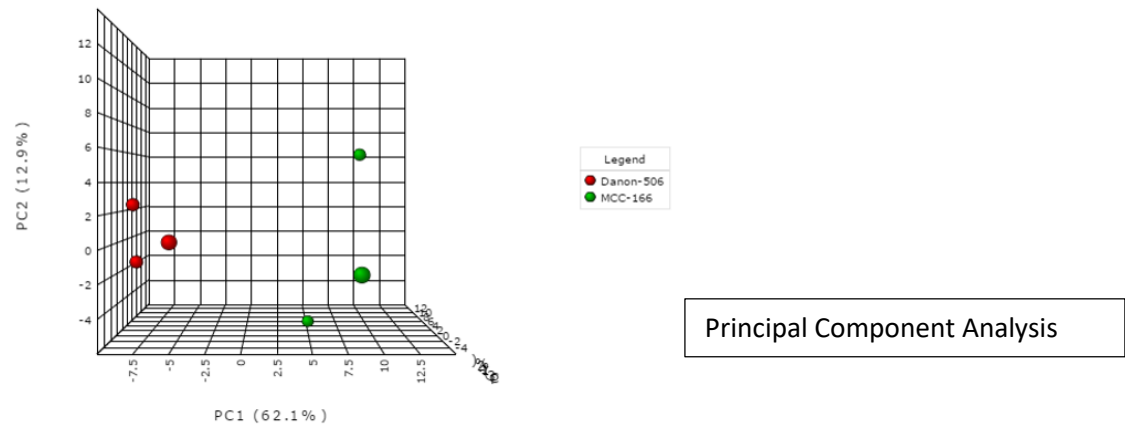


hiPS-CM Metabolome analysis MEDIUM



RAW DATA

N.	compound	CmpdID	Pathway	parent	med Rt	Polarit y	MCC-166_Controls			Danon-506			MEDIAN		FOLD CHANGE	p-value
							M1	M2	M3	D1	D2	D3	M	D	Danon/MC C	
1	L-alanine	C00041	Amino acids	90,0559	1,20	+	3,79E+07	3,86E+07	4,97E+07	4,91E+07	5,37E+07	4,84E+07	3,86E+07	4,91E+07	1,27	0,12
2	L-arginine	C00062	Amino acids	175,1194	1,18	+	1,29E+08	1,28E+08	1,17E+08	1,50E+08	1,60E+08	1,70E+08	1,28E+08	1,60E+08	1,25	0,01
3	L-asparagine	C00152	Amino acids	133,0612	1,20	+	3,87E+06	4,18E+06	4,53E+06	5,07E+06	4,16E+06	4,85E+06	4,18E+06	4,85E+06	1,16	0,21
4	L-aspartate	C00049	Amino acids	134,0452	1,22	+	4,52E+05	4,54E+05	3,78E+05	7,96E+05	8,66E+05	9,16E+05	4,52E+05	8,66E+05	1,92	0,00
5	L-cysteine	C00097	Amino acids	122,0276	1,23	+	1,32E+06	1,30E+06	1,23E+06	4,35E+06	3,80E+06	4,03E+06	1,30E+06	4,03E+06	3,10	0,00
6	L-glutamate	C00025	Amino acids	148,0608	1,21	+	7,38E+06	7,14E+06	6,55E+06	2,03E+07	2,42E+07	2,43E+07	7,14E+06	2,42E+07	3,39	0,00
7	L-glutamine	C00064	Amino acids	147,0768	1,20	+	3,68E+07	4,28E+07	5,04E+07	2,78E+07	1,74E+07	1,50E+07	4,28E+07	1,74E+07	0,41	0,01
8	glycine	C00037	Amino acids	76,0403	1,22	+	3,06E+06	2,87E+06	3,70E+06	4,81E+06	5,42E+06	5,22E+06	3,06E+06	5,22E+06	1,71	0,00
9	L-histidine	C00135	Amino acids	156,0771	1,11	+	6,25E+06	5,45E+06	5,79E+06	5,15E+06	6,25E+06	5,27E+06	5,79E+06	5,27E+06	0,91	0,55
10	L-leucine	C00123	Amino acids	132,1023	1,24	+	2,37E+08	2,00E+08	3,13E+08	1,85E+08	1,81E+08	1,78E+08	2,37E+08	1,81E+08	0,76	0,11
11	L-lysine	C00047	Amino acids	147,1131	1,10	+	2,68E+07	2,11E+07	2,38E+07	2,43E+07	2,14E+07	2,49E+07	2,38E+07	2,43E+07	1,02	0,86
12	L-methionine	C00073	Amino acids	150,0577	1,24	+	2,53E+07	2,01E+07	2,93E+07	2,24E+07	2,27E+07	2,35E+07	2,53E+07	2,27E+07	0,90	0,48

13	L-phenylalanine	C00079	Amino acids	166,08 61	1,24	+	4,06E+ 07	3,58E+ 07	3,89E+ 07	3,65E+ 07	4,03E+ 07	3,54E+ 07	3,89E+ 07	3,65E+ 07	0,94	0,65
14	L-proline	C00148	Amino acids	116,07 12	1,23	+	1,67E+ 08	1,52E+ 08	2,08E+ 08	2,27E+ 08	2,34E+ 08	2,11E+ 08	1,67E+ 08	2,27E+ 08	1,36	0,05
15	L-serine	C00065	Amino acids	106,05 06	1,20	+	1,62E+ 06	1,68E+ 06	1,64E+ 06	1,33E+ 06	1,04E+ 06	1,25E+ 06	1,64E+ 06	1,25E+ 06	0,76	0,01
