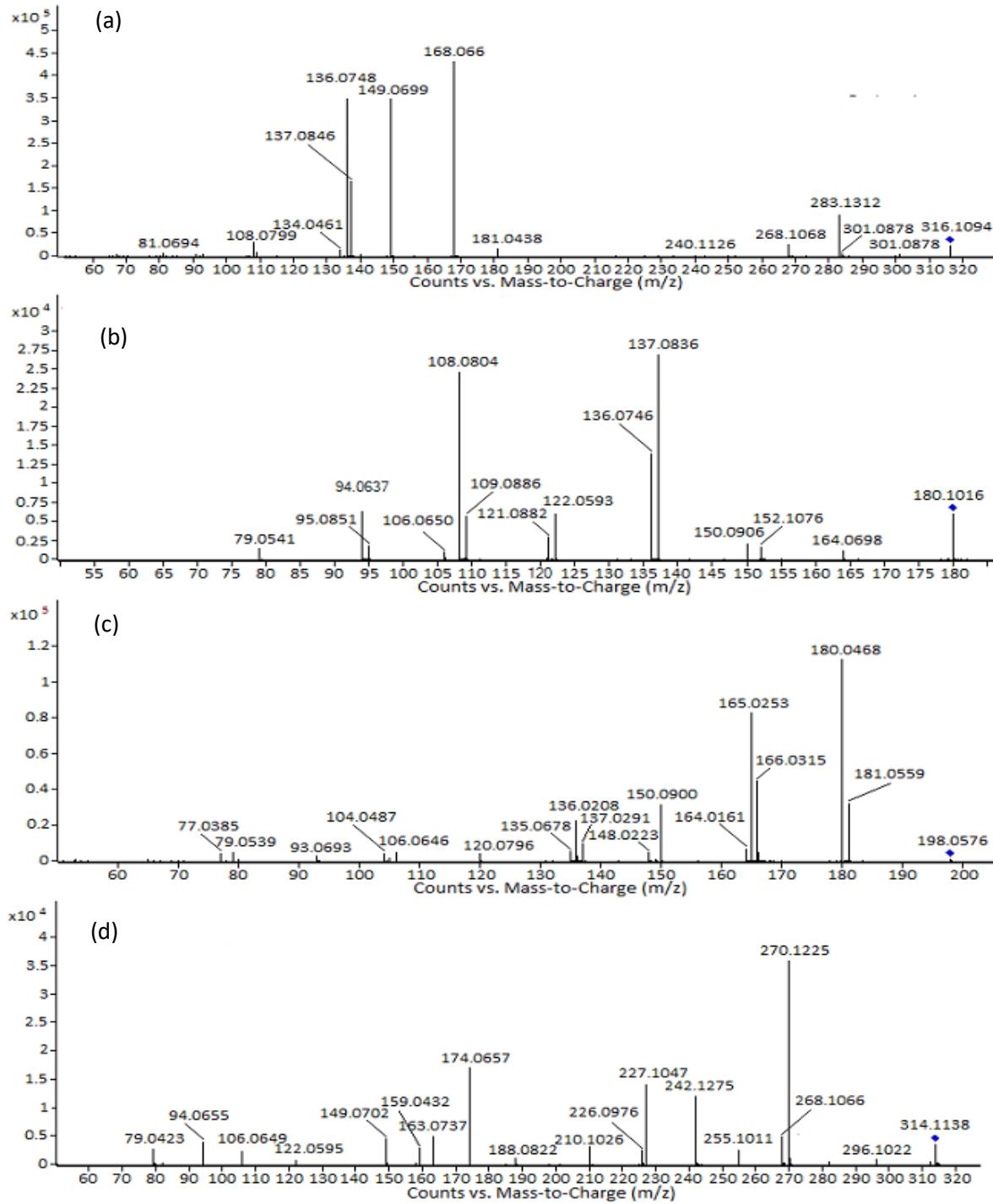


Figure.S3. UPLC/ESI/MS/MS Spectra of $[M+H]^+$ ions of OMP-8(a), OMP-9(b), OMP-10(c) and OMP-11(d) at 30 eV.

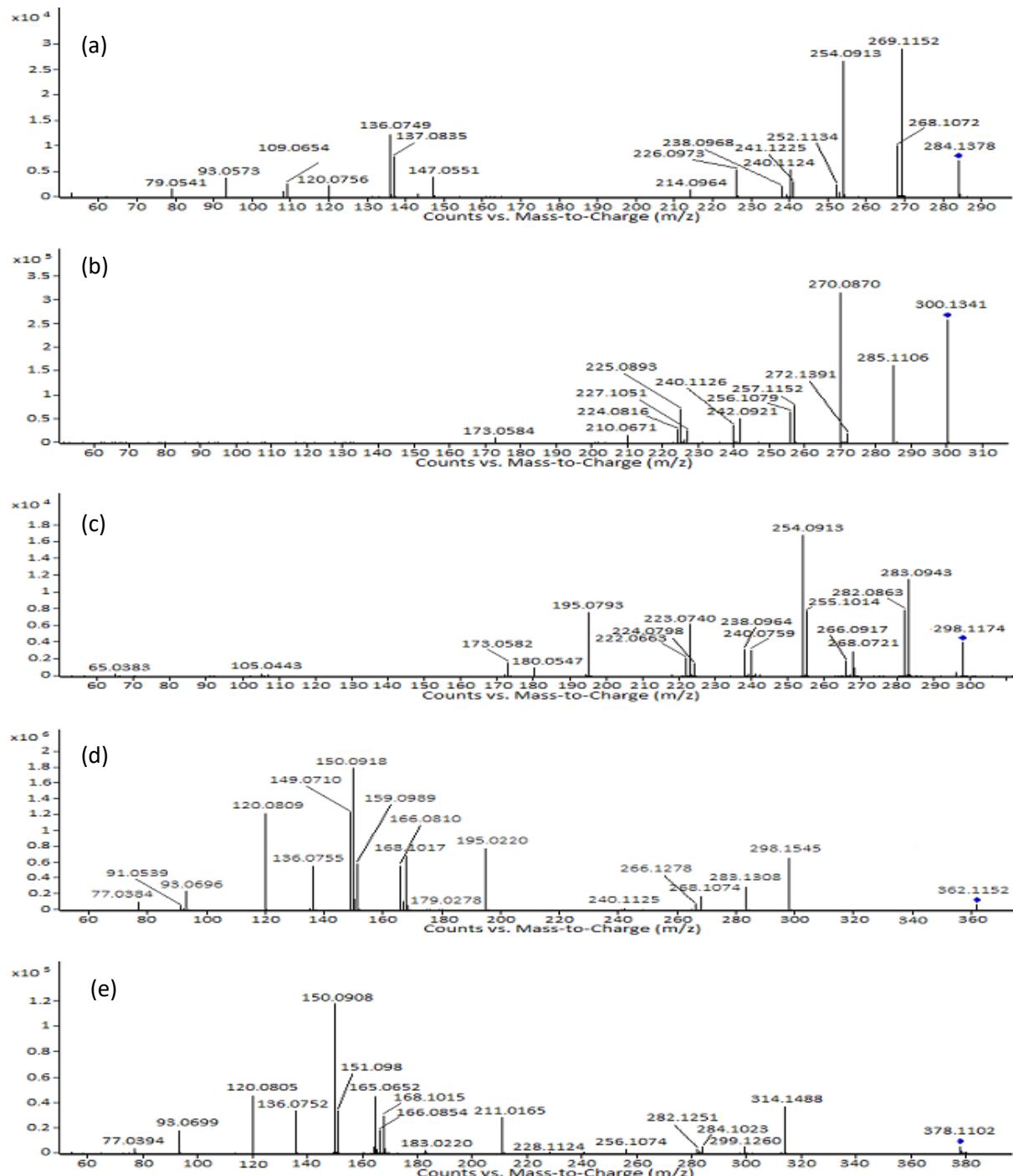


Figure.S4. UPLC/ESI/MS/MS Spectra of $[M+H]^+$ ions of OMP-12(a), OMP-13(b), OMP-14(c), OMP-15(d) and OMP-16(e) at 30 eV

