

**Table. S1. The detail data for 411 phenolic compounds.**

No.	Compounds	Formula	Class I	Class II	CAS	Q1 (Da)	Q3 (Da)	Molecular weight (Da)	Ionization model	LF-OMTMS-D-1	LF-OMTMS-D-2	LF-OMTMS-D-3	MF-OMTMS-D-1	MF-OMTMS-D-2	MF-OMTMS-D-3	HF-OMTMS-D-1	HF-OMTMS-D-2	HF-OMTMS-D-3
1	1-O-p-Coumaroylquinic acid	C16H18O8	Phenolic acids	Phenolic acids	-	337.09	163.04	338.1002	[M-H]-	21296398	14902495.2	21428995.6	20670086.7	21733345.8	14248843.9	21202013.4	19982307.5	22732608.9
2	2-Hydroxycinnamic acid*	C9H8O3	Phenolic acids	Phenolic acids	583-17-5	163.04	119.05	164.0473	[M-H]-	11702959.9	10889151.1	10546549	10235525	10080350.3	10128075.3	14582851.4	14189657.7	13865588.7
3	o-Hydroxycinnamic Acid*	C9H8O3	Phenolic acids	Phenolic acids	5801-57-0	163.0401	119.0502	164.0473	[M-H]-	11484080.1	11357105.5	11321427.9	10374426.5	10119731.4	10238949.7	13246908.5	14873876.3	14013284.8
4	3-Hydroxycinnamic Acid*	C9H8O3	Phenolic acids	Phenolic acids	14755-02-3	163.04	119.05	164.0473	[M-H]-	10174947.9	11073831.7	10269587.5	9745958.58	9401503.95	9845393.46	13637118.3	14054314.9	14139235
5	Butyl isobutyl phthalate*	C16H22O4	Phenolic acids	Phenolic acids	17851-53-5	279.16	149.03	278.1518	[M+H]+	11071447.8	10278557.2	12307095.8	8649993.58	10247829	9184439.39	9708835.52	9706888	10783181
6	4-O-Methylgallic Acid	C8H8O5	Phenolic acids	Phenolic acids	4319-02-2	183.03	124.02	184.0372	[M-H]-	1908573.42	2230906.26	2075349.38	5283832.11	4507638.31	5285518.21	9004367.93	9663017.17	11061022.2
7	Methyl gallate	C8H8O5	Phenolic acids	Phenolic acids	99-24-1	183.03	124.02	184.0372	[M-H]-	1639766.93	1845745.97	1861219.3	4596875.12	4004415.44	4460316.52	7442354.24	7909577.23	9224934.07
8	3-O-p-Coumaroylquinic acid	C16H18O8	Phenolic acids	Phenolic acids	87099-71-6	337.09	191.06	338.1002	[M-H]-	6870805.25	7136648.59	7047089.74	7362037.14	6657524.44	7202262.83	7223062.97	7745198.68	7798558.15
9	4-(3,4,5-Trihydroxybenzoyl)benzoic acid	C14H10O7	Phenolic acids	Phenolic acids	-	289.04	137.02	290.0427	[M-H]-	7082310.23	6764209.51	5080971.72	5453492.9	4743469.84	5147226.73	6505821.73	4972151.24	7055673.61
10	Phthalic anhydride	C8H4O3	Phenolic acids	Phenolic acids	85-44-9	149.02	65.04	148.016	[M+H]+	7374407.55	7225989.86	8174042.31	7100987.46	7126100.42	5165476.37	5355508.35	6928134.32	6202811.26
11	Ferulic acid*	C10H10O4	Phenolic acids	Phenolic acids	537-98-4	193.05	134.04	194.0579	[M-H]-	4534444.84	4191517.32	4261634.13	4844286.08	4437516.71	4424536.87	5229883.2	5090616.61	5126196.42
12	3-Galloylquinic acid	C14H16O10	Phenolic acids	Phenolic acids	17365-11-6	343.07	191.06	344.0751	[M-H]-	3498357.24	3378167.91	3169330.56	4135508.8	4016862.62	4218911.06	4045162.17	4330015.55	4308978.89
13	5-O-p-Coumaroylquinic acid	C16H18O8	Phenolic acids	Phenolic acids	1899-30-5	337.09	191.06	338.1002	[M-H]-	2960321.06	3327446.52	3501419.94	3662756.27	3567016.82	3845672.16	3960694.27	4195955.97	4096184.45
14	Dimethyl phthalate	C10H10O4	Phenolic acids	Phenolic acids	131-11-3	195.06	163.04	194.0579	[M+H]+	4971658.9	6031624.99	4717620.12	3110305.29	3963354	4178728.31	4147008.73	3878484.55	4215180.49
15	4-Hydroxybenzoic acid	C7H6O3	Phenolic acids	Phenolic acids	99-96-7	137.02	93.03	138.0317	[M-H]-	3058025.61	3159386.16	2923961.22	3072831.12	3158008.42	3072402.47	3833794.25	3770062.88	3722624.21
16	4-Hydroxybenzaldehyde	C7H6O2	Phenolic acids	Phenolic acids	123-08-0	121.03	92.03	122.0368	[M-H]-	3542189.6	3655526	3445210.69	3160460.73	2835170.56	2656221.14	3195330.63	3048636.5	3106045.13
17	2,5-Dihydroxybenzaldehyde	C7H6O3	Phenolic acids	Phenolic acids	1194-98-5	137.02	93.03	138.0317	[M-H]-	2413115.61	2532170.59	2251703.09	2452020.85	2471300.13	2458317.07	2925034.73	3097795.72	2946586.78
18	Isoferulic Acid*	C10H10O4	Phenolic acids	Phenolic acids	25522-33-2	193.0506	134.0374	194.0579	[M-H]-	2701623.19	2461465.16	2555785.23	2578774.79	2637701.7	2733818.27	3075105.33	3018062.22	2821667.4
19	Caffeic acid	C9H8O4	Phenolic acids	Phenolic acids	331-39-5	179.03	135.05	180.0423	[M-H]-	1779940.56	1783909.98	1565851.87	2979366.16	2990165.95	2935740.88	2821906.27	2552963.37	2510066.49
20	Gallic acid	C7H6O5	Phenolic acids	Phenolic acids	149-91-7	169.01	125.02	170.0215	[M-H]-	1939874.56	1845183.9	1627606.25	2312807.78	2284382.49	2260598.55	2328110.5	2517485.33	2379630.2