16	L-threonine	C00188	Amino acids	120,06 61	1,21	+	6,06E+ 06	6,69E+ 06	8,38E+ 06	7,39E+ 06	7,02E+ 06	6,47E+ 06	6,69E+ 06	7,02E+ 06	1,05	0,92
17	L-tryptophan	C00078	Amino acids	205,09 76	1,34	+	6,80E+ 06	9,35E+ 06	4,74E+ 06	2,80E+ 06	4,97E+ 06	4,41E+ 06	6,80E+ 06	4,41E+ 06	0,65	0,12
18	L-tyrosine	C00082	Amino acids	182,08 15	1,24	+	2,04E+ 07	1,80E+ 07	2,43E+ 07	1,80E+ 07	2,08E+ 07	2,08E+ 07	2,04E+ 07	2,08E+ 07	1,02	0,65
19	L-valine	C00183	Amino acids	118,08 69	1,24	+	5,42E+ 07	4,64E+ 07	7,07E+ 07	4,60E+ 07	4,48E+ 07	4,65E+ 07	5,42E+ 07	4,60E+ 07	0,85	0,19
20	L-cystine	C00491	Amino acids	241,03 10	1,24	+	1,99E+ 06	2,17E+ 06	2,56E+ 06	1,59E+ 06	1,17E+ 06	1,10E+ 06	2,17E+ 06	1,17E+ 06	0,54	0,01
21	ADP	C00008	Nucleotides	426,02 32	1,48	-	7,71E+ 03	2,65E+ 03	2,73E+ 03	3,41E+ 03	4,52E+ 03	1,10E+ 03	2,73E+ 03	3,41E+ 03	1,25	0,53
22	AMP	C00020	Nucleotides	348,07 10	1,26	+	4,92E+ 03	0,00E+ 00	5,84E+ 03	3,93E+ 04	4,41E+ 04	2,93E+ 04	4,92E+ 03	3,93E+ 04	7,98	0,00
23	Adenosine	C00212	Nucleotides	268,10 44	1,27	+	3,82E+ 03	0,00E+ 00	5,44E+ 03	4,60E+ 03	7,07E+ 03	9,44E+ 03	3,82E+ 03	7,07E+ 03	1,85	0,14
24	Adenine	C00147	Nucleotides	136,06 22	1,24	+	1,15E+ 06	1,34E+ 06	1,49E+ 06	1,27E+ 06	1,13E+ 06	1,23E+ 06	1,34E+ 06	1,23E+ 06	0,92	0,35
25	Guanine	C00242	Nucleotides	152,05 71	1,25	+	1,37E+ 04	0,00E+ 00	1,69E+ 04	0,00E+ 00	0,00E+ 00	8,60E+ 03	1,37E+ 04	0,00E+ 00	0,00	0,28
26	Cytidine	C00475	Nucleotides	244,09 32	1,24	+	7,29E+ 04	6,73E+ 04	7,52E+ 04	2,18E+ 05	2,06E+ 05	2,58E+ 05	7,29E+ 04	2,18E+ 05	2,99	0,00
27	Cytosine	C00380	Nucleotides	112,05 13	1,24	+	1,57E+ 05	1,09E+ 05	1,30E+ 05	3,95E+ 05	4,38E+ 05	7,01E+ 05	1,30E+ 05	4,38E+ 05	3,37	0,02
28	Thymine	C00178	Nucleotides	127,05 07	1,23	+	1,41E+ 05	1,86E+ 05	1,49E+ 05	1,30E+ 05	8,49E+ 04	1,25E+ 05	1,49E+ 05	1,25E+ 05	0,83	0,08
29	UDP	C00015	Nucleotides	405,01 03	1,79	+	2,15E+ 03	0,00E+ 00	5,88E+ 04	2,78E+ 04	2,16E+ 03	1,82E+ 03	2,15E+ 03	2,16E+ 03	1,00	0,67
30	Hypoxanthine	C00262	Nucleotides	137,04 62	1,25	+	1,19E+ 06	1,22E+ 06	1,82E+ 06	1,01E+ 06	7,46E+ 05	3,01E+ 05	1,22E+ 06	7,46E+ 05	0,61	0,07
31	Xanthine	C00385	Nucleotides	151,02 53	1,59	-	2,15E+ 05	2,43E+ 05	1,39E+ 05	1,63E+ 05	1,15E+ 05	9,26E+ 04	2,15E+ 05	1,15E+ 05	0,53	0,11