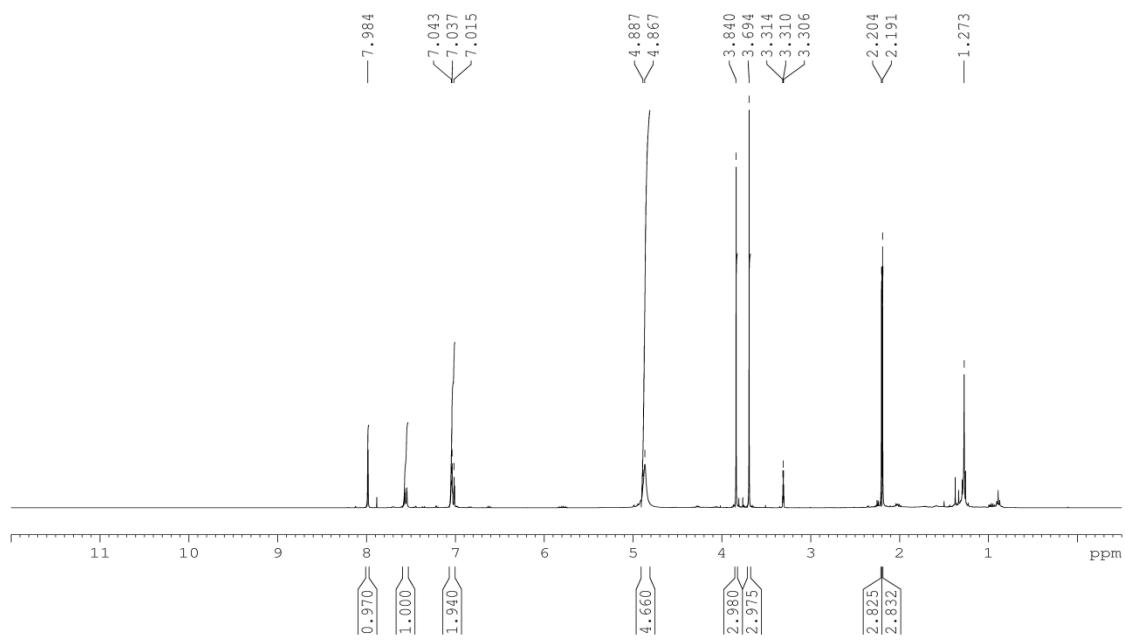


Figure.S5. ^1H NMR spectrum of OMP-15

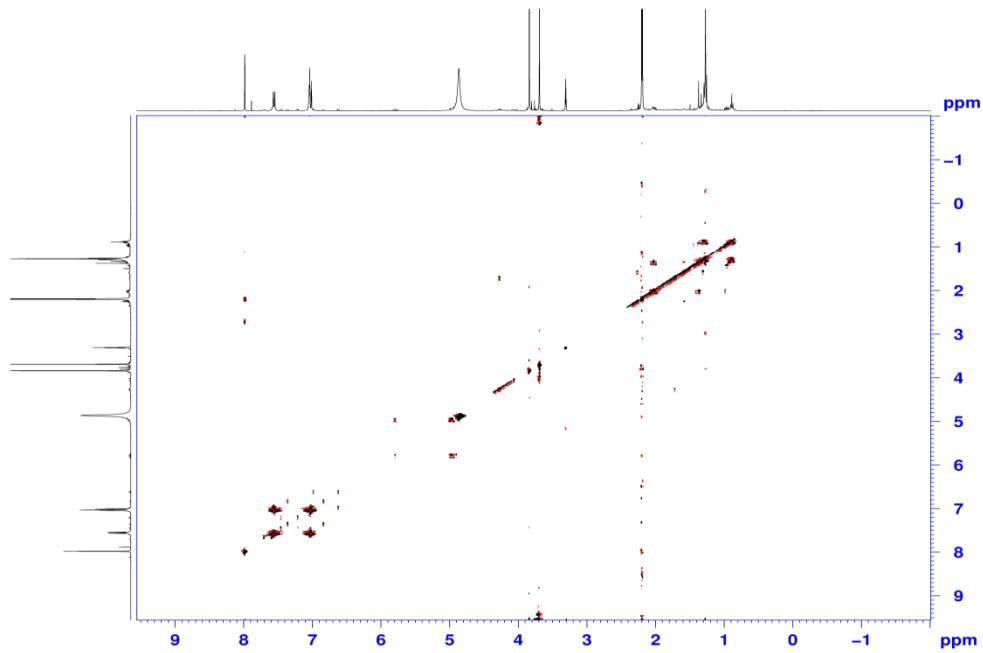


Figure.S6. COSY spectrum of OMP-15

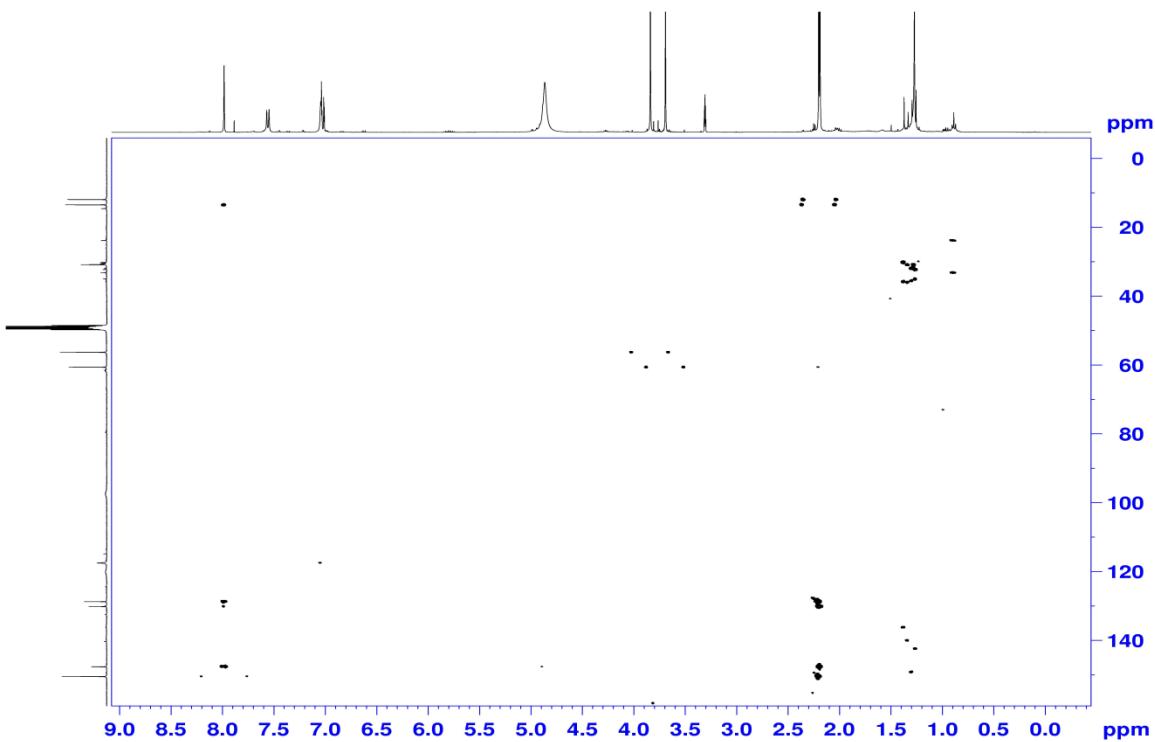


Figure. S7. HSQC spectrum of OMP-15

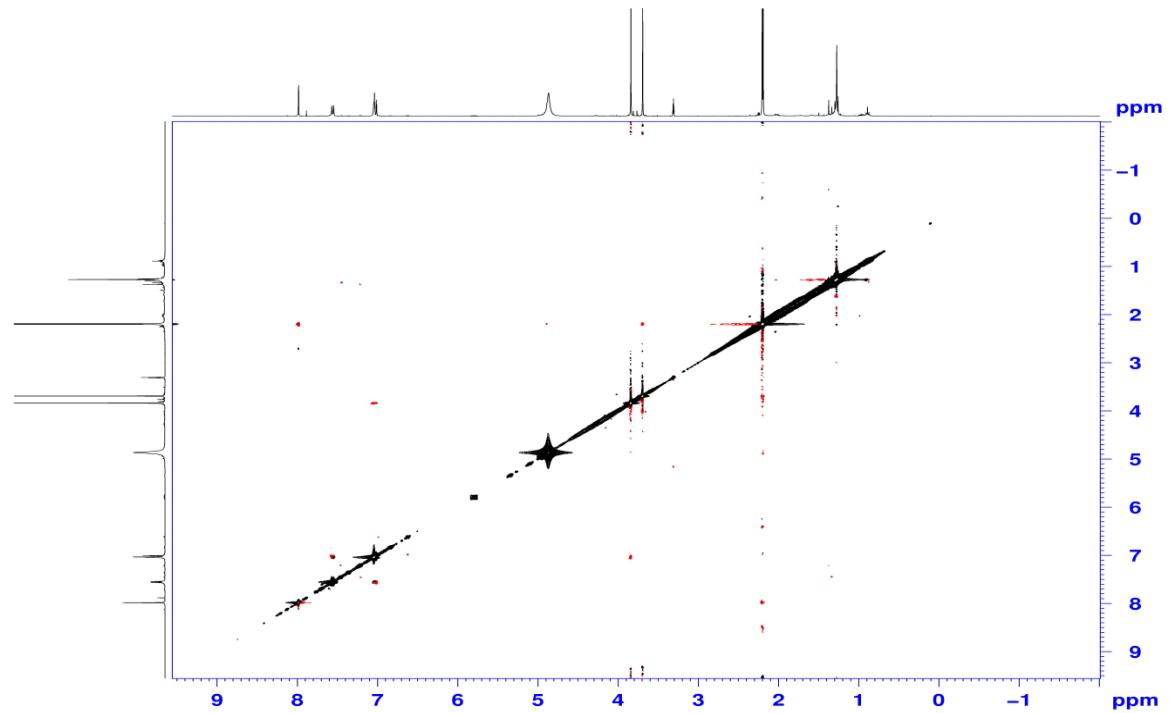


Figure. S8. NOESY spectrum of OMP-15

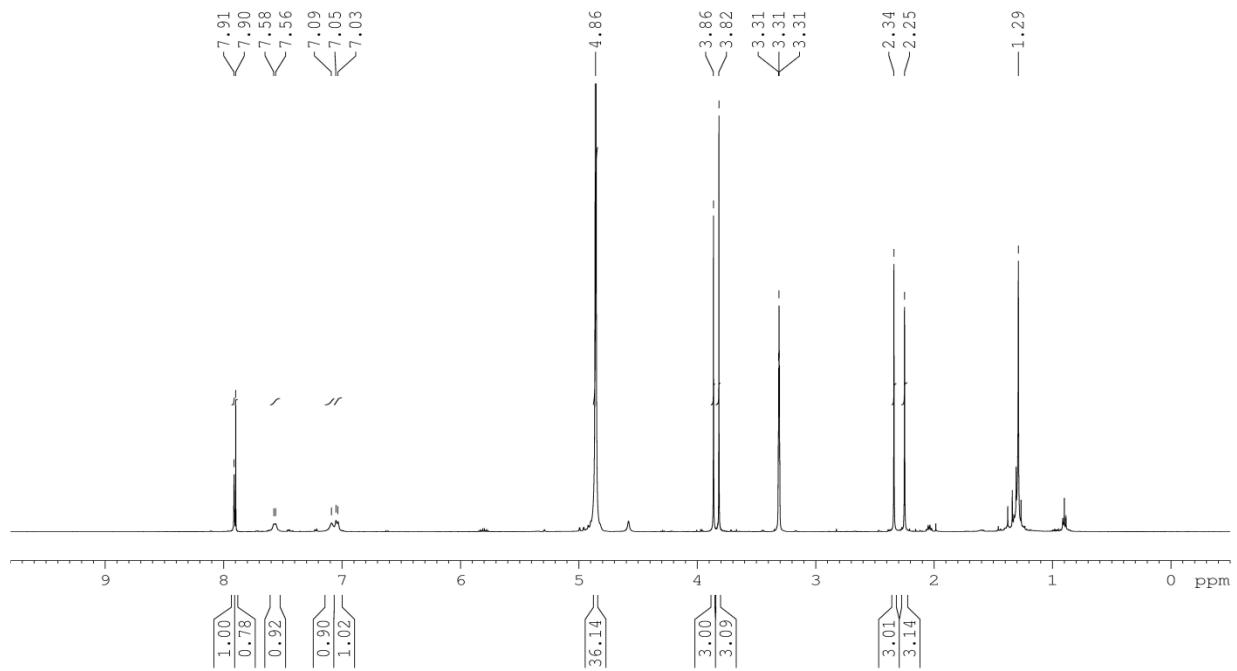