21	2-(Formylamino)benzoic acid	C8H7NO3	Phenolic acids	Phenolic acids	3342-77-6	164.04	120.05	165.0426	[M-H]-	1971785.84	1763745.51	1824241.35	1692164.88	1685718.67	1604513.07	2198784.79	2211278.27	2126756.08
22	Vanillin; 4-Hydroxy-3-Methoxybenzaldehyde*	C8H8O3	Phenolic acids	Phenolic acids	121-33-5	151.04	136.02	152.0473	[M-H]-	2254368.65	1930479	2126812.62	1939643.9	2082162.29	2031453.36	2019461.67	2372500.53	2075203
23	2,5-Dihydroxybenzoic acid; Gentisic Acid*	C7H6O4	Phenolic acids	Phenolic acids	490-79-9	153.02	109.03	154.0266	[M-H]-	2342169.36	2329211.34	2329523.03	2204344.25	2059050.05	2357386.34	1973992.24	2080327.44	2124394.75
24	2,3-Dihydroxybenzoic Acid*	C7H6O4	Phenolic acids	Phenolic acids	303-38-8	153.02	109.03	154.0266	[M-H]-	2342169.36	2329211.34	2329523.03	2204344.25	2059050.05	2357386.34	1973992.24	2080327.44	2124394.75
25	3,4-Dihydroxybenzoic acid (Protocatechuic acid)*	C7H6O4	Phenolic acids	Phenolic acids	99-50-3	153.02	109.03	154.0266	[M-H]-	2466642.51	2403845.31	2260731.63	2233766.3	2010634.14	2076159.69	1993379.29	1997891.62	2181255.23
26	3-O-Methylgallic acid	C8H8O5	Phenolic acids	Phenolic acids	3934-84-7	183.03	124.02	184.0372	[M-H]-	1405659.69	1370557.79	1546313.29	1420482.54	1462529.15	1469950.3	1500293.88	1454404.23	1563933.04
27	Coniferin	C16H22O8	Phenolic acids	Phenolic acids	531-29-3	341.12	179.07	342.1315	[M-H]-	1135655.5	966010.304	1109370.62	1392240.57	1330933.05	1488469.33	1266152	1458409.03	1492672.92
28	Nordihydrocapsiate	C17H26O4	Phenolic acids	Phenolic acids	220012-53-3	293.18	221.16	294.1831	[M-H]-	1373675.77	1674848.33	1446870.01	1009801.81	1232574.26	1600082.14	1274003.68	1336727.8	1191364.74
29	Methyl cumalate*	C7H6O4	Phenolic acids	Phenolic acids	6018-41-3	153.02	109.03	154.0266	[M-H]-	1445859.24	1231188.11	1251315.11	1250822.75	1216791.51	1318675.72	1096351.34	1144797.72	1103544.47
30	4-Methoxycinnamaldehyde	C10H10O2	Phenolic acids	Phenolic acids	1963-36-6	163.08	91.05	162.0681	[M+H]+	1243590.38	1387805.82	1485428.86	1158803.82	1214953.02	1286335.58	1121625.63	1073411.17	1043180.69
31	Protocatechuic acid 1-O-(Glucosylvanilloyl)*	C21H22O12	Phenolic acids	Phenolic acids	-	465.1	303.05	466.1111	[M-H]-	511603.74	482634.43	443232.007	739135.838	652690.659	625912.341	867805.378	887829.337	955663.305
32	1-O-Salicyloyl-β-D-glucose*	C13H16O8	Phenolic acids	Phenolic acids	60517-74-0	299.08	137.02	300.0845	[M-H]-	632258.831	569863.945	582547	1001252.82	1098266.5	1153194.71	845789.207	862957.039	913109.615
33	Glucosyloxybenzoic acid*	C13H16O8	Phenolic acids	Phenolic acids	-	299.08	137.02	300.0845	[M-H]-	632258.831	569863.945	582547	1001252.82	1098266.5	1153194.71	845789.207	862957.039	913109.615
34	Glucosyringic acid	C15H20O10	Phenolic acids	Phenolic acids	33228-65-8	359.1	197.05	361.1129	[M-H]-	381272.481	400952.663	418414.809	541639.534	641514.247	581905.868	871079.112	879989.923	842525.061
35	Salidroside	C14H20O7	Phenolic acids	Phenolic acids	10338-51-9	299.11	137.02	300.1209	[M-H]-	508882.839	572592.748	538798.078	1012072.03	932553.426	887629.365	870551.543	844649.839	838650.881
36	4-Nitrophenol	C6H5NO3	Phenolic acids	Phenolic acids	100-02-7	140.03	98.96	139.0269	[M+H]+	13075656.9	12180580	1204261.1	1373444.53	1607729.14	1652747.62	739515.902	697427.545	1039870.08
37	Benzamide	C7H7NO	Phenolic acids	Phenolic acids	55-21-0	122.06	105.03	121.0528	[M+H]+	1012020.78	943822.597	1003477.17	909934.302	802345.65	879871.594	702852.815	812880.411	759953.857
38	2-O-Galloyl-D-glucose*	C13H16O10	Phenolic acids	Phenolic acids	-	331.07	169.01	332.0743	[M-H]-	813166.149	824879.908	593137.883	67384.0007	694096.907	539178.301	899573.003	99801.5007	1147701.17
39	Phloroglucinol; 1,3,5-Benzenetriol	C6H6O3	Phenolic acids	Phenolic acids	108-73-6	127.04	81.03	126.0317	[M+H]+	714628.637	627568.598	787268.967	594816.02	433908.206	609273.353	604966.631	642249.354	888436.512
40	Dumaliinamide A*	C21H22O10	Phenolic acids	Phenolic acids	-	433.11	271.06	434.1213	[M-H]-	588759.706	532545.225	512086.933	658345.108	649776.945	657321.077	666652.911	708015.939	749820.819