32	Allantoate	C00499	Nucleotides	177,06 13	1,13	+	5,03E+ 06	4,33E+ 06	7,77E+ 06	2,80E+ 06	2,42E+ 06	2,14E+ 06	5,03E+ 06	2,42E+ 06	0,48	0,04
33	5-Hydroxyisourate	C11821	Nucleotides	185,03 02	1,08	+	1,09E+ 03	0,00E+ 00	4,72E+ 03	3,13E+ 03	4,72E+ 03	1,16E+ 03	1,09E+ 03	3,13E+ 03	2,86	0,58
34	Urate	C00366	Nucleotides	167,02 15	1,24	-	1,77E+ 05	1,98E+ 05	1,78E+ 05	1,11E+ 05	1,26E+ 05	1,15E+ 05	1,78E+ 05	1,15E+ 05	0,65	0,00
35	5-6-Dihydrothymine	C00906	Nucleotides	129,06 64	1,23	+	1,40E+ 06	1,21E+ 06	1,53E+ 06	1,50E+ 06	1,55E+ 06	1,54E+ 06	1,40E+ 06	1,54E+ 06	1,10	0,20
36	Pyridoxal	C00250	Nucleotides	168,06 59	1,24	+	2,09E+ 06	2,05E+ 06	2,26E+ 06	1,56E+ 06	1,37E+ 06	1,61E+ 06	2,09E+ 06	1,56E+ 06	0,75	0,00
37	4-Pyridoxate	C00847	Nucleotides	184,06 01	1,26	+	3,40E+ 04	1,20E+ 04	1,79E+ 04	9,47E+ 03	2,37E+ 05	1,67E+ 05	1,79E+ 04	1,67E+ 05	9,32	0,16
38	Pyridoxamine 5'-phosphate	C00647	Nucleotides	249,06 24	1,24	+	8,88E+ 05	1,12E+ 06	5,17E+ 05	2,79E+ 05	4,47E+ 05	4,65E+ 05	8,88E+ 05	4,47E+ 05	0,50	0,07
39	Nicotinamide	C00153	Nucleotides	123,05 58	1,25	+	5,72E+ 06	5,07E+ 06	5,42E+ 06	3,81E+ 05	3,61E+ 05	3,94E+ 05	5,42E+ 06	3,81E+ 05	0,07	0,00

40	Nicotinate ribonucleotide	C01185	Nucleotides	335,04 57	1,13	-	4,15E+ 04	3,97E+ 04	7,39E+ 04	2,49E+ 04	2,16E+ 04	2,71E+ 04	4,15E+ 04	2,49E+ 04	0,60	0,07
41	Phosphate	C00009	Phosphates	98,985 0	1,25	+	6,03E+ 07	6,46E+ 07	6,90E+ 07	6,46E+ 07	5,97E+ 07	5,64E+ 07	6,46E+ 07	5,97E+ 07	0,92	0,27
42	Diphosphate	C00013	Phosphates	176,93 53	1,27	-	2,95E+ 06	3,45E+ 06	3,04E+ 06	3,08E+ 06	2,68E+ 06	3,09E+ 06	3,04E+ 06	3,08E+ 06	1,01	0,39
43	D-Glucose	C00031	Glycolysis	179,05 59	1,18	-	8,12E+ 04	5,19E+ 04	4,13E+ 04	2,31E+ 05	1,91E+ 05	3,12E+ 05	5,19E+ 04	2,31E+ 05	4,46	0,01
44	D-Glucose 6-phosphate	C02965	Glycolysis	259,02 28	1,27	-	4,48E+ 04	3,01E+ 04	2,04E+ 04	4,81E+ 04	2,70E+ 04	4,06E+ 04	3,01E+ 04	4,06E+ 04	1,35	0,51
45	D-Fructose 1-6-bisphosphate	C00354	Glycolysis	338,98 92	1,64	-	4,27E+ 03	4,03E+ 03	1,41E+ 04	2,86E+ 04	1,19E+ 04	7,26E+ 03	4,27E+ 03	1,19E+ 04	2,79	0,31
46	D-Glyceraldehyde 3-phosphate/Glycerone phosphate	C00118	Glycolysis	168,98 91	1,27	-	5,05E+ 04	4,58E+ 04	5,90E+ 04	7,07E+ 04	5,75E+ 04	8,66E+ 04	5,05E+ 04	7,07E+ 04	1,40	0,10
47	2/3-Phospho-D-glycerate	C00631	Glycolysis	184,98 51	1,31	-	6,49E+ 04	7,66E+ 04	1,11E+ 05	8,78E+ 04	7,54E+ 04	1,06E+ 05	7,66E+ 04	8,78E+ 04	1,15	0,76