Figure.S9. ¹H NMR spectrum of OMP-16

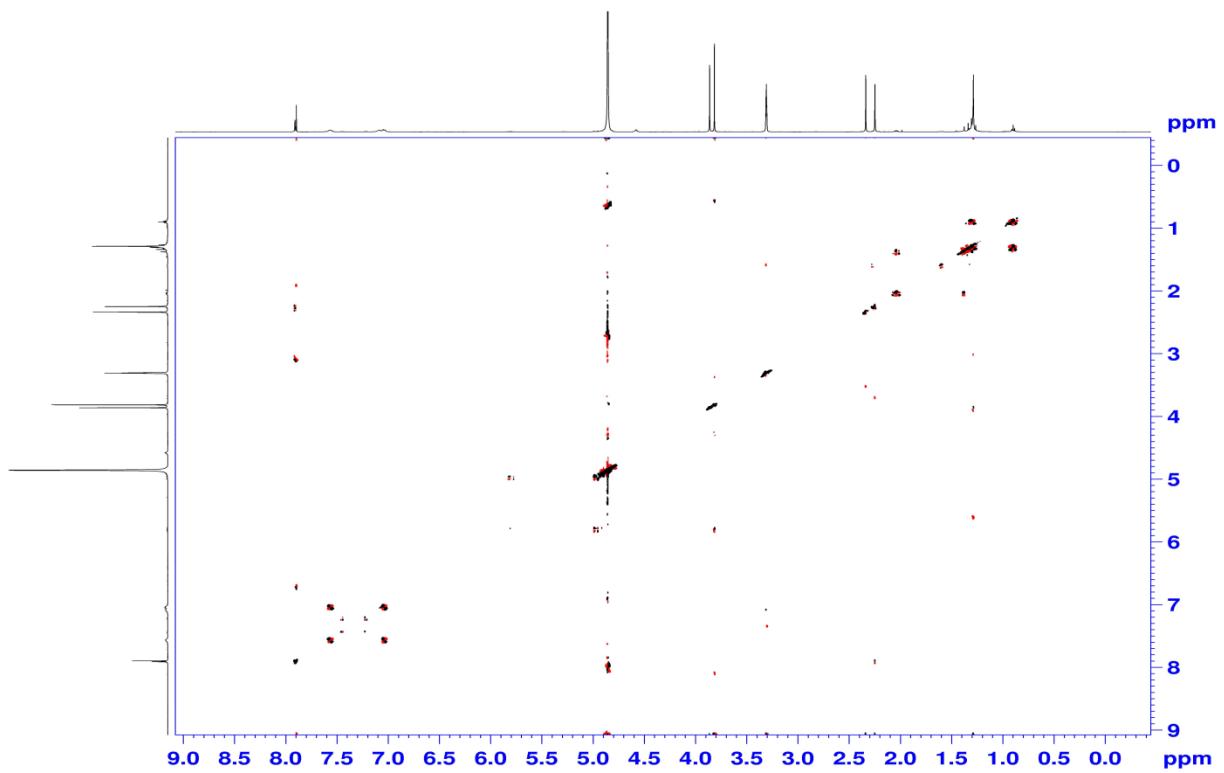


Figure.S10. COSY spectrum of OMP-16

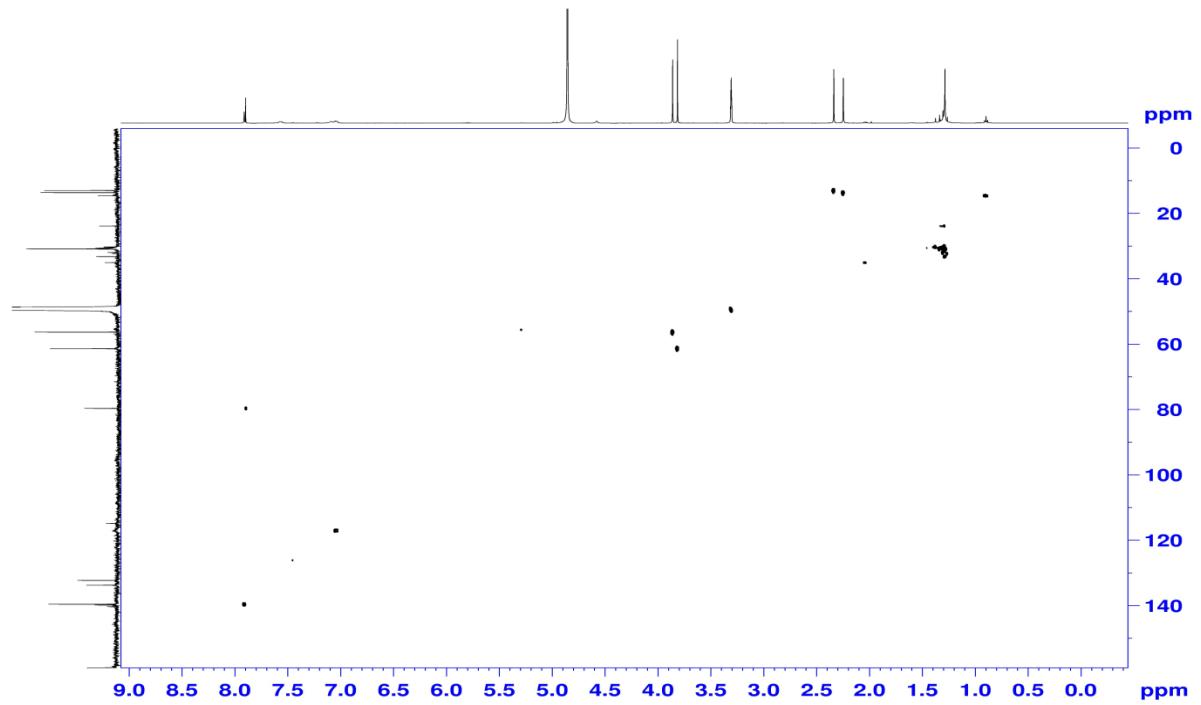


Figure. S11. HSQC spectrum of OMP-16

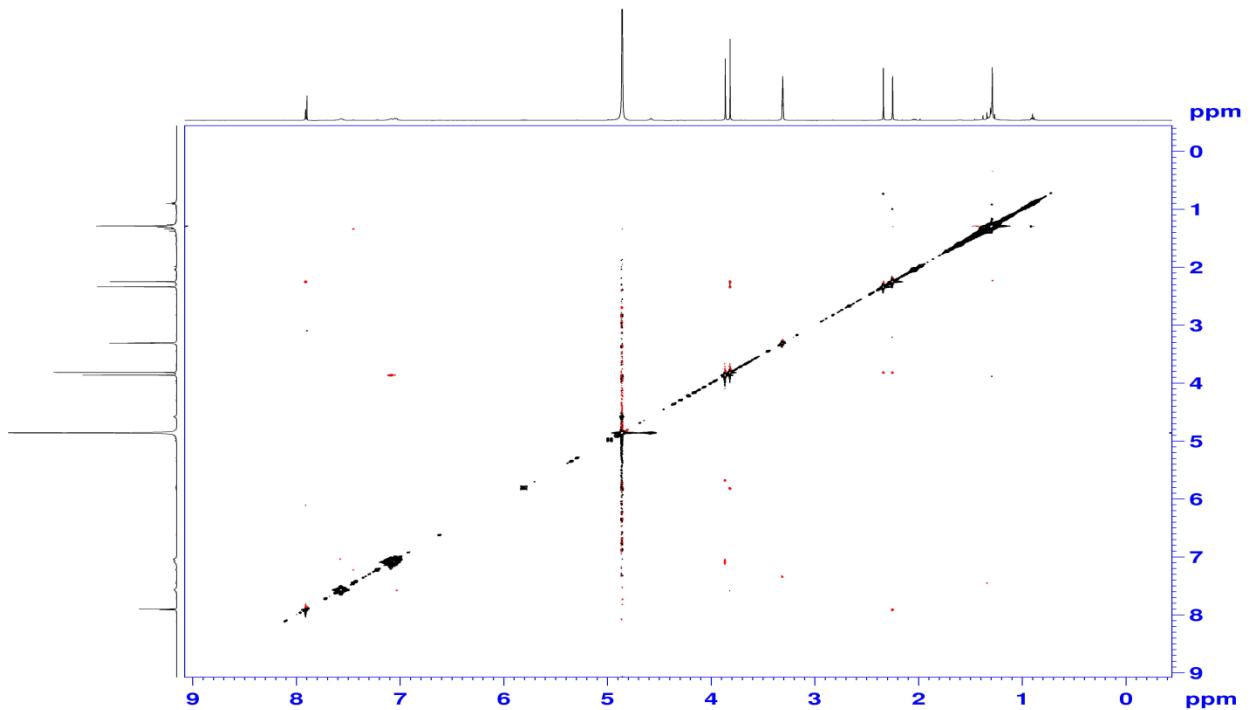


Figure.S12. NOESY spectrum of OMP-16

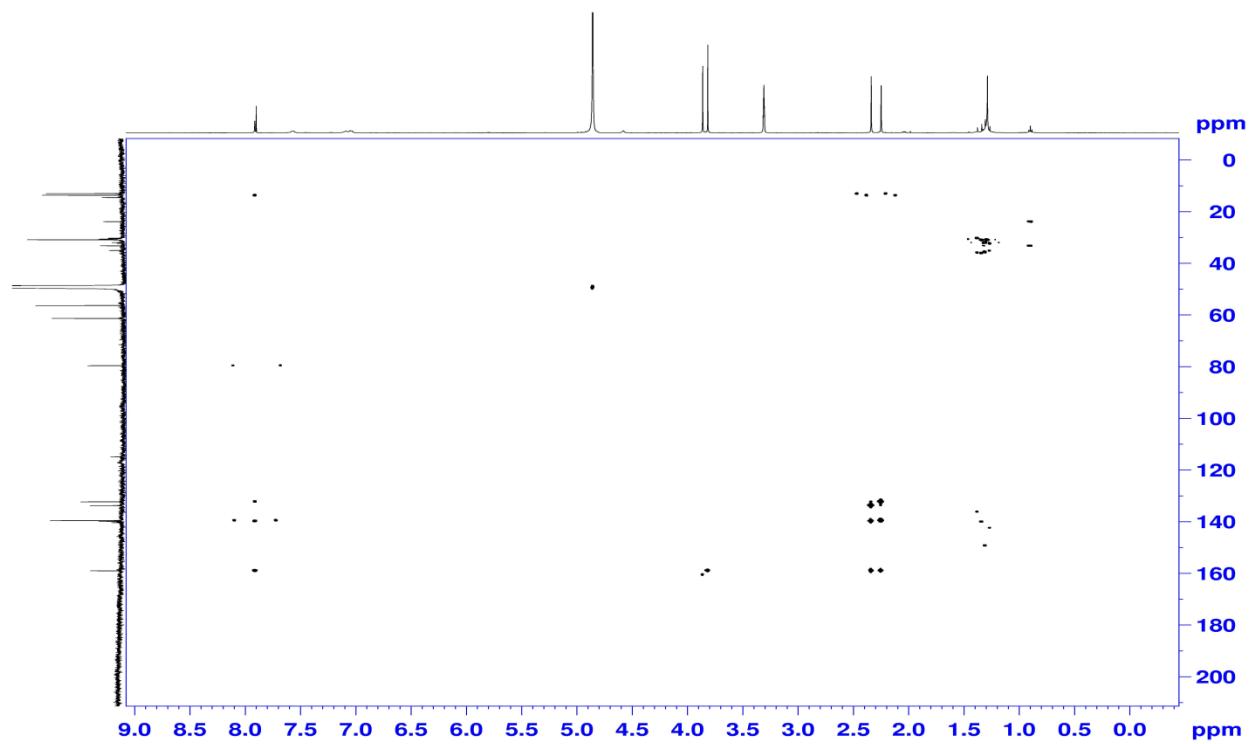


Figure.S13. HMBS spectrum of OMP-16

