Reference Spectrum: perfluorokerosine (and air background)

Reference Mass	Intensity	Formula
4.002603	125	He
14.003074	1560	N
15.994915	440	O
17.002740	2500	OH
18.010565	3500	H_2O
28.006148	7800	N_2
30.998403	23	CF
31.989829	920	O_2
39.962383	10	Ar
43.989829	10	CO_2
51.004632	20	CF_2H
68.995210	10000	CF_3
92.995210	170	C_3F_3
99.993613	660	C_2F_4
111.993613	19	C_3F_4
118.992016	3200	C_2F_5
130.992016	2380	C_3F_5
149.990420	163	C_3F_6
161.990420	479	C_4F_6
168.988823	2070	C_3F_7
180.988823	1930	C_4F_7
192.988823	570	C_5F_7
204.988823	328	C_6F_7
218.985629	1093	C_4F_9
230.985629	1150	C_5F_9
242.985629	822	C_6F_9
254.985629	357	C_7F_9
268.982436	574	C_5F_{11}
280.982436	851	C_6F_{11}
292.982436	588	C_7F_{11}
304.982436	226	C_8F_{11}
318.979242	281	C_6F_{13}
330.979242	567	C_7F_{13}
342.979242	426	C_8F_{13}
354.979242	179	C_9F_{13}
368.976049	108	C_7F_{15}
380.976049	454	C_8F_{15}
392.976049	272	C_9F_{15}
404.976049	204	$C_{10}F_{15}$
416.976049	106	$C_{11}F_{15}$
430.972855	379	C_9F_{17}
442.972855	170	$C_{10}F_{17}$
454.972855	157	$C_{11}F_{17}$
466.972855	75	$C_{12}F_{17}$
480.969662	179	$C_{10}F_{19}$
492.969662	149	$C_{11}F_{19}$
504.969662	132	$C_{12}F_{19}$
516.969662	85	$C_{13}F_{19}$
530.966468	119	$C_{11}F_{21}$
542.966468	111	$C_{12}F_{21}$
554.966468	106	$C_{13}F_{21}$
566.966468	98	$C_{14}F_{21}$
580.963275	94	$C_{12}F_{23}$
592.963275	106	$C_{13}F_{23}$
604.963275	108	$C_{14}F_{23}$
616.963275	92	$C_{15}F_{23}$
630.960081	71	$C_{13}F_{25}$
642.960081	75	$C_{14}F_{25}$
654.960081	94	$C_{15}F_{25}$
666.960081	82	$C_{16}F_{25}$
680.956888	20	$C_{14}F_{27}$
692.956888	60	$C_{15}F_{27}$
704.956888	72	$C_{16}F_{27}$
716.956888	78	$C_{17}F_{27}$
730.953694	65	$C_{15}F_{29}$
742.953694	51	$C_{16}F_{29}$
754.953694	61	$C_{17}F_{29}$
766.953694	64	$C_{18}F_{29}$
780.950501	31	$C_{16}F_{31}$
792.950501	41	$C_{17}F_{31}$
804.950501	47	$C_{18}F_{31}$
816.950501	52	$C_{19}F_{31}$
830.947307	30	$C_{17}F_{33}$
842.947307	34	$C_{18}F_{33}$
854.947307	38	$C_{19}F_{33}$
866.947307	41	$C_{20}F_{33}$
880.944114	23	$C_{18}F_{35}$
892.944114	27	$C_{19}F_{35}$
904.944114	28	$C_{20}F_{35}$
916.944114	35	$C_{21}F_{35}$
930.940920	20	$C_{19}F_{37}$
942.940920	24	$C_{20}F_{37}$
954.940920	21	$C_{21}F_{37}$
966.940920	26	$C_{22}F_{37}$
980.937727	14	$C_{20}F_{39}$
992.937727	16	$C_{21}F_{39}$