41	Isovanillin	C8H8O3	Phenolic acids	Phenolic acids	621-59-0	153.05	65.04	152.0473	[M+H] <sup>+</sup>	878706.424	546059.105	780874.689	671992.127	710702.094	715966.104	660641.854	732529.26	670926.615
42	3-O-Caffeoylshikimic acid*	C16H16O8	Phenolic acids	Phenolic acids	-	335.08	179.03	336.084518	[M-H] <sup>-</sup>	734506.915	654661.519	643056.232	729031.839	655087.996	769771.319	643725.077	609511.464	764317.217
43	4-Caffeoylshikimic acid*	C16H16O8	Phenolic acids	Phenolic acids	-	335.08	179.03	336.0845	[M-H] <sup>-</sup>	734506.915	654661.519	643056.232	729031.839	655087.996	769771.319	643725.077	609511.464	764317.217
44	5-O-Caffeoylshikimic acid	C16H16O8	Phenolic acids	Phenolic acids	73263-62-4	335.08	135.05	336.0845	[M-H] <sup>-</sup>	667748.306	591361.995	586490.57	600922.746	627108.661	676127.595	636566.02	616599.976	673927.841
45	4-O-p-Coumaroylquinic acid	C16H18O8	Phenolic acids	Phenolic acids	32451-86-8	337.09	163.04	338.1002	[M-H] <sup>-</sup>	594097.945	595002.857	529494.069	568103.96	549829.136	563676.052	641283.814	616842.485	640149.225
46	2,4-Di-Tert-Butylphenol*	C14H22O	Phenolic acids	Phenolic acids	96-76-4	205.1598	189.1267	206.1671	[M-H] <sup>-</sup>	553984.891	750167.022	739801.771	711499.92	682784.191	665814.18	674379.363	674473.305	537110.624
47	Eugenol	C10H12O2	Phenolic acids	Phenolic acids	97-53-0	165.09	91.05	164.0837	[M+H] <sup>+</sup>	702101.047	555971.137	881084.612	492526.11	385616.479	519423.307	581867.102	706318.571	586444.511
48	4-Hydroxyacetophenone	C8H8O2	Phenolic acids	Phenolic acids	99-93-4	135.05	92.03	136.0524	[M-H] <sup>-</sup>	717663.02	558622.981	698741.845	657997.991	588899.976	565758.214	649941.702	613657.967	609550.625
49	Phenyl acetate	C8H8O2	Phenolic acids	Phenolic acids	122-79-2	135.05	92.03	136.0524	[M-H] <sup>-</sup>	731175.481	705949.871	694122.63	699536.306	694564.67	598263.915	606767.337	616729.86	639185.849
50	2,6-Di-tert-butylphenol*	C14H22O	Phenolic acids	Phenolic acids	128-39-2	205.16	189.13	206.1671	[M-H] <sup>-</sup>	589965.389	724764.194	799790.502	726001.277	740009.989	793488.446	639362.13	681931.139	519784.418
51	Sinapic acid	C11H12O5	Phenolic acids	Phenolic acids	530-59-6	223.06	193.02	224.0685	[M-H] <sup>-</sup>	67682.4881	51625.1426	70575.7545	847206.383	822014.463	775020.98	601498.424	571260.099	582672.942
52	6-O-Caffeoyl-D-glucose*	C15H18O9	Phenolic acids	Phenolic acids	-	341.09	179.03	342.0951	[M-H] <sup>-</sup>	426442.323	483655.185	468934.794	530510.672	496104.37	470269.325	581614.96	550035.345	607033.544
53	1-O-Caffeoyl-β-D-glucose*	C15H18O9	Phenolic acids	Phenolic acids	14364-08-0	341.09	179.04	342.0951	[M-H] <sup>-</sup>	509530.417	454094.82	438177.612	520798.706	565359.858	563778.965	595428.085	597623.099	530222.364
54	Neochlorogenic acid (5-O-Caffeoylquinic acid)*	C16H18O9	Phenolic acids	Phenolic acids	906-33-2	353.09	191.06	354.0951	[M-H] <sup>-</sup>	487989.753	520193.216	504333.15	482315.919	537326.25	580285.528	599666.449	567363.215	545652.258
55	1-O-Sinapoyl-β-D-glucose	C17H22O10	Phenolic acids	Phenolic acids	-	385.11	223.06	386.1213	[M-H] <sup>-</sup>	212109.388	199120.152	167958.93	441696.215	403300.411	361277.348	531168.15	568670.925	598515.126
56	Syringic acid	C9H10O5	Phenolic acids	Phenolic acids	530-57-4	197.05	123.01	198.0528	[M-H] <sup>-</sup>	409717.774	414310.705	372650.617	407886.454	423712.715	435542.506	571926.813	584438.389	509473.445
57	4-O-Glucosyl-sinapate	C17H22O10	Phenolic acids	Phenolic acids	-	385.11	223.06	386.1213	[M-H] <sup>-</sup>	233971.392	217114.868	158441.556	392183.177	411381.042	365319.001	553757.678	530453.506	530171.073
58	Chlorogenic acid (3-O-Caffeoylquinic acid)*	C16H18O9	Phenolic acids	Phenolic acids	327-97-9	353.09	191.06	354.0951	[M-H] <sup>-</sup>	425723.484	428685.7	397611.491	435013.42	454706.575	472680.784	524869.9	529585.91	485296.996
59	Greenaldehyde F	C15H18O9	Phenolic acids	Phenolic acids	1094004-50-8	341.09	135.04	342.0951	[M-H] <sup>-</sup>	342952.673	367819.683	396250.374	486353.097	501052.501	500650.32	526055.039	473815.696	523596.195
60	Dumaliinonide C*	C21H22O11	Phenolic acids	Phenolic acids	-	449.11	287.06	450.1162	[M-H] <sup>-</sup>	518667.895	522915.672	507535.248	521707.073	501809.643	502861.665	515201.212	483988.607	495701.843