Table S1: Elemental composition for fragment ions of the OMP

Drug	Proposed molecular formula [M+H] ⁺	Observed (m/z)	Calculated (m/z)	Error (ppm)
OMP	C ₁₇ H ₂₀ N ₃ O ₃ S ⁺	346.1233	346.1219	-4.04
	C ₁₇ H ₁₈ N ₃ O ₂ S ⁺	328.1103	328.1114	3.35
	C ₁₇ H ₁₇ N ₃ O ₄₂ ⁺	295.1322	295.1320	-0.67
	C ₉ H ₁₂ NO ₂ S ⁺	198.0574	198.0583	4.54
	C ₉ H ₁₀ NOS ⁺	180.0469	180.0477	4.44
	C ₈ H ₇ N ₂ OS ⁺	179.0269	179.0273	2.23
	C ₉ H ₁₄ NO ₂ ⁺	168.1021	168.1019	-1.18
	C ₉ H ₁₃ NO ⁺	151.0991	151.0997	3.97
	C ₉ H ₁₂ NO ⁺	150.0908	150.0913	3.33
	C ₈ H ₉ N ₂ O ⁺	149.0715	149.0709	-4.02
	C ₈ H ₁₀ NO ⁺	136.0752	136.0756	2.93
	C ₇ H ₆ N ₂ O ⁺	134.0478	134.0480	1.49
	C ₇ H ₅ N ₂ O ⁺	133.0401	133.0396	-3.75
	C ₈ H ₁₁ N ⁺	121.0893	121.0891	-1.65