48	Phosphoenolpyruvate	C00074	Glycolysis	166,97 44	1,40	-	5,50E+ 03	3,58E+ 03	6,40E+ 03	7,57E+ 03	3,15E+ 03	7,67E+ 03	5,50E+ 03	7,57E+ 03	1,38	0,60
49	Pyruvate	C00022	Glycolysis	87,007 4	1,36	-	4,69E+ 06	4,58E+ 06	5,41E+ 06	4,99E+ 06	5,82E+ 06	5,68E+ 06	4,69E+ 06	5,68E+ 06	1,21	0,18
50	Lactate	C01432	Glycolysis	89,023 0	1,28	-	1,69E+ 08	1,76E+ 08	1,91E+ 08	1,20E+ 08	1,27E+ 08	1,08E+ 08	1,76E+ 08	1,20E+ 08	0,68	0,00
51	Maltose	C00208	Other sugars	343,12 36	1,17	+	1,95E+ 04	1,65E+ 04	8,01E+ 03	0,00E+ 00	1,91E+ 04	3,28E+ 04	1,65E+ 04	1,91E+ 04	1,16	0,81
52	Citrate	C00158	TCA cycle	191,01 94	1,26	-	6,13E+ 06	7,04E+ 06	9,12E+ 06	2,10E+ 07	2,15E+ 07	2,18E+ 07	7,04E+ 06	2,15E+ 07	3,05	0,00
53	2-Oxoglutarate	C00026	TCA cycle	145,01 43	1,28	-	5,25E+ 05	5,41E+ 05	5,10E+ 05	1,32E+ 06	1,36E+ 06	1,34E+ 06	5,25E+ 05	1,34E+ 06	2,54	0,00
54	Succinate	C00042	TCA cycle	117,01 81	1,29	-	4,91E+ 05	4,22E+ 05	7,41E+ 05	4,65E+ 05	3,79E+ 05	4,11E+ 05	4,91E+ 05	4,11E+ 05	0,84	0,25
55	Fumarate	C00122	TCA cycle	115,00 25	1,29	-	2,17E+ 05	2,16E+ 05	3,20E+ 05	3,43E+ 05	3,56E+ 05	4,08E+ 05	2,17E+ 05	3,56E+ 05	1,64	0,04
56	Malate	C00149	TCA cycle	133,01 31	1,28	-	1,64E+ 06	1,82E+ 06	2,65E+ 06	3,28E+ 06	3,91E+ 06	3,59E+ 06	1,82E+ 06	3,59E+ 06	1,97	0,01
57	2-Hydroxyglutarate/Citramalate	C02630	Alternative Carboxylic acids	147,02 91	1,25	-	1,83E+ 05	2,00E+ 05	2,68E+ 05	5,67E+ 05	5,89E+ 05	4,54E+ 05	2,00E+ 05	5,67E+ 05	2,83	0,00
58	Sedoheptulose 7-phosphate	C05382	Pentose Phosphate Pathway	289,03 46	1,28	-	3,80E+ 03	7,99E+ 03	3,69E+ 03	2,00E+ 04	1,00E+ 04	2,30E+ 04	3,80E+ 03	2,00E+ 04	5,26	0,04
59	Pentose phosphates (isobars)	C00199	Pentose Phosphate Pathway	229,01 17	1,26	-	4,78E+ 04	9,02E+ 04	1,04E+ 05	9,21E+ 04	5,94E+ 04	6,34E+ 04	9,02E+ 04	6,34E+ 04	0,70	0,68
60	Glutathione	C00051	GSH homeostasis	308,09 16	1,25	+	1,21E+ 04	0,00E+ 00	0,00E+ 00	0,00E+ 00	0,00E+ 00	0,00E+ 00	0,00E+ 00	0,00E+ 00	#DIV/0!	0,37
61	5-Oxoproline	C01879	GSH homeostasis	130,05 03	1,23	+	1,01E+ 08	9,58E+ 07	9,91E+ 07	8,11E+ 07	7,76E+ 07	7,31E+ 07	9,91E+ 07	7,76E+ 07	0,78	0,00
62	S-Glutathionyl-L-cysteine	C05526	GSH homeostasis	427,09 63	1,23	+	7,46E+ 03	0,00E+ 00	3,86E+ 03	6,43E+ 03	0,00E+ 00	0,00E+ 00	3,86E+ 03	0,00E+ 00	0,00	0,62