Reference Spectrum: cesium iodide

Reference Mass	Intensity	Formula
132.905355	2000	Cs^+
265.810710	1000	$Cs2^+$
392.715187	6000	$(CsI)Cs^+$
652.525019	2260	$(CsI)_2Cs^+$
912.334851	640	$(CsI)_3Cs^+$
1,172.144683	230	$(CsI)_4Cs^+$
1,431.954515	80	$(CsI)_5Cs^+$
1,691.764347	90	$(CsI)_6Cs^+$
1,951.574179	30	$(CsI)_7Cs^+$
2,211.384011	20	$(CsI)_8Cs^+$
2,471.193843	20	$(CsI)_9Cs^+$
2,731.003675	20	$(CsI)_{10}Cs^+$
2,990.813507	20	$(CsI)_{11}Cs^+$
3,250.623339	25	$(CsI)_{12}Cs^+$
3,510.433171	23	$(CsI)_{13}Cs^+$
3,770.243003	21	$(CsI)_{14}Cs^+$
4,030.052835	19	$(CsI)_{15}Cs^+$
4,289.862667	17	$(CsI)_{16}Cs^+$
4,549.672499	16	$(CsI)_{17}Cs^+$
4,809.482331	15	$(CsI)_{18}Cs^+$

Reference Mass	Intensity	Formula
5,069.292163	14	$(CsI)_{19}Cs^+$
5,329.101995	14	$(CsI)_{20}Cs^+$
5,588.911827	13	$(CsI)_{21}Cs^+$
5,848.721659	13	$(CsI)_{22}Cs^+$
6,108.531491	13	$(CsI)_{23}Cs^+$
6,368.341323	12	$(CsI)_{24}Cs^+$
6,628.151155	12	$(CsI)_{25}Cs^+$
6,887.960987	12	$(CsI)_{26}Cs^+$
7,147.770819	12	$(CsI)_{27}Cs^+$
7,407.580651	11	$(CsI)_{28}Cs^+$
7,667.390483	11	$(CsI)_{29}Cs^+$
7,927.200315	11	$(CsI)_{30}Cs^+$
8,187.010147	11	$(CsI)_{31}Cs^+$
8,446.819979	10	$(CsI)_{32}Cs^+$
8,706.629811	10	$(CsI)_{33}Cs^+$
8,966.439643	10	$(CsI)_{34}Cs^+$
9,226.249475	10	$(CsI)_{35}Cs^+$
9,486.059307	9	$(CsI)_{36}Cs^+$
9,745.869139	9	$(CsI)_{37}Cs^+$
10,005.678971	8	$(CsI)_{38}Cs^+$

Reference Spectrum: poly(ethylene glycol) - sodium adducts

Reference Mass	Intensity	Formula
173.079	100	$H(OCH_2CH_2)_3OHNa^+$
217.105	300	$H(OCH_2CH_2)_4OHNa^+$
261.131	312	$H(OCH_2CH_2)_5OHNa^+$
305.158	453	$H(OCH_2CH_2)_6OHNa^+$
349.184	638	$H(OCH_2CH_2)_7OHNa^+$
393.210	764	$H(OCH_2CH_2)_8OHNa^+$
437.236	809	$H(OCH_2CH_2)_9OHNa^+$
481.263	851	$H(OCH_2CH_2)_{10}OHNa^+$
525.289	931	$H(OCH_2CH_2)_{11}OHNa^+$
569.315	1000	$H(OCH_2CH_2)_{12}OHNa^+$
613.341	891	$H(OCH_2CH_2)_{13}OHNa^+$
657.367	762	$H(OCH_2CH_2)_{14}OHNa^+$
701.394	549	$H(OCH_2CH_2)_{15}OHNa^+$
745.420	435	$H(OCH_2CH_2)_{16}OHNa^+$
789.446	370	$H(OCH_2CH_2)_{17}OHNa^+$
833.472	287	$H(OCH_2CH_2)_{18}OHNa^+$
877.499	185	$H(OCH_2CH_2)_{19}OHNa^+$
921.525	184	$H(OCH_2CH_2)_{20}OHNa^+$
965.551	182	$H(OCH_2CH_2)_{21}OHNa^+$
1009.577	234	$H(OCH_2CH_2)_{22}OHNa^+$
1053.603	228	$H(OCH_2CH_2)_{23}OHNa^+$
1097.630	164	$H(OCH_2CH_2)_{24}OHNa^+$