Table S2: Elemental composition for product ions of OMP-1 and OMP-2

Degradation	Proposed molecular formula [M+H] ⁺	Observed (<i>m/z</i>)	Calculated (<i>m/z</i>)	Error (ppm)
Products				
OMP-1	C ₁₇ H ₂₀ N ₃ O ₂ S ⁺	330.126	330.1270	3.02
	C ₁₆ H ₁₆ N ₃ O ₂ S ⁺	314.0945	314.0957	3.82
	C ₁₇ H ₁₉ N ₃ O ₂ ⁺	297.1471	297.1477	-2.01
	C ₁₆ H ₁₆ N ₃ O ₂ ⁺	282.1235	282.1237	0.70
	C ₁₆ H ₁₇ N ₃ O ⁺	267.1367	267.1371	1.49
	C ₁₅ H ₁₆ N ₃ O ⁺	254.1293	254.1287	-2.36
	C ₉ H ₁₂ NOS ⁺	182.0635	182.0634	-0.54
	C ₈ H ₈ NOS ⁺	166.0313	166.0321	4.81
	C ₉ H ₁₂ NO ⁺	150.0911	150.0913	1.33
	C ₈ H ₉ N ₂ O ⁺	149.071	149.0709	-0.67
	C ₈ H ₁₀ NO ⁺	136.0757	136.0756	-0.73
	C ₈ H ₁₀ N ⁺	120.0808	120.0807	-0.83
	C ₇ H ₉ ⁺	93.0699	93.0698	-1.07
	C ₇ H ₇ ⁺	91.0538	91.0542	4.39
OMP-2	C ₆ H ₅ ⁺	77.0388	77.0391	3.89
	C ₁₇ H ₂₀ N ₃ O ₂ ⁺	298.1548	298.1550	0.67
	C ₁₆ H ₁₇ N ₃ O ₂ ⁺	283.1331	283.1320	-3.88
	C ₁₆ H ₁₆ N ₃ O ₂ ⁺	282.1238	282.1237	-0.35
	C ₁₅ H ₁₄ N ₃ O ₂ ⁺	268.1073	268.1080	2.61
	C ₁₆ H ₁₆ N ₃ O ⁺	266.1277	266.1287	3.75
	C ₁₅ H ₁₆ N ₃ O ⁺	254.1291	254.1287	-1.57
	C ₁₄ H ₁₁ N ₃ O ₂ ⁺	253.0855	253.0851	-1.58
	C ₁₄ H ₁₄ N ₃ O ⁺	240.1124	240.1131	2.91
	C ₁₆ H ₁₆ N ₃ O ₂ ⁺	282.1228	282.1237	3.19
	C ₁₆ H ₁₆ N ₃ O ₂ ⁺	282.1243	282.1237	-2.12
	C ₁₅ H ₁₄ N ₃ O ₂ ⁺	268.1071	268.1080	3.35

Table S3: Elemental composition for product ions of OMP-3 and OMP-4

Degradation Products	Proposed molecular formula [M+H] ⁺	Observed (m/z)	Calculated (m/z)	Error (ppm)
OMP-3	C ₁₇ H ₁₈ N ₃ O ₂ S ⁺	328.1116	328.1114	-0.60
	C ₁₆ H ₁₄ N ₃ O ₂ ⁺	312.0812	312.0801	-3.52
	C ₁₅ H ₁₂ N ₃ O ₂ S ⁺	298.0642	298.0644	0.67
	C ₁₇ H ₁₇ N ₃ O ₂ ⁺	295.133	295.1320	-3.38
	C ₁₅ H ₁₄ N ₃ OS ⁺	284.0855	284.0852	-1.05
	C ₁₆ H ₁₄ N ₃ O ₂ ⁺	280.1082	280.1080	-0.71
	C ₁₅ H ₁₁ N ₃ O ₂ ⁺	265.0853	265.0845	-3.01
	C ₁₄ H ₁₃ N ₃ O ⁺	255.1002	255.1007	1.96
	C ₁₄ H ₁₂ N ₃ O ₂ ⁺	254.0923	254.0924	0.39
	C ₁₅ H ₁₄ N ₃ O ⁺	252.1124	252.1131	2.77
	C ₁₄ H ₁₁ N ₃ O ⁺	237.0897	237.0902	2.10
	C ₉ H ₁₀ NOS ⁺	180.0484	180.0477	-3.88
	C ₁₇ H ₂₀ N ₃ O ₃ ⁺	314.1511	314.1499	-3.81
OMP-4	C ₁₆ H ₁₇ N ₃ O ₃ ⁺	299.1275	299.1269	-2.00
	C ₁₇ H ₂₀ N ₃ O ₃ ⁺	314.1511	314.1499	-3.81
	C ₁₆ H ₁₇ N ₃ O ₃ ⁺	299.1275	299.1269	-2.00
	C ₁₅ H ₁₄ N ₃ O ₃ ⁺	284.1035	284.1029	-2.11
	C ₁₆ H ₁₆ N ₃ O ₂ ⁺	282.1242	282.1237	-1.77
	C ₁₅ H ₁₄ N ₃ O ₂ ⁺	268.1093	268.1080	-4.84
	C ₁₅ H ₁₂ N ₃ O ₂ ⁺	266.0932	266.0924	-3.00
	C ₁₄ H ₁₁ N ₃ O ₂ ⁺	253.0839	253.0851	4.74
	C ₈ H ₉ NO ⁺	135.0678	135.0684	4.44
	C ₈ H ₁₂ N ⁺	122.097	122.0964	-4.91
	C ₇ H ₁₀ N ⁺	108.0811	108.0807	-3.70

Table S4: Elemental composition for product ions of OMP-5.

Degradation	Proposed molecular formula [M+H] ⁺	Observed (<i>m/z</i>)	Calculated (<i>m/z</i>)	Error (ppm)
OMP-5	C ₁₇ H ₁₈ N ₃ O ₃ ⁺	312.1337	312.1342	1.60
	C ₁₆ H ₁₅ N ₃ O ₃ ^{·+}	297.1108	297.1113	1.68
	C ₁₆ H ₁₄ N ₃ O ₃ ⁺	296.1023	296.1029	2.02
	C ₁₆ H ₁₈ N ₃ O ₂ ⁺	284.1392	284.1393	0.35
	C ₁₆ H ₁₄ N ₃ O ₂ ^{·+}	280.1078	280.1080	0.71
	C ₁₅ H ₁₅ N ₃ O ₂ ^{·+}	269.1152	269.1164	4.45
	C ₁₆ H ₁₄ N ₃ O ₂ ^{·+}	268.1076	268.1080	1.49
	C ₁₄ H ₁₂ N ₃ O ₂ ⁺	254.0927	254.0924	-1.18
	C ₁₅ H ₁₄ N ₃ O ⁺	252.1134	252.1131	-1.18
	C ₁₄ H ₁₅ N ₃ O ^{·+}	241.1211	241.1215	1.65
	C ₁₄ H ₁₄ N ₃ O ⁺	240.1137	240.1131	-2.49
	C ₁₃ H ₁₂ N ₃ O ⁺	226.0969	226.0974	2.21
	C ₁₂ H ₁₃ N ₃ O ⁺	215.1048	215.1058	4.64
	C ₁₂ H ₁₂ N ₃ ⁺	198.1028	198.1025	-1.51
	C ₆ H ₆ N ⁺	92.0491	92.0494	3.25

