

No.	MRM Name	HMDB number
1	L-Kynurenine	HMDB00183
2	5-Methyltetrahydrofolic acid	HMDB01396
3	O-Phosphoethanolamine	HMDB00224
4	PC(36:1)	HMDB08037
5	PC(18:0/18:2)	HMDB00593
6	2-Methylcitric acid	HMDB00379
7	LysoPC(18:0)	HMDB10384
8	L-Cystine	HMDB00192
9	N-Acetyl-glucosamine 1-phosphate	HMDB01367
10	Cysteine	HMDB00574
11	SM(d18:1/26:2)	
12	SM(d18:1/26:1 OH)	
13	DHC(18:1/24:1)	
14	Saccharopine	HMDB00279
15	THC 18:1/24:0	
16	PA(18:0/18:1)	
17	AICAR	HMDB03192
18	Pyroglutamic acid	HMDB00267
19	PC(16:0/16:0)	HMDB00564
20	Glycerophosphocholine	HMDB00086
21	PC(20:5/P-16:0)	HMDB11222
22	THC 18:1/18:0	
23	Cytosine	HMDB00630
24	PI(36:4)	HMDB09899
25	1-Methylhistidine	HMDB00001
26	Dimethyl-L-arginine	HMDB01539
27	Histamine	HMDB00870
28	Cytidine diphosphate ethanolamine	HMDB01564
29	Phosphorylcholine	HMDB01565
30	Oxaloacetic acid	HMDB00223
31	Thiamine	HMDB00235
32	CL(18:2/18:2/16:1/16:1)	HMDB57668
33	DHC(18:1/24:0)	
34	PI(16:0/16:0)	HMDB09778
35	Hydroxyproline	HMDB00725
36	3, 5-Tetradecadiencarnitine	HMDB06707
37	PC(32:2)	HMDB07874
38	L-Glutamic acid	HMDB00148
39	PA(16:0/16:0)	HMDB00674
40	Phosphoenolpyruvic acid	HMDB00263

41	Quinolinic Acid	HMDB00232
42	Indoxyl sulfate	HMDB00682
43	L-Proline	HMDB00162
44	SM(d18:1/24:2)	
45	Gamma-Aminobutyric acid	HMDB00112
46	Oxidized glutathione	HMDB03337
47	Guanosine	HMDB00133
48	Citrulline	HMDB00904
49	Cyclic adenosine monophosphate	HMDB00058
50	Amino adipic acid	HMDB00510
51	Azelaic acid	HMDB00784
52	Xanthosine	HMDB00299

Pathway Name	PLSDA VIP Score	Log Space Z-Score	Linear Z Score
Tryptophan, Kynurenine, Serotonin, Melatonin Metabolism	2.9004	3.35442003	12.5384175
1-Carbon, Folate Metabolism	2.5871	3.74869319	26.7502481
Phospholipid Metabolism	2.5498	2.4734549	6.5470998
Phospholipid Metabolism	2.5474	2.37123921	3.91230155
Phospholipid Metabolism	2.3964	2.08044024	3.35025884
Krebs Cycle	2.3523	2.1813191	2.99447776
Phospholipid Metabolism	2.3318	1.95139246	3.50923728
SAM, SAH, Methionine, Cysteine, Glutathione Metabolism	2.2671	1.90818125	5.67351552
Amino-Sugar, Galactose, & Non-Glucose Metabolism	2.2549	1.83198111	4.96190933
SAM, SAH, Methionine, Cysteine, Glutathione Metabolism	2.1628	1.70259263	3.0558659
Sphingomyelin Metabolism	2.1332	1.61242165	3.00252649
Sphingomyelin Metabolism	2.0659	1.70380709	4.87961881
Glycosphingolipid Metabolism	2.029	-1.5190747	-0.7242155
Lysine Metabolism	1.9615	1.40012289	0.93104424
Glycosphingolipid Metabolism	1.9384	1.6071381	3.2263881
Phospholipid Metabolism	1.9331	1.37828577	1.75018333
Purine Metabolism	1.9249	1.39470503	2.10577141
GABA, Glutamate, Arginine, Ornithine, Proline Metabolism	1.8983	1.3662314	2.85055144
Phospholipid Metabolism	1.8693	1.35455391	1.82980301
Phospholipid Metabolism	1.8597	1.32335602	3.71714923
Plasmalogen Metabolism	1.8315	-1.3629046	-1.1629483
Glycosphingolipid Metabolism	1.8194	1.61158717	4.3369623
Pyrimidine Metabolism	1.8143	1.23933292	2.66395313
Phospholipid Metabolism	1.8077	1.36351442	2.07669382
Histidine, Histamine, Carnosine Metabolism	1.7941	1.2713469	2.55437839
Nitric Oxide, Superoxide, Peroxide Metabolism	1.782	1.29020154	2.24709817
Histidine, Histamine, Carnosine Metabolism	1.7658	1.1874164	2.68461461
Phospholipid Metabolism	1.712	1.17114135	3.58398281
Phospholipid Metabolism	1.7103	1.20787446	1.09040879
Krebs Cycle	1.7006	1.28379673	1.92751689
Vitamin B1 (Thiamine) Metabolism	1.6977	1.12829167	2.48306702
Cardiolipin Metabolism	1.672	1.15611569	2.33559116
Glycosphingolipid Metabolism	1.6549	-1.112423	-0.700723
Phospholipid Metabolism	1.6513	1.1526124	1.39331227
Vitamin C (Ascorbate) Metabolism	1.6463	1.10891694	0.96058479
Fatty Acid Oxidation and Synthesis	1.6437	-1.1113642	-0.6548789
Phospholipid Metabolism	1.6382	-1.2420047	-1.0345524
Bioamines and Neurotransmitter Metabolism	1.6223	1.07486837	1.34383836
Phospholipid Metabolism	1.6206	1.07961931	1.13366401
Glycolysis and Gluconeogenesis Metabolism	1.6081	1.26462905	6.98985685