63	Cys-Gly	C01419	GSH homeostasis	179,04 89	1,24	+	1,48E+ 04	0,00E+ 00	0,00E+ 00	0,00E+ 00	0,00E+ 00	0,00E+ 00	0,00E+ 00	0,00E+ 00	#DIV/0!	0,37
64	Ascorbate	C00072	GSH homeostasis	175,02 61	1,23	-	4,42E+ 04	4,59E+ 04	3,37E+ 04	7,38E+ 04	9,26E+ 04	9,37E+ 04	4,42E+ 04	9,26E+ 04	2,09	0,00
65	Dehydroascorbate	C05422	GSH homeostasis	173,00 88	1,25	-	6,90E+ 05	7,65E+ 05	9,89E+ 05	1,84E+ 06	1,98E+ 06	1,74E+ 06	7,65E+ 05	1,84E+ 06	2,40	0,00
66	gamma-L-Glutamyl-D-alanine	C03738	Gamma-glutamyls	219,09 83	1,25	+	1,36E+ 04	4,29E+ 04	1,64E+ 04	1,50E+ 04	3,70E+ 04	1,84E+ 04	1,64E+ 04	1,84E+ 04	1,12	0,94
67	gamma-Glutamyl-gamma-aminobutyrate	C15767	Gamma-glutamyls	233,11 43	1,25	+	5,00E+ 04	3,92E+ 04	2,37E+ 04	6,68E+ 04	2,41E+ 04	3,14E+ 04	3,92E+ 04	3,14E+ 04	0,80	0,85

68	gamma-L-Glutamylputrescine	C15699	Gamma-glutamyls	218,15 06	1,09	+	1,20E+ 03	0,00E+ 00	1,19E+ 03	0,00E+ 00	0,00E+ 00	0,00E+ 00	1,19E+ 03	0,00E+ 00	0,00	0,12
69	(5-L-Glutamyl)-L-glutamine	C05283	Gamma-glutamyls	276,11 96	1,23	+	1,18E+ 05	1,51E+ 05	1,25E+ 05	6,05E+ 04	7,78E+ 04	3,03E+ 04	1,25E+ 05	6,05E+ 04	0,48	0,01
70	Dimethylglycine	C01026	Serine biosynthesis and one-carbon metabolism	104,07 14	1,29	+	1,32E+ 06	5,74E+ 05	4,24E+ 05	2,99E+ 05	3,12E+ 05	3,27E+ 05	5,74E+ 05	3,12E+ 05	0,54	0,17
71	3-Phosphonopyruvate	C02798	Serine biosynthesis and one-carbon metabolism	168,99 01	1,40	+	3,72E+ 03	2,65E+ 03	5,79E+ 03	1,58E+ 04	1,02E+ 04	9,76E+ 03	3,72E+ 03	1,02E+ 04	2,73	0,02
72	Ornithine	C01602	Urea cycle	133,09 76	1,10	+	1,63E+ 07	1,38E+ 07	2,07E+ 07	8,94E+ 06	6,67E+ 06	7,16E+ 06	1,63E+ 07	7,16E+ 06	0,44	0,01
73	L-Citrulline	C00327	Urea cycle	176,10 35	1,21	+	1,57E+ 04	0,00E+ 00	0,00E+ 00	0,00E+ 00	0,00E+ 00	1,92E+ 04	0,00E+ 00	0,00E+ 00	#DIV/0!	0,89
74	Putrescine	C00134	Polyamines	89,108 1	1,15	+	1,48E+ 07	1,45E+ 07	2,23E+ 07	1,87E+ 07	1,33E+ 07	1,01E+ 07	1,48E+ 07	1,33E+ 07	0,90	0,43
75	Spermidine	C00315	Polyamines	146,16 55	1,13	+	6,64E+ 05	4,86E+ 05	5,99E+ 05	1,71E+ 06	2,32E+ 06	2,29E+ 06	5,99E+ 05	2,29E+ 06	3,83	0,00
76	Spermine	C00750	Polyamines	203,22 34	1,15	+	5,00E+ 04	2,67E+ 04	5,02E+ 04	7,73E+ 04	4,72E+ 04	4,75E+ 04	5,00E+ 04	4,75E+ 04	0,95	0,30
77	N-Acetylneuraminate	C00270	Aminosugars	310,11 38	1,21	+	3,58E+ 03	0,00E+ 00	2,94E+ 03	1,52E+ 03	2,66E+ 03	4,09E+ 03	2,94E+ 03	2,66E+ 03	0,91	0,68