Reference Mass	Intensity	Formula
1141.656	100	$H(OCH_2CH_2)_{25}OHNa^+$
1185.682	75	$H(OCH_2CH_2)_{26}OHNa^+$
1229.708	50	$H(OCH_2CH_2)_{27}OHNa^+$
1273.735	25	$H(OCH_2CH_2)_{28}OHNa^+$
1317.761	10	$H(OCH_2CH_2)_{29}OHNa^+$
1361.787	10	$H(OCH_2CH_2)_{30}OHNa^+$
1405.813	9	$H(OCH_2CH_2)_{31}OHNa^+$
1449.839	8	$H(OCH_2CH_2)_{32}OHNa^+$
1493.866	8	$H(OCH_2CH_2)_{33}OHNa^+$
1537.892	7	$H(OCH_2CH_2)_{34}OHNa^+$
1581.918	7	$H(OCH_2CH_2)_{35}OHNa^+$
1625.944	6	$H(OCH_2CH_2)_{36}OHNa^+$
1669.970	6	$H(OCH_2CH_2)_{37}OHNa^+$
1713.997	6	$H(OCH_2CH_2)_{38}OHNa^+$
1758.023	5	$H(OCH_2CH_2)_{39}OHNa^+$
1802.049	5	$H(OCH_2CH_2)_{40}OHNa^+$
1846.075	5	$H(OCH_2CH_2)_{41}OHNa^+$
1890.102	5	$H(OCH_2CH_2)_{42}OHNa^+$
1934.128	4	$H(OCH_2CH_2)_{43}OHNa^+$
1978.154	4	$H(OCH_2CH_2)_{44}OHNa^+$
2022.180	4	$H(OCH_2CH_2)_{45}OHNa^+$
2066.206	3	$H(OCH_2CH_2)_{46}OHNa^+$

Reference Spectra: peptides and proteins - proton adducts

Myoglobin

average MW = 16,951.6 amu

m / z	z	intensity
679.07	25	2140
707.32	24	4280
738.03	23	6090
771.53	22	6290
808.22	21	7180
848.58	20	8000
893.19	19	5890
942.76	18	4220
998.15	17	3150
1,060.48	16	2370
1,131.11	15	1410
1,211.83	14	510
1,304.97	13	230
1,413.63	12	190
1,542.05	11	40
1,696.16	10	20
1,884.51	9	10
2,119.95	8	10
2,422.65	7	10

Lysozyme

average MW = 14,302.2 amu

m / z	z	intensity
1,101.39	13	150
1,193.09	12	520
1,301.46	11	900
1,431.52	10	2840
1,590.45	9	6420
1,789.13	8	8000
2,044.58	7	3250
2,385.20	6	210

Gramicidin S

average MW = 1,141.46 amu

m / z	z	intensity
571.73	2	1000

accurate MW = 1,140.71 amu

m / z	z	intensity
571.36	2	1000

Insulin

average MW = 5,733.5 amu

m / z	z	intensity
956.58	6	500
1147.70	5	1200
1434.38	4	300
1912.17	3	100
2867.75	2	50

Albumin

average MW = 66,266 amu

m / z	z	intensity
1,105.43	60	200
1,124.15	59	200
1,143.52	58	200
1,163.56	57	275
1,184.32	56	300
1,205.84	55	500
1,228.15	54	750
1,251.30	53	1000
1,275.35	52	950
1,300.33	51	700
1,326.32	50	800
1,353.37	49	780
1,381.54	48	850
1,410.91	47	780
1,441.57	46	790
1,473.58	45	600
1,507.05	44	650
1,542.07	43	700
1,578.76	42	500
1,617.24	41	530
1,657.65	40	480
1,700.13	39	370
1,744.84	38	340
1,791.97	37	280
1,841.72	36	220
1,894.31	35	200
1,950.00	34	150
2,009.06	33	125
2,071.81	32	100
2,138.61	31	75
2,209.87	30	60
2,286.03	29	50
2,367.64	28	40
2,455.30	27	25