Tryptophan, Kynurenine, Serotonin, Melatonin Metabolism	1.6043	1.34488331	1.8068242
Microbiome Metabolism	1.6027	1.05816709	2.1541195
GABA, Glutamate, Arginine, Ornithine, Proline Metabolism	1.5899	1.03686588	1.22379204
Sphingomyelin Metabolism	1.5848	1.04472549	1.64879271
GABA, Glutamate, Arginine, Ornithine, Proline Metabolism	1.5825	1.03158386	1.28166938
SAM, SAH, Methionine, Cysteine, Glutathione Metabolism	1.5769	1.05217919	2.12105721
Purine Metabolism	1.5376	1.04315903	1.89391192
Urea Cycle	1.5353	0.9864995	0.94555475
Purine Metabolism	1.5176	1.03413145	1.28000526
Lysine Metabolism	1.5152	0.99071056	0.72231299
Nitric Oxide, Superoxide, Peroxide Metabolism	1.506	-1.0065138	-0.9295727
Purine Metabolism	1.5005	0.95738142	0.60747295

Mean	1.86171923	1.16464621
Minimum	1.5005	-1.5190747
Maximum	2.9004	3.74869319
SD	0.3313224	1.03265562

Student's ttest p	Mann- Whitney U test p	Welch's ttest p	D'Agostino & Pearson omnibus p	D'Agostino & Pearson omnibus p (Linear)	FDR	q-Value
2.9295E-06	0.00095693	0.00040566	0.44118826	0.7050959	0.00110734	0.00066579
0.00011745	0.00499343	0.03351901	0.00582932	2.6706E-09	0.01591869	0.00957112
0.00016498	0.00295287	0.00483545	0.75029607	0.07564963	0.01591869	0.00957112
0.00016845	0.0022493	0.00207766	0.96186965	0.25914828	0.01591869	0.00957112
0.00057525	0.00295287	0.00327779	0.70770066	0.03983242	0.04348924	0.02614793
0.00079285	0.00565626	0.01506584	0.59207397	0.18306753	0.04944893	0.0297312
0.00091572	0.00295287	0.00288863	0.69617177	0.20706427	0.04944893	0.0297312
0.00141426	0.00643238	0.00761739	0.7984412	0.00616702	0.06429206	0.03865564
0.00153076	0.00385205	0.00353137	0.56360366	0.3117549	0.06429206	0.03865564
0.00269513	0.00436375	0.00463359	0.58506145	0.08456663	0.10187576	0.06125286
0.00319935	0.00385205	0.00120095	0.09880654	0.00066132	0.10994116	0.06610219
0.00464138	0.00823419	0.0258379	4.5428E-05	0.67803378	0.14620348	0.08790493
0.00564018	0.00924881	0.00494251	0.45755457	0.00021874	0.16399909	0.09860455
0.00792466	0.00823419	0.00125358	0.16882048	2.7644E-05	0.21010449	0.12632545
0.00886238	0.02578387	0.04975054	0.34345326	0.0908646	0.21010449	0.12632545
0.00909006	0.01047503	0.00215653	0.57707817	0.53171343	0.21010449	0.12632545
0.00944914	0.01047503	0.00567671	0.69845226	1.9091E-07	0.21010449	0.12632545
0.01070504	0.01047503	0.00619477	0.44042219	0.40133143	0.22480583	0.13516464
0.01222138	0.01324294	0.01106851	0.67281143	0.58149654	0.24112807	0.1449784
0.0127581	0.00643238	0.00646923	1.8522E-05	0.8849637	0.24112807	0.1449784
0.01445597	0.00821335	0.02708179	0.24900664	0.61098724	0.2523649	0.15173455
0.01523792	0.06900879	0.09995481	0.0004617	0.19472026	0.2523649	0.15173455
0.01557614	0.00385205	0.0011862	0.00027703	0.65749341	0.2523649	0.15173455
0.01602317	0.02573577	0.03767808	0.25148818	0.31719201	0.2523649	0.15173455
0.01698436	0.01324294	0.01200205	0.34839522	0.12127268	0.25680357	0.1544033
0.01787154	0.02578387	0.02306716	0.48847098	0.1078692	0.25982475	0.15621979
0.01912347	0.00384056	0.00096407	0.00011596	0.97151073	0.26772853	0.16097194
0.02378174	0.01321311	0.00802826	0.00510489	0.68756126	0.30676105	0.18444027
0.02393836	0.03180289	0.02298733	0.30410696	1.3755E-05	0.30676105	0.18444027
0.02488038	0.01663868	0.06234297	0.04074457	0.78813738	0.30676105	0.18444027
0.02515765	0.00643238	0.00164777	0.02856675	0.06716989	0.30676105	0.18444027
0.02780041	0.01324294	0.01825599	3.8994E-06	0.31601181	0.32277055	0.19406599
0.02967513	0.01663868	0.00739016	0.53585788	0.00069905	0.32277055	0.19406599
0.0300742	0.02578387	0.02731976	0.84231928	0.02954488	0.32277055	0.19406599
0.03065458	0.03898861	0.00914497	0.95693865	1.6699E-07	0.32277055	0.19406599
0.03095647	0.03898861	0.01114561	0.8533621	0.0007539	0.32277055	0.19406599
0.03159394	0.06292959	0.08140651	0.86545463	0.41126942	0.32277055	0.19406599
0.03352032	0.03898861	0.00531188	0.53815422	0.17129137	0.32414003	0.19488939
0.03373321	0.03898861	0.00743582	0.7770284	0.22630196	0.32414003	0.19488939
0.0353131	0.0829149	0.11049857	0.4088727	0.2395195	0.32414003	0.19488939