78	5-Guanidino-2-oxopentanoate	C03771	Arginine and proline metabolism	174,08 79	1,24	+	7,69E+ 04	5,24E+ 04	9,54E+ 04	1,16E+ 05	1,68E+ 05	1,66E+ 05	7,69E+ 04	1,66E+ 05	2,16	0,02
79	Phosphocreatine	C02305	Arginine and proline metabolism	212,04 34	1,27	+	5,86E+ 03	1,47E+ 04	4,94E+ 03	4,04E+ 03	4,61E+ 03	0,00E+ 00	5,86E+ 03	4,04E+ 03	0,69	0,18
80	Creatine	C00300	Arginine and proline metabolism	132,07 72	1,23	+	4,16E+ 06	2,73E+ 06	2,92E+ 06	7,62E+ 05	7,48E+ 05	5,53E+ 05	2,92E+ 06	7,48E+ 05	0,26	0,00
81	Creatinine	C00791	Arginine and proline metabolism	114,06 68	1,22	+	2,08E+ 05	1,92E+ 05	2,88E+ 05	3,99E+ 04	5,49E+ 04	3,84E+ 04	2,08E+ 05	3,99E+ 04	0,19	0,00
82	Guanidinoacetate	C00581	Arginine and proline metabolism	118,06 17	1,22	+	2,19E+ 04	1,29E+ 04	5,97E+ 04	1,04E+ 05	4,76E+ 05	4,72E+ 05	2,19E+ 04	4,72E+ 05	21,54	0,06
83	trans-4-Hydroxy-L-proline	C01157	Arginine and proline metabolism	132,06 60	1,21	+	1,56E+ 07	1,89E+ 07	2,13E+ 07	2,11E+ 07	2,01E+ 07	1,94E+ 07	1,89E+ 07	2,01E+ 07	1,06	0,41
84	5-Aminopentanoate	C00431	Arginine and proline metabolism	118,08 69	1,64	+	3,03E+ 06	2,82E+ 06	2,86E+ 06	2,85E+ 06	2,88E+ 06	0,00E+ 00	2,86E+ 06	2,85E+ 06	1,00	0,36
85	L-1-Pyrroline-3-hydroxy-5-carboxylate	C04281	Arginine and proline metabolism	130,05 03	1,80	+	2,50E+ 07	2,11E+ 07	2,21E+ 07	2,02E+ 07	1,99E+ 07	1,93E+ 07	2,21E+ 07	1,99E+ 07	0,90	0,07
86	Pantothenol	C00864	Panthothenate metabolism	220,11 84	1,33	+	6,00E+ 05	5,43E+ 05	5,88E+ 05	5,39E+ 05	5,98E+ 05	5,34E+ 05	5,88E+ 05	5,39E+ 05	0,92	0,50
87	Pantetheine	C00831	Panthothenate metabolism	279,13 55	1,26	+	1,05E+ 04	2,72E+ 03	0,00E+ 00	0,00E+ 00	0,00E+ 00	0,00E+ 00	2,72E+ 03	0,00E+ 00	0,00	0,23
88	Taurine	C00245	Sulfur metabolism	126,02 24	1,25	+	5,20E+ 03	2,09E+ 03	0,00E+ 00	0,00E+ 00	0,00E+ 00	0,00E+ 00	2,09E+ 03	0,00E+ 00	0,00	0,18
89	Hypotaurine	C00519	Sulfur metabolism	110,02 77	1,20	+	3,92E+ 04	1,63E+ 04	1,28E+ 04	0,00E+ 00	0,00E+ 00	0,00E+ 00	1,63E+ 04	0,00E+ 00	0,00	0,05
90	3-Sulfino-L-alanine	C00606	Sulfur metabolism	152,00 14	1,21	-	1,02E+ 04	9,71E+ 03	1,14E+ 04	1,10E+ 04	4,40E+ 03	5,99E+ 03	1,02E+ 04	5,99E+ 03	0,59	0,18