Table S5: Elemental composition for product ions of OMP-6, OMP-7 & OMP-8

Degradation Products	Proposed molecular formula [M+H] ⁺	Observed (<i>m/z</i>)	Calculated (<i>m/z</i>)	Error (ppm)
OMP-6	C ₁₆ H ₁₈ N ₃ O ₃ S ⁺	332.105	332.1063	3.91
	C ₁₆ H ₁₆ N ₃ O ₂ S ⁺	314.0950	314.0957	2.22
	C ₈ H ₉ N ₂ O ₂ S ⁺	197.0370	197.0379	4.56
	C ₁₀ H ₁₀ NO ₂ S ⁺	184.0418	184.0426	4.34
	C ₈ H ₇ N ₂ OS ⁺	179.0272	179.0273	0.55
	C ₈ H ₈ NOS ⁺	166.0312	166.0321	5.42
	C ₈ H ₁₂ NO ₂ ⁺	154.0832	154.0826	-3.89
	C ₇ H ₁₀ N ⁺	108.0802	108.0807	4.62
	C ₈ H ₉ N ₂ OS ⁺	181.0434	181.0430	-2.20
	C ₇ H ₆ N ₂ OS ⁺	166.0196	166.0200	2.40
OMP-7	C ₇ H ₅ N ₂ OS ⁺	165.0109	165.0117	4.84
	C ₆ H ₆ N ₂ S ⁺	138.0245	138.0251	4.34
	C ₇ H ₇ N ₂ O ⁺	133.0399	133.0396	-2.25
	C ₇ H ₉ NO ⁺	123.0688	123.0684	-3.25
	C ₄ H ₃ N ₂ S ⁺	111.0016	111.0011	-4.50
	C ₆ H ₅ NO ⁺	107.0368	107.0371	2.80
	C ₆ H ₅ N ₂ ⁺	105.0451	105.0447	-3.80
OMP-8	C ₆ H ₈ N ⁺	94.0649	94.0651	2.12
	C ₁₆ H ₁₈ N ₃ O ₂ S ⁺	316.1099	316.1114	4.74
	C ₁₅ H ₁₅ N ₃ O ₂ S ⁺	301.0878	301.0885	2.32
	C ₁₅ H ₁₄ N ₃ OS ⁺	284.0839	284.0852	4.57
	C ₁₆ H ₁₇ N ₃ O ₂ ⁺	283.1312	283.1320	2.82
	C ₁₅ H ₁₄ N ₃ O ₂ ⁺	268.1068	268.1080	4.47
	C ₁₄ H ₁₄ N ₃ O ⁺	240.1126	240.1131	2.08
	C ₈ H ₉ N ₂ OS ⁺	181.0438	181.0430	-4.41
	C ₈ H ₁₁ NO ⁺	137.0844	137.0840	-2.91
	C ₆ H ₉ ⁺	81.0694	81.0698	4.93

Table S6: Elemental composition for product ions of OMP-9 and OMP-10.

Degradation	Proposed molecular formula [M+H] ⁺	Observed (<i>m/z</i>)	Calculated (<i>m/z</i>)	Error (ppm)
Products				
OMP-9	C ₁₀ H ₁₄ NO ₂ ⁺	180.1016	180.1019	1.66
	C ₉ H ₁₀ NO ₂ ⁺	164.0698	164.0706	4.87
	C ₉ H ₁₄ NO ⁺	152.1076	152.1069	-4.60
	C ₈ H ₁₁ NO ⁺ .	137.0836	137.0840	2.91
	C ₇ H ₁₁ N ⁺ .	109.0886	109.0891	4.58
	C ₇ H ₁₀ N ⁺	108.0804	108.0807	2.77
	C ₇ H ₈ N ⁺	106.065	106.0651	0.94
	C ₇ H ₁₁ ⁺	95.0851	95.0855	4.20
	C ₉ H ₁₂ NO ₂ S ⁺	198.0576	198.0583	3.53
OMP-10	C ₉ H ₁₁ NOS ⁺ .	181.0559	181.0561	1.10
	C ₉ H ₁₀ NOS ⁺	180.0468	180.0477	4.99
	C ₈ H ₈ NOS ⁺	166.0315	166.0321	3.61
	C ₈ H ₇ NOS ⁺ .	165.0253	165.0248	-3.02
	C ₈ H ₆ NOS ⁺	164.0161	164.0164	1.82
	C ₈ H ₆ NS ⁺	148.0223	148.0215	-5.40
	C ₇ H ₇ NS ⁺ .	137.0293	137.0299	4.37
	C ₇ H ₆ NS ⁺	136.0208	136.0215	5.14

Table S7: Elemental composition for product ions of OMP-11 and OMP-12.

Degradation	Proposed molecular formula [M+H] ⁺	Observed (<i>m/z</i>)	Calculated (<i>m/z</i>)	Error (ppm)
Products				
OMP-11	C ₁₆ H ₁₆ N ₃ O ₄ ⁺	314.1138	314.1135	-0.95
	C ₁₆ H ₁₄ N ₃ O ₃ ⁺	296.1022	296.1029	2.36
	C ₁₅ H ₁₆ N ₃ O ₂ ⁺	270.1228	270.1237	3.33
	C ₁₅ H ₁₄ N ₃ O ₂ ⁺	268.1066	268.1080	5.22
	C ₁₄ H ₁₃ N ₃ O ₂ ⁺	255.1011	255.1007	-1.56
	C ₁₄ H ₁₆ N ₃ O ⁺	242.1275	242.1287	4.95
	C ₁₃ H ₁₃ N ₃ O ⁺	227.1047	227.1058	4.84
	C ₁₃ H ₁₂ N ₃ O ⁺	226.0976	226.0974	-0.88
	C ₁₃ H ₁₂ N ₃ ⁺	210.1026	210.1031	2.37
	C ₁₀ H ₁₀ N ₃ O ⁺	188.0822	188.0818	-2.12
	C ₉ H ₈ N ₃ O ⁺	174.0657	174.0661	2.29
	C ₈ H ₉ N ₃ O ⁺	163.0737	163.0745	4.90
OMP-12	C ₈ H ₅ N ₃ O ⁺	159.0432	159.0427	-3.14
	C ₇ H ₈ NO ⁺	122.0595	122.0600	4.09
	C ₁₆ H ₁₈ N ₃ O ₂ ⁺	284.1378	284.1393	5.27
	C ₁₅ H ₁₅ N ₃ O ₂ ⁺	269.1152	269.1164	4.45
	C ₁₅ H ₁₄ N ₃ O ₂ ⁺	268.1072	268.1080	2.98
	C ₁₄ H ₁₂ N ₃ O ₂ ⁺	254.0913	254.0924	4.32
	C ₁₅ H ₁₄ N ₃ O ⁺	252.1134	252.1131	-1.18
	C ₁₄ H ₁₅ N ₃ O ⁺	241.1225	241.1215	-4.14
	C ₁₄ H ₁₄ N ₃ O ⁺	240.1124	240.1131	2.91
	C ₁₄ H ₁₂ N ₃ O ⁺	238.0968	238.0974	2.51
	C ₁₄ H ₁₂ N ₃ O ⁺	214.0964	214.0974	4.67
	C ₇ H ₉ O ⁺	109.065	109.0647	-2.75
	C ₆ H ₇ N ⁺	93.0573	93.0578	5.37

Table S8: Elemental composition for product ions of OMP-13 and OMP-14.