61	1-O-Vanilloyl-D-Glucose	C14H18O9	Phenolic acids	Phenolic acids	-	329.11	167.03	330.0951	[M-H] <sup>-</sup>	378063.466	525558.827	515748.276	466098.608	406110.64	408986.162	496986.136	509645.139	455365.597
62	devidoside C*	C15H16O9	Phenolic acids	Phenolic acids	-	339.07	177.02	340.0794	[M-H] <sup>-</sup>	639721.675	574549.934	609063.852	538795.541	477102.881	554598.819	513742.107	441476.817	499223.796
63	5-Glucosyloxy-2-Hydroxybenzoic acid methyl ester	C14H18O9	Phenolic acids	Phenolic acids	-	329.09	167.04	330.0951	[M-H] <sup>-</sup>	399557.957	509168.987	530107.065	450931.707	380126.016	413365.081	470831.702	490936.868	474591.382
64	Caffeic aldehyde	C9H8O3	Phenolic acids	Phenolic acids	141632-15-7	165.05	91.05	164.0473	[M+H] <sup>+</sup>	582348.648	682501.958	887953.761	654124.17	354051.134	534017.857	455892.883	495924.882	467250.41
65	Trihydroxycinnamoylquinic acid	C16H20O10	Phenolic acids	Phenolic acids	-	371.1	249.06	372.1056	[M-H] <sup>-</sup>	786962.529	734650.924	796333.812	453501.895	418413.342	404032.77	469295.665	416175.959	499740.162
66	Methyl 4-hydroxybenzoate*	C8H8O3	Phenolic acids	Phenolic acids	99-76-3	151.04	136.02	152.0473	[M-H] <sup>-</sup>	435647.573	427823.414	448080.712	407686.826	437846.544	406886.352	427137.753	476159.318	424049.118
67	2,4-Dinitrophenol	C6H4N2O5	Phenolic acids	Phenolic acids	51-28-5	183	109.02	184.012	[M-H] <sup>-</sup>	439376.116	508445.488	511463.745	399147.855	394972.709	393018.824	406909.368	409169.032	417552.728
68	p-Coumaric acid	C9H8O3	Phenolic acids	Phenolic acids	501-98-4	165.05	119.05	164.0473	[M+H] <sup>+</sup>	567508.557	545021.781	570883.814	439163.151	378960.357	367438.247	416390.739	379983.585	414860.555
69	3,4-Dihydroxybenzoic acid*	C8H8O4	Phenolic acids	Phenolic acids	102-32-9	167.03	123.05	168.0423	[M-H] <sup>-</sup>	248875.5	251541.925	254251.949	327330.221	355517.917	356430.288	392318.465	413750.684	379294.687
70	5-O-Galloyl-D-hammamelose*	C13H16O10	Phenolic acids	Phenolic acids	-	331.07	169.02	332.0743	[M-H] <sup>-</sup>	342493.727	324260.753	317027.437	362328.969	331714.946	342211.388	354761.707	374990.155	397033.897
71	1-O-Galloyl-β-D-glucose*	C13H16O10	Phenolic acids	Phenolic acids	58511-73-2	331.07	169.01	332.0743	[M-H] <sup>-</sup>	326466.636	336864.77	340358.355	332982.867	314006.17	332823.157	347066.618	386063.2	375642.488
72	6-O-Galloyl-β-D-glucose*	C13H16O10	Phenolic acids	Phenolic acids	13186-19-1	331.07	169.01	332.0743	[M-H] <sup>-</sup>	326466.636	336864.77	340358.355	332982.867	314006.17	332823.157	347066.618	386063.2	375642.488
73	Digalloylglucose*	C20H20O14	Phenolic acids	Phenolic acids	-	483.08	169.05	484.0853	[M-H] <sup>-</sup>	317600.488	233573.625	252005.446	218704.181	216840.689	221537.945	345324.202	374360.009	357197.223
74	Isochlorogenic acid B*	C25H24O12	Phenolic acids	Phenolic acids	14534-61-3	515.12	353.09	516.1268	[M-H] <sup>-</sup>	124007.044	134100.565	56395.9674	192667.045	206357.307	161357.101	357945.013	307172.002	408684.191
75	Gallic Acid Ethyl Ester; Ethyl gallate	C9H10O5	Phenolic acids	Phenolic acids	831-61-8	197.05	124.02	198.0528	[M-H] <sup>-</sup>	296431.153	272613.638	248213.888	295796.229	293622.854	292308.525	347889.455	345646.182	379644.345
76	3-O-Galloyl-D-glucose*	C13H16O10	Phenolic acids	Phenolic acids	-	331.07	169.01	332.0743	[M-H] <sup>-</sup>	355913.065	332707.465	324660.989	360855.901	315014.782	343134.955	311871.912	38835.114	353718.01
77	Diisobutyl phthalate*	C16H22O4	Phenolic acids	Phenolic acids	84-69-5	279.1591	149.0233	278.1518	[M+H] <sup>+</sup>	564387.718	375798.198	464588.938	401763.108	435552.929	48953.1758	270698.959	419107.855	353194.706
78	4-Hydroxyphenylacetic acid*	C8H8O3	Phenolic acids	Phenolic acids	156-38-7	151.04	107.05	152.0473	[M-H] <sup>-</sup>	296546.039	287452.427	271771.969	239057.116	300712.939	289455.069	270789.166	392226.915	376726.934
79	Anthranilic Acid	C7H7NO2	Phenolic acids	Phenolic acids	118-92-3	138.06	92.05	137.0477	[M+H] <sup>+</sup>	446324.721	445458.289	424822.753	302091.305	373967.16	368393.632	321906.074	329903.314	364490.036
80	Propyl 4-hydroxybenzoate	C10H12O3	Phenolic acids	Phenolic acids	94-13-3	179.07	92.03	180.0786	[M-H] <sup>-</sup>	128036.021	191142.762	182271.853	175293.768	142987.459	166710.154	322799.987	303607.167	332747.7