91	L-Cysteate	C00506	Sulfur metabolism	170,01 28	1,69	+	1,18E+ 05	1,28E+ 05	1,42E+ 05	1,15E+ 05	9,55E+ 04	1,07E+ 05	1,28E+ 05	1,07E+ 05	0,84	0,06
92	L-Methionine S-oxide	C02989	Sulfur metabolism	166,05 37	1,51	+	1,01E+ 07	8,16E+ 06	9,34E+ 06	8,37E+ 06	8,54E+ 06	9,05E+ 06	9,34E+ 06	8,54E+ 06	0,91	0,41
93	Indole	C00463	Indole and Tryptophan	118,06 57	1,27	+	4,41E+ 05	5,10E+ 05	4,39E+ 05	4,31E+ 05	4,76E+ 05	4,70E+ 05	4,41E+ 05	4,70E+ 05	1,06	0,88
94	kynurenine	C00328	Indole and Tryptophan	209,09 24	1,25	+	1,46E+ 04	0,00E+ 00	1,07E+ 04	1,48E+ 06	1,49E+ 06	1,43E+ 06	1,07E+ 04	1,48E+ 06	138,36	0,00
95	N-formyl kynurenine	C02700	Indole and Tryptophan	237,08 73	1,25	+	1,23E+ 04	4,49E+ 03	0,00E+ 00	1,29E+ 05	8,46E+ 04	1,18E+ 05	4,49E+ 03	1,18E+ 05	26,26	0,00

96	Glycerol 3-phosphate	C00093	Glycerophospholipid biosynthesis	173,02 13	1,27	+	4,31E+ 04	3,09E+ 04	3,74E+ 04	3,58E+ 04	2,47E+ 04	2,48E+ 04	3,74E+ 04	2,48E+ 04	0,66	0,16
97	Ethanolamine phosphate	C00346	Glycerophospholipid biosynthesis	142,02 68	1,23	+	5,27E+ 04	7,44E+ 04	5,03E+ 04	1,18E+ 05	1,21E+ 05	1,07E+ 05	5,27E+ 04	1,18E+ 05	2,25	0,00
98	N-Methylethanolamine phosphate	C01210	Glycerophospholipid biosynthesis	156,04 25	1,13	+	8,22E+ 04	6,48E+ 04	5,91E+ 04	6,89E+ 04	7,05E+ 04	4,92E+ 04	6,48E+ 04	6,89E+ 04	1,06	0,58
99	sn-glycero-3-Phosphoethanolamine	C01233	Glycerophospholipid biosynthesis	216,06 29	1,22	+	2,21E+ 04	8,10E+ 03	0,00E+ 00	0,00E+ 00	3,10E+ 04	7,33E+ 04	8,10E+ 03	3,10E+ 04	3,83	0,33
10 0	L-Carnitine	C00318	Carnitine and fatty acid metabolsim	162,11 28	1,22	+	5,65E+ 07	5,20E+ 07	6,38E+ 07	5,09E+ 07	6,29E+ 07	7,23E+ 07	5,65E+ 07	6,29E+ 07	1,11	0,55
10 1	propionyl-carnitine	HMDB008 24	Carnitine and fatty acid metabolsim	218,13 92	1,25	+	1,40E+ 06	1,12E+ 06	1,09E+ 06	4,67E+ 06	7,47E+ 06	8,78E+ 06	1,12E+ 06	7,47E+ 06	6,66	0,01
10 2	butanoyl-l-carnitine	HMDB007 36	Carnitine and fatty acid metabolsim	232,15 48	1,25	+	6,63E+ 05	5,09E+ 05	4,16E+ 05	1,47E+ 06	1,01E+ 06	1,04E+ 06	5,09E+ 05	1,04E+ 06	2,04	0,02
10 3	acyl-C4-OH	HMDB131 27	Carnitine and fatty acid metabolsim	248,14 98	1,27	+	5,98E+ 03	3,49E+ 04	1,19E+ 04	3,37E+ 04	3,74E+ 04	2,90E+ 04	1,19E+ 04	3,37E+ 04	2,84	0,16
10 4	acyl-C5-OH	ac107	Carnitine and fatty acid metabolsim	262,16 54	1,25	+	1,10E+ 05	9,75E+ 04	1,38E+ 05	2,45E+ 05	3,10E+ 05	3,92E+ 05	1,10E+ 05	3,10E+ 05	2,83	0,01