Degradation Products	Proposed molecular formula [M+H] ⁺	Observed (<i>m/z</i>)	Calculated (<i>m/z</i>)	Error (ppm)
OMP-13	C ₁₆ H ₁₈ N ₃ O ₃ ⁺	300.1341	300.1342	0.33
	C ₁₅ H ₁₅ N ₃ O ₃ ⁺ .	285.1106	285.1113	2.45
	C ₁₅ H ₁₈ N ₃ O ₂ ⁺	272.1391	272.1393	0.73
	C ₁₄ H ₁₂ N ₃ O ₃ ⁺	270.087	270.0873	1.11
	C ₁₄ H ₁₅ N ₃ O ₂ ⁺ .	257.1152	257.1164	4.66
	C ₁₄ H ₁₄ N ₃ O ₂ ⁺	256.1079	256.1080	0.39
	C ₁₃ H ₁₂ N ₃ O ₂ ⁺	242.0921	242.0924	1.23
	C ₁₄ H ₁₄ N ₃ O ⁺	240.1126	240.1131	2.08
	C ₁₃ H ₁₃ N ₃ O ⁺ .	227.1051	227.1058	3.08
	C ₁₃ H ₁₁ N ₃ O ⁺ .	225.0893	225.0902	3.99
	C ₁₃ H ₁₀ N ₃ O ⁺	224.0816	224.0818	0.89
	C ₁₂ H ₈ N ₃ O ⁺	210.0671	210.0661	-4.76
OMP-14	C ₉ H ₇ N ₃ O ⁺ .	173.0584	173.0589	2.88
	C ₁₆ H ₁₆ N ₃ O ₃ ⁺	298.1174	298.1186	4.02
	C ₁₅ H ₁₃ N ₃ O ₃ ⁺ .	283.0943	283.0956	4.59
	C ₁₅ H ₁₂ N ₃ O ₃ ⁺	282.0863	282.0873	3.54
	C ₁₄ H ₁₀ N ₃ O ₃ ⁺	268.0721	268.0716	-1.86
	C ₁₅ H ₁₂ N ₃ O ₂ ⁺	266.0917	266.0924	2.63
	C ₁₄ H ₁₃ N ₃ O ₂ ⁺ .	255.1014	255.1007	-2.74
	C ₁₄ H ₁₂ N ₃ O ₂ ⁺	254.0913	254.0924	4.32
	C ₁₃ H ₁₀ N ₃ O ₂ ⁺	240.0759	240.0767	3.33
	C ₁₃ H ₁₀ N ₃ O ⁺	224.0828	224.0818	-4.46
	C ₁₃ H ₉ N ₃ O ⁺ .	223.0735	223.0745	4.48
	C ₁₃ H ₈ N ₃ O ⁺	222.0672	222.0661	-4.95

Table S9: Elemental composition for product ions of OMP-15 and OMP-16.

Degradation Products	Proposed molecular formula [M+H] ⁺	Observed (<i>m/z</i>)	Calculated (<i>m/z</i>)	Error (ppm)
OMP-15	C ₁₇ H ₂₀ N ₃ O ₄ S ⁺	362.1152	362.1169	4.69
	C ₁₇ H ₂₀ N ₃ O ₂ ⁺	298.1545	298.1550	1.67
	C ₁₆ H ₁₇ N ₃ O ₂ [·]	283.1308	283.1320	4.23
	C ₁₅ H ₁₄ N ₃ O ₂ ⁺	268.1074	268.1080	2.23
	C ₁₆ H ₁₆ N ₃ O ⁺	266.1278	266.1287	3.38
	C ₁₄ H ₁₄ N ₃ O ⁺	240.1125	240.1131	2.49
	C ₈ H ₇ N ₂ O ₂ S ⁺	195.022	195.0222	1.02
	C ₈ H ₇ N ₂ OS ⁺	179.0278	179.0273	-2.79
	C ₉ H ₁₄ NO ₂ ⁺	168.1017	168.1019	1.18
	C ₉ H ₁₂ NO ₂ ⁺	166.081	166.0802	-4.81
	C ₁₇ H ₂₀ N ₃ O ₅ S ⁺	378.1102	378.1118	4.23
	C ₁₇ H ₂₀ N ₃ O ₃ ⁺	314.1488	314.1499	3.50
OMP-16	C ₁₆ H ₁₇ N ₃ O ₃ [·]	299.126	299.1269	3.00
	C ₁₅ H ₁₄ N ₃ O ₃ ⁺	284.1023	284.1029	2.11
	C ₁₆ H ₁₆ N ₃ O ₂ ⁺	282.1251	282.1237	-4.96
	C ₁₄ H ₁₄ N ₃ O ₂ ⁺	256.1074	256.1080	2.34
	C ₁₃ H ₁₄ N ₃ O ⁺	228.1124	228.1131	3.06
	C ₈ H ₇ N ₂ O ₃ S ⁺	211.0165	211.0171	2.84
	C ₇ H ₇ N ₂ O ₂ S ⁺	183.022	183.0222	1.09
	C ₉ H ₁₄ NO ₂ ⁺	168.1015	168.1019	2.37
	C ₈ H ₉ N ₂ O ₂ ⁺	165.0652	165.0658	3.63
	C ₈ H ₈ N ₂ O ₂ [·]	164.0577	164.0585	4.87

Table S10: ^1H chemical shifts and coupling constants ($J_{\text{H-H}}$) for **OMP-15** (400 MHz, MeOD- d_6)

Proton	(δ) ppm	multiplicity	3J (Hz)
H1	7.01	dd	$^3J_{\text{H2/H3}} = 2.3$ $^3J_{\text{H2/H6}} = 8.5$
2-OCH ₃	3.84	s	-----
H3	7.04	d	$^3J_{\text{H2/H3}} = 2.3$
H6	7.55	d	$^3J_{\text{H2/H6}} = 8.5$
H9	7.04	m	-----
10-CH ₂	4.88	s	-----
H13	7.98	s	-----
14-CH ₃	2.20	s	-----
15-OCH ₃	3.69	s	-----
16-CH ₃	2.19	s	-----

Table S11: ^1H chemical shifts and coupling constants ($J_{\text{H-H}}$) for **OMP-16** (400 MHz, MeOD- d_6)

Proton	(δ) ppm	multiplicity	3J (Hz)
H1	7.04	d	$^3J_{\text{H2/H6}} = 8.5$
2-OCH ₃	3.86	s	-----
H3	7.89	m	-----
H6	7.56	d	$^3J_{\text{H2/H6}} = 8.5$
H9	7.05	m	-----
10-CH ₂	4.85	s	-----
H13	7.91	s	-----
14-CH ₃	2.24	s	-----
15-OCH ₃	3.81	s	-----
16-CH ₃	2.23	s	-----

Table S12: IC₅₀ values^a (in µg) of OMP, OMP-15 and OMP-16

Sl. No	HEK-293 ^b	NIH3T3 ^c
OMP	32.85±2.45	28.21±2.01
OMP-15	62.70±1.90	56.40±4.83
OMP-16	57.05±3.75	63.76±2.75

^a 50% Inhibitory concentration after 48 h of drug treatment.

^b Normal human embryonic kidney cells (**HEK-293**)

^c Normal mouse embryo fibroblast cells (**NIH3T3**)