81	Phthalic acid	C8H6O4	Phenolic acids	Phenolic acids	88-99-3	165.02	77.04	166.0266	[M-H] <sup>-</sup>	3513766.02	551707.251	496446.621	504460.479	1402577.15	1339783.39	399007.304	256740.868	300455.978
82	Isochlorogenic acid C*	C25H24O12	Phenolic acids	Phenolic acids	57378-72-0	515.12	353.09	516.1268	[M-H] <sup>-</sup>	174059.354	123743.667	52852.2884	169494.902	201174.38	171724.407	361707.093	203432.574	381541.603







209	Hesperetin-5-O-glucoside	C22H24O11	Flavonoids	Flavanones	69651-80-5	463.12	301.07	464.1319	[M-H]-	455748.531	529312.347	341796.548	1028142.43	1008044.13	1111913.27	2688568.49	2834596.69	3880119
210	Quercetin-7-O-glucoside*	C21H20O12	Flavonoids	Flavonols	491-50-9	463.09	301.04	464.0955	[M-H]-	452057.822	445017.272	272312.892	892933.843	826908.124	1180745.7	2491273.46	2507147.37	3691012.63
211	Quercetin 3-xyloyl-(1->6)-glucoside	C26H28O16	Flavonoids	Flavones	-	595.14	134.05	596.137735	[M-H]-	1371754.41	1081944.86	1340157.67	1415160.4	1304481.21	1440066.33	2511555.3	2572278.21	2210860.43
212	Gallocatechin 3-O-gallate*	C22H18O11	Flavonoids	Flavanols	5127-64-0	457.08	169.01	458.0849	[M-H]-	1341849.05	803428.136	888131.166	2267294.22	1977962.24	2014408.23	1943235.25	2155624.37	2045512.92
213	4'-O-Glucosylvitexin	C27H30O15	Flavonoids	Flavones	38950-94-6	595.17	433.12	594.1585	[M+H]+	1908101	2035668.27	1914801.15	1897242	1727236.73	1995618.18	1912882.2	1960299.81	2004628.02
214	Kaempferol-7-O-glucoside*	C21H20O11	Flavonoids	Flavonols	16290-07-6	447.09	285.04	448.1006	[M-H]-	303188.176	305734.892	247274.819	698574.801	638674.174	732649.002	1596767.78	1743625.48	2301864.76
215	Kaempferol-3-O-galactoside (Trifolin)*	C21H20O11	Flavonoids	Flavonols	23627-87-4	447.09	285.04	448.1006	[M-H]-	321004.479	305908.575	213722.393	686313.416	615340.738	761976.392	1627863.71	1528297.64	2264533.45
216	Quercetin-3-O-robinobioside	C27H30O16	Flavonoids	Flavonols	52525-35-6	609.15	300.03	610.1534	[M-H]-	678256.876	726892.212	541386.57	840664.061	779403.879	916269.372	1397347.77	1415233.34	1511621.39
217	Luteolin-4'-O-glucoside*	C21H20O11	Flavonoids	Flavones	6920-38-3	449.11	287.05	448.1006	[M+H]+	939965.77	861731.742	600392.947	1222739.83	1127253.31	893579.175	1267243.61	1590345.82	1329505.03
218	Kaempferol-3-O-glucoside (Astragaln)*	C21H20O11	Flavonoids	Flavonols	480-10-4	449.1078	287.0553	448.1006	[M+H]+	927220.27	840695.168	751285.006	840198.244	837901.11	872426.212	633001.838	1456413.66	1918861.67
219	Epicatechin*	C15H14O6	Flavonoids	Flavanols	490-46-0	291.0863	139.0397	290.079	[M+H]+	1506755.68	1381641.25	1289976.52	1070080.88	1058108.46	1123042.14	1200705.73	1107058.49	1337390.45
220	Kaempferol-4'-O-glucoside*	C21H20O11	Flavonoids	Flavonols	-	449.11	287.06	448.1006	[M+H]+	667303.552	827759.447	632765.889	751084.088	639730.857	1064282.28	823546.88	808504.971	1852982.48
221	Quercetin-3-O-rutinoside (Rutin)	C27H30O16	Flavonoids	Flavonols	153-18-4	609.15	301.04	610.1534	[M-H]-	572950.012	490353.212	391357.203	771459.519	645255.724	602315.463	1041467.82	1008284.22	1302361.87
222	Isohemiphloin	C21H22O10	Flavonoids	Flavanones	3682-02-8	433.11	313.07	434.1213	[M-H]-	1076164.53	989065.023	1152685.77	1251644.03	973290.589	1002998.44	1084672.8	1028849.74	1047747.16
223	Taxifolin-3'-O-glucoside*	C21H22O12	Flavonoids	Flavanonols	31106-05-5	465.13	303.05	466.1111	[M-H]-	633476.852	542042.692	537202.355	672062.595	651898.233	760872.729	1017922.16	997527.923	1114865.47
224	1,8-dihydroxy-4,5-dimethoxy-3-[(2s,3r,4s,5s,6r)-3,4,5-trihydroxy-6-(hydroxymethyl)oxan-2-yl]oxy xanthen-9-one*	C21H22O12	Flavonoids	Other Flavonoids	-	465.1	303.05	466.1111	[M-H]-	566317.374	593562.085	564520.955	741938.24	660482.932	633920.978	999574.541	807933.597	1154453.7
225	Isovitexin-2''-O-rhamnoside	C27H30O14	Flavonoids	Flavones	-	579.17	313.07	578.1636	[M+H]+	866414.131	898738.222	1010474.56	850749.466	953400.384	884558.049	968164.956	981412.883	961340.845
226	Quercetin-5-O-β-D-glucoside*	C21H20O12	Flavonoids	Flavonols	-	465.1	303.05	464.0955	[M+H]+	45547.113	223357.746	52420.8654	51853.607	261755.79	119535.977	1223228.62	462232.857	1005375.81