10 5	Acetyl phosphate	C00227	Other	140,99 57	1,45	+	4,72E+ 04	7,52E+ 04	7,62E+ 04	7,69E+ 04	6,36E+ 04	7,39E+ 04	7,52E+ 04	7,39E+ 04	0,98	0,64
10 6	1-Hydroxy-2-aminoethylphosphonate	C05678	Other	142,02 68	1,23	+	5,27E+ 04	7,44E+ 04	5,03E+ 04	1,18E+ 05	1,21E+ 05	1,07E+ 05	5,27E+ 04	1,18E+ 05	2,25	0,00
10 7	2-Methyleneglutarate	C02930	Other	145,04 99	1,30	+	2,70E+ 04	2,88E+ 04	2,15E+ 04	7,29E+ 04	7,42E+ 04	9,51E+ 04	2,70E+ 04	7,42E+ 04	2,74	0,00
10 8	4-Aminobenzoate	C00568	Other	138,05 53	1,89	+	9,97E+ 04	8,45E+ 04	1,06E+ 05	9,90E+ 04	8,80E+ 04	9,33E+ 04	9,97E+ 04	9,33E+ 04	0,94	0,66
10 9	beta-Butoxyethyl nicotinate	C13138	Other	224,12 86	1,24	+	8,10E+ 04	1,14E+ 05	1,27E+ 05	1,31E+ 05	1,42E+ 05	1,68E+ 05	1,14E+ 05	1,42E+ 05	1,24	0,09
11 0	3-Oxalomalate	C01990	Other	207,01 47	1,20	+	1,57E+ 06	1,53E+ 06	1,69E+ 06	8,00E+ 05	5,31E+ 05	4,88E+ 05	1,57E+ 06	5,31E+ 05	0,34	0,00
11 1	D-glucono-1,5-lactone	C00198	Other	179,05 50	1,09	+	8,95E+ 03	3,43E+ 03	3,28E+ 03	6,85E+ 03	6,90E+ 03	1,24E+ 04	3,43E+ 03	6,90E+ 03	2,01	0,25
11 2	2-Dehydro-3-deoxy-D-glucarate	C03921	Other	193,03 50	1,58	+	1,01E+ 05	6,81E+ 04	7,66E+ 04	2,23E+ 05	0,00E+ 00	0,00E+ 00	7,66E+ 04	0,00E+ 00	0,00	0,93
11 3	Ferric gluconate	C13511	Other	196,05 81	1,10	+	0,00E+ 00	0,00E+ 00	4,06E+ 03	1,81E+ 03	3,01E+ 03	4,52E+ 03	0,00E+ 00	3,01E+ 03	#DIV/0!	0,32
11 4	6-Thioxanthine 5--monophosphate	C16618	Other	381,02 37	1,13	+	9,49E+ 05	9,12E+ 05	1,18E+ 06	4,14E+ 05	4,91E+ 05	3,93E+ 05	9,49E+ 05	4,14E+ 05	0,44	0,00
11 5	Deoxyribose triphosphate	C12347	Other	374,96 49	1,15	+	5,09E+ 05	5,15E+ 05	5,85E+ 05	2,93E+ 05	2,68E+ 05	2,64E+ 05	5,15E+ 05	2,68E+ 05	0,52	0,00
11 6	Riboflavin	C00255	Other	377,14 74	1,26	+	3,69E+ 05	4,50E+ 05	5,50E+ 05	6,35E+ 05	5,22E+ 05	4,44E+ 05	4,50E+ 05	5,22E+ 05	1,16	0,37
11 7	N-Amidino-L-aspartate	C03139	Other	176,06 62	1,25	+	5,30E+ 06	4,73E+ 06	5,70E+ 06	3,58E+ 06	3,33E+ 06	3,00E+ 06	5,30E+ 06	3,33E+ 06	0,63	0,00
11 8	threo-3-Hydroxy-L-aspartate	C11511	Other	150,03 88	1,49	+	5,94E+ 05	5,82E+ 05	6,16E+ 05	6,28E+ 05	6,40E+ 05	6,28E+ 05	5,94E+ 05	6,28E+ 05	1,06	0,03
11 9	N-Carbamyl-L-glutamate	C05829	Other	191,06 73	1,21	+	1,27E+ 04	3,71E+ 03	1,54E+ 03	1,37E+ 04	7,51E+ 03	2,21E+ 04	3,71E+ 03	1,37E+ 04	3,70	0,19