227	3,4,2',4',6'-Pentahydroxychalcone	C15H12O6	Flavonoids	Chalcones	73692-51-0	289.07	163.04	288.0634	[M+H]+	1001597.46	873981.243	636644.372	501899.369	555207.997	602992.732	923575.883	829700.252	855243.349
228	Epicatechin glucoside	C21H24O11	Flavonoids	Flavanols	-	451.12	289.07	452.1319	[M-H]-	1484760.19	1255589.71	158429.246	1093178.16	69252.9855	1024562.77	104607.513	1121044.75	1210074.53
229	Isosaponarin[Isovitexin-4''-O-glucoside]	C27H30O15	Flavonoids	Flavones	19416-87-6	595.17	313.07	594.1585	[M+H]+	711597.206	694321.3	738377.34	663937.095	603569.848	723885.365	726034.916	821342.233	768824.303
230	Apigenin-6-C-(2''-glucuroyl)xyloside	C26H26O15	Flavonoids	Flavones	-	579.13	283.06	578.1272	[M+H]+	775172.137	648034.494	754237.46	746799.563	504238.143	657899.383	639707.302	664011.8	851045.576
231	Naringenin-4'-O-glucoside*	C21H22O10	Flavonoids	Flavanones	-	433.12	271.06	434.1213	[M-H]-	520345.862	502233.971	538413.582	641616.596	573160.398	597089.1	634969.712	726860.122	762040.687
232	Quercetin-3-O-galactoside (Hyperin)*	C21H20O12	Flavonoids	Flavonols	482-36-0	465.1	303.06	464.0955	[M+H]+	47752.0677	87093.3459	103810.889	97602.4412	187106.517	341454.76	570531.5	539067.655	993533.223
233	Isohyperoside*	C21H20O12	Flavonoids	Flavonols	35589-21-0	465.1019	303.0613	464.0955	[M+H]+	47752.0677	87093.3459	103810.889	97602.4412	187106.517	341454.76	570531.5	539067.655	993533.223
234	Tricin-7-O-Glucoside*	C23H24O12	Flavonoids	Flavones	32769-01-0	493.13	331.08	492.1268	[M+H]+	372456.865	295201.575	229996.45	356320.833	366148.605	428503.241	606027.932	600641.881	893746.1
235	Butin-7-O-glucoside*	C21H22O10	Flavonoids	Flavanones	-	433.11	271.06	434.1213	[M-H]-	557497.21	531237.545	461234.855	608051.827	571661.816	608179.001	696379.512	669752.543	700753.71
236	Apigenin-6,8-di-C-arabinoside*	C25H26O13	Flavonoids	Flavones	-	535.14	499.12	534.1373	[M+H]+	280789.028	232218.082	237742.066	331725.158	278345.886	366898.877	591020.457	747719.467	706862.414
237	Luteolin-7-O-glucoside (Cynaroside)*	C21H20O11	Flavonoids	Flavones	5373-11-5	449.11	287.07	448.1006	[M+H]+	751454.992	745490.243	673975.821	756535.887	813354.635	889618.969	1123256.69	204029.984	622022.144
238	Apigenin-6-C-arabinoside-8-C-xyloside*	C25H26O13	Flavonoids	Flavones	-	535.14	499.12	534.1373	[M+H]+	233154.294	200923.356	142325.856	318267.061	297703.044	291924.217	558817.046	544011.435	722476.652
239	Jacoesidin-7-O-Glucoside*	C23H24O12	Flavonoids	Flavones	25474-11-7	493.14	331.08	492.1268	[M+H]+	312085.076	291704.138	204325.993	300853.502	343062.752	412460.939	525550.497	458339.847	705757.633
240	Apigenin-6-C-(2''-glucosyl)arabinoside	C26H28O14	Flavonoids	Flavones	-	565.16	427.1	564.1479	[M+H]+	497919.496	432943.242	390366.69	526285.349	577932.497	515247.615	590617.04	559363.254	534182.443
241	Isochaetoflside	C26H28O14	Flavonoids	Flavones	52012-29-0	565.16	409.09	564.1479	[M+H]+	530183.403	465530.138	385933.646	456993.672	464112.649	504119.389	495918.931	530111.726	622044.972
242	6-C-Glucosyl-2-Hydroxynaringenin	C21H22O11	Flavonoids	Flavanones	-	449.11	269.05	450.1162	[M-H]-	622605.705	592203.539	580460.878	509786.007	503945.026	518470.013	532900.638	472169.728	580890.756
243	Dihydrokaempferide	C16H14O6	Flavonoids	Flavanonols	137225-59-3	303.09	229.08	302.079	[M+H]+	117396.499	103089.214	46845.3147	182132.706	204947.162	216551.27	405379.433	479405.108	667434.72
244	Luteolin-3'-O-glucoside*	C21H20O11	Flavonoids	Flavones	-	449.11	287.06	448.1006	[M+H]+	130910.861	207164.836	78585.6587	150759.481	238609.228	383656.371	456053.283	366829.487	713858.377
245	Aromadendrin-7-O-glucoside*	C21H22O11	Flavonoids	Flavanonols	28189-90-4	449.11	287.06	450.1162	[M-H]-	592612.88	554614.122	516828.33	465993.459	464400.414	445071.465	534298.052	547507.708	431856.211
246	1,3,6,7-tetrahydroxy-2-(3,4,5-trihydroxyoxan-2-yl)xanthen-9-one	C18H16O10	Flavonoids	Other Flavonoids	-	391.07	229.05	392.0743	[M-H]-	495270.985	537092.724	458337.69	583264.968	537063.024	582548.694	313809.196	841470	210597.376
247	Chrysoeriol-5-O-glucoside	C22H22O11	Flavonoids	Flavones	-	461.11	299.1	462.1162	[M-H]-	83106.0587	77629.9028	66624.5139	175186.703	142297.016	183497.46	414026.924	412310.032	508464.314
248	Eriodictyol-8-C-glucoside*	C21H22O11	Flavonoids	Flavanones	1023271-51-3	449.11	287.06	450.1162	[M-H]-	491374.041	457508.751	511191.619	405982.912	430345.385	384586.878	481862.318	437316.705	399574.779
249	1,2,3,7,8-pentahydroxy-6-methylanthracene-9,10-dione	C15H10O7	Flavonoids	Other Flavonoids	-	303.05	229.05	302.0427	[M+H]+	99831.9101	85280.9251	51441.5114	133382.123	80641.8851	133614.942	340836.461	355545.155	609335.195
250	1,2,4,5-tetrahydroxy-7-(hydroxymethyl)anthracene-9,10-dione	C15H10O7	Flavonoids	Other Flavonoids	-	303.05	229.05	302.0427	[M+H]+	140537.646	139785.902	118658.31	178106.834	149577.533	192621.764	364150.811	338671.738	540749.444









377	Fraxetin (7,8-Dihydroxy-6-methoxycoumarin)	C10H8O5	Lignans and Coumarins	Coumarins	574-84-5	209.04	149.02	208.0372	[M+H] <sup>+</sup>	227281.283	231268.344	207945.379	192538.563	189794.188	157334.311	149839.022	173963.027	160365.725
378	Lariciresinol-4'-O-glucoside	C26H34O11	Lignans and Coumarins	Lignans	143663-00-7	521.2	359.15	522.2101	[M-H] <sup>-</sup>	103402.656	127528.456	108162.59	113881.544	103636.281	117655.245	122893.698	105223.063	127669.171
379	6-Methylcoumarin	C10H8O2	Lignans and Coumarins	Coumarins	92-48-8	161.06	115.05	160.0524	[M+H] <sup>+</sup>	81751.0919	91412.895	85433.3306	91779.26	117474.239	97644.0099	99396.3664	95760.4834	107903.448
380	7-Hydroxycoumarin,Umbelliferone	C9H6O3	Lignans and Coumarins	Coumarins	93-35-6	161.02	133.03	162.0317	[M-H] <sup>-</sup>	74645.1111	88427.0541	71154.9717	107160.143	89495.1211	94972.5267	111409.416	96643.1581	77045.5851
381	Ethyl 3-coumarincarboxylate	C12H10O4	Lignans and Coumarins	Coumarins	1846-76-0	219.06	173.03	218.0579	[M+H] <sup>+</sup>	77889.4788	74215.1092	108097.709	67304.1042	68677.4982	77631.5666	84514.8266	69819.5172	102133.6
382	Massoniresinol; Vladinol A	C20H24O8	Lignans and Coumarins	Lignans	96087-10-4	391.14	59.01	392.1471	[M-H] <sup>-</sup>	91635.1375	140956.368	74919.9532	111517.366	91035.3922	87752.6899	97921.889	65534.158	87168.933
383	4-Hydroxycoumarin	C9H6O3	Lignans and Coumarins	Coumarins	1076-38-6	161.02	117.03	162.0317	[M-H] <sup>-</sup>	59594.6739	52766.474	49260.9932	51125.9417	60487.1076	64637.2961	67608.3063	78079.7052	74298.4726
384	Erythro-Guaiacylglycerol-β-dihydroconiferyl Ether glucoside	C26H36O12	Lignans and Coumarins	Lignans	-	539.21	491.19	540.2207	[M-H] <sup>-</sup>	85785.5505	87455.5182	71500.9501	50974.9422	84924.9907	66467.28	70069.5202	68602.9907	78856.5545
385	Dihydrodehydroconiferyl alcohol-4-O-glucoside*	C26H34O11	Lignans and Coumarins	Lignans	-	521.2	359.15	522.2101	[M-H] <sup>-</sup>	77407.4538	93142.9406	72829.6244	57867.6501	60022.7057	56349.3853	62987.3579	66336.1499	75838.7627
386	Isolariciresinol-9'-O-glucoside*	C26H34O11	Lignans and Coumarins	Lignans	63358-12-3	521.2	359.15	522.2101	[M-H] <sup>-</sup>	66742.1135	54634.4018	66657.6603	64453.8357	67918.0413	69004.0608	62295.5204	62155.6774	62001.6495
387	Sesamol	C7H6O3	Lignans and Coumarins	Lignans	533-31-3	139.04	98.98	138.0317	[M+H] <sup>+</sup>	62649.7625	45473.5437	72369.7826	44492.9144	57268.6556	47924.1594	53354.2354	55084.7843	62513.148
388	3,4-Dihydro-4-(4'-hydroxyphenyl)-5,7-dihydrocoumarin glucoside*	C21H22O10	Lignans and Coumarins	Coumarins	-	435.13	273.08	434.1208	[M+H] <sup>+</sup>	58356.5293	60707.8034	82184.7907	137703.701	74944.8678	66869.5152	48984.923	52310.7876	56328.3826
389	Skimmin (7-Hydroxycoumarin-7-O-glucoside)	C15H16O8	Lignans and Coumarins	Coumarins	93-39-0	325.09	163.04	324.0845	[M+H] <sup>+</sup>	48858.4995	60032.7253	86980.5373	58797.3083	64693.2014	68121.0983	49756.0951	57947.3552	47188.9947
390	Erythro-Guaiacylglycerol-β-dihydroconiferyl Ether*	C20H26O7	Lignans and Coumarins	Lignans	135820-77-8	377.16	329.14	378.1679	[M-H] <sup>-</sup>	35568.5104	34830.5422	34013.2075	30592.3454	30005.4166	37049.3411	29814.1128	48821.3952	30308.1895
391	Daphnetin	C9H6O4	Lignans and Coumarins	Coumarins	486-35-1	177.02	121.03	178.0266	[M-H] <sup>-</sup>	43565.7587	33272.1891	26515.1706	29689.7064	37644.8258	29918.0544	32922.544	26982.0089	26935.6639
392	Sesamin	C20H18O6	Lignans and Coumarins	Lignans	607-80-7	355.1	163.04	354.1103	[M+H] <sup>+</sup>	30225.1097	10788.871	29473.0803	22645.386	34290.0128	33388.8161	42205.6819	17030.6045	25149.379
393	Secosolariciresinol 4-O-glucoside	C26H36O11	Lignans and Coumarins	Lignans	-	523.22	361.14	524.2258	[M-H] <sup>-</sup>	22009.7548	30317.3622	28388.7353	27970.2312	31942.3569	23115.0018	36271.0974	24191.1337	22935.596
394	Demethyl-erythro-Guaiacylglycerol β-Sinapyl Ether	C20H24O8	Lignans and Coumarins	Lignans	-	391.14	343.12	392.1471	[M-H] <sup>-</sup>	30663.7843	19759.9235	20437.5922	21042.5192	34248.8466	23130.4708	23872.8192	29384.7219	18262.0405
395	Epipinoresinol*	C20H22O6	Lignans and Coumarins	Lignans	24404-50-0	357.1344	151.0442	358.1416	[M-H] <sup>-</sup>	10752.0317	19723.0419	15164.1372	15148.6686	15074.9625	19036.8515	20164.4152	20919.5217	19662.1938
396	Scopoletin-7-O-glucoside (Scopolin)	C16H18O9	Lignans and Coumarins	Coumarins	531-44-2	355.1	193.05	354.0951	[M+H] <sup>+</sup>	17471.3118	21654.0461	13495.1185	30559.9382	22547.2285	13272.9815	14646.7055	21148.3037	23921.7239
397	1-Hydroxypinoresinol-1-O-Glucoside	C26H32O12	Lignans and Coumarins	Lignans	81495-71-8	535.18	373.13	536.1894	[M-H] <sup>-</sup>	12693.9279	15181.1415	14686.3068	9950.31484	10028.9393	11729.0385	21161.6468	14872.9586	23426.0647
398	Esculetin-7-O-quinic acid	C16H16O9	Lignans and Coumarins	Coumarins	-	351.07	105.1	352.0794	[M-H] <sup>-</sup>	19356.4251	20560.1549	23124.5459	13242.8158	17489.6799	17088.0701	16190.8347	21865.5005	17897.3332
399	Matairesinol-4'-O-glucoside (Matairesinoid)	C26H32O11	Lignans and Coumarins	Lignans	23202-85-9	538.23	359.15	520.1945	[M+NH4] <sup>+</sup>	8785.30555	21711.7421	26006.5309	31372.1591	14414.4886	9783.0458	16503.2086	23446.8867	15945.2282
400	Pinoresinol*	C20H22O6	Lignans and Coumarins	Lignans	487-36-5	357.13	151.04	358.1416	[M-H] <sup>-</sup>	18077.7977	15863.405	16180.1862	18046.3724	13049.9606	16661.248	17110.9103	18609.0867	16312.0907
401	7R,8S-erythro-3',4,9,9'-tetrahydroxy-3-methoxy-8-O-4'-neolignan-7-O-glucopyranoside,	C25H34O12	Lignans and Coumarins	Lignans	-	525.2	179.07	526.205	[M-H] <sup>-</sup>	8318.10185	13923.6602	21998.0897	19747.9438	5906.80871	8332.35305	18461.6879	20591.4632	10476.6712
402	Secosolariciresinol-9'-O-glucoside	C26H36O11	Lignans and Coumarins	Lignans	63320-67-2	523.22	475.2	524.2258	[M-H] <sup>-</sup>	11817.546	9936.83465	10074.2947	15199.4268	11552.6447	11722.8734	10960.2314	11128.6967	4285.4874
403	dihydrodehydroconiferyl alcohol-9-O-β-D-glucopyranoside	C26H34O11	Lignans and Coumarins	Lignans	-	521.2	491.19	522.2101	[M-H] <sup>-</sup>	4954.10082	14146.7918	6752.07499	8827.68773	8929.54933	10234.1273	10858.9051	1759.40207	10193.601
404	Procyanidin B1*	C30H26O12	Tannins	Proanthocyanidins	20315-25-7	577.14	425.09	578.1424	[M-H] <sup>-</sup>	86689.6959	70753.0391	74523.5745	70469.1228	71321.4145	76719.3374	53583.186	55881.7932	69285.4373
405	Gambirin A1	C30H28O12	Tannins	Tannin	76250-49-2	581.17	139.04	580.1581	[M+H] <sup>+</sup>	9	9	9	9	9	9	34956.7798	23536.8073	30023.7983
406	Procyanidin B3*	C30H26O12	Tannins	Proanthocyanidins	23567-23-9	577.14	407.08	578.1424	[M-H] <sup>-</sup>	24480.2633	26649.7362	16454.0329	24251.4269	27186.7795	26849.2437	24829.6116	18224.4591	39452.9479
407	Procyanidin B2*	C30H26O12	Tannins	Proanthocyanidins	29106-49-8	577.14	407.08	578.1424	[M-H] <sup>-</sup>	25649.1197	17561.2106	21660.2535	14371.6035	25110.8173	23285.3998	22147.1522	18949.4899	15964.0912
408	Phyllanemblinin B*	C27H22O18	Tannins	Tannin	-	633.07	301	634.0806	[M-H] <sup>-</sup>	8228.33313	10144.7116	4957.65349	11335.123	9608.50834	20853.7047	17502.7289	12221.9424	27312.6636
409	Theaflagin	C20H16O9	Tannins	Tannin	102208-15-1	399.07	233.05	400.0794	[M-H] <sup>-</sup>	10036.9678	16237.7003	7088.75091	20454.4768	10633.7923	15533.7487	12488.2827	18918.9215	16063.1133
410	Isoorientagin*	C27H22O18	Tannins	Tannin	-	633.07	301	634.0806	[M-H] <sup>-</sup>	4255.37907	3922.46236	3551.18054	9879.03539	14502.6115	8380.65647	11952.7554	14023.8439	17925.1421
411	Sanguin H4*	C27H22O18	Tannins	Tannin	84316-77-8	633.08	301.01	634.0806	[M-H] <sup>-</sup>	5097.25785	6220.95764	3804.25985	22261.6594	16545.0294	11720.4504	11627.5596	14629.2568	17116.5867

\* represents the presence of an isomer of the compound.