0.03579611	0.06909915	0.141891	0.81261781	0.53499823	0.32414003	0.19488939
0.03601556	0.01324294	0.0058173	0.10106836	0.05969326	0.32414003	0.19488939
0.03771846	0.02077637	0.00316828	0.15904744	0.01389608	0.32469917	0.19522557
0.03841093	0.01663868	0.0069058	0.00274046	0.47516454	0.32469917	0.19522557
0.03872597	0.01660342	0.00348876	0.34613567	0.22302111	0.32469917	0.19522557
0.03951366	0.02578387	0.01366051	0.2342387	0.00882044	0.32469917	0.19522557
0.04534428	0.03898861	0.03211755	0.23846575	0.10888032	0.35996599	0.21642976
0.04570997	0.07575257	0.00285021	0.10834425	0.2838774	0.35996599	0.21642976
0.04855892	0.04750893	0.04030564	0.9703255	7.9661E-05	0.37013811	0.22254576
0.04896007	0.02578387	0.01127842	0.03259399	5.1159E-06	0.37013811	0.22254576
0.05051522	0.03180289	0.02776171	0.81154968	0.53730784	0.37092136	0.22301669
0.05145822	0.02578387	0.00316432	0.94797367	0.00056365	0.37092136	0.22301669

0.02126825	0.02166943				0.23977626	
2.9295E-06	0.00095693				0.00110734	
0.05145822	0.0829149				0.37092136	
0.0160884	0.02055502				0.11350757	

Log2 Control Mean	Log2 Control Median	Control SD*	Control SEM*	Log2 Case Mean	Log2 Case Median	Case SD*
19.5820949	19.8179236	1.8501854	1.16628264	22.5597124	22.9512705	1.8591063
10.4537203	10.3427577	2.16321125	1.21275963	14.6266702	15.8237653	7.89276878
17.7546967	17.7947226	1.90935901	1.17549801	20.0626487	20.0156328	2.09965683
22.4470071	22.4386837	1.51912625	1.11019296	23.8774377	23.9225234	1.49463941
22.9622552	22.99159	1.58394873	1.12185126	24.3426806	24.4105404	1.52875883
17.503547	17.4272158	1.35556683	1.07902183	18.4609197	18.7273355	1.48192999
20.2139942	20.1885666	1.80738603	1.15947858	21.8802973	21.9387641	1.65797791
16.799131	16.6704798	3.32397393	1.35025067	20.1058356	20.857568	3.28764727
19.49922	19.6213746	2.40389978	1.24517126	21.8173663	21.6757297	2.07618417
18.067338	18.0969785	1.99261932	1.18810845	19.7608492	20.0156328	1.75247782
23.3196399	23.3792199	2.6044241	1.27036326	25.5463368	25.8312276	1.81401611
19.9569527	20.1364134	1.79579075	1.15761443	21.396021	21.1206024	1.97813802
18.1078786	17.6891321	2.38963734	1.24332023	16.1987181	16.1236365	1.89683796
20.0767027	20.0769518	4.27852932	1.43821438	23.0129214	23.1030957	2.15936667
16.5866855	16.5032271	2.19427636	1.21709038	18.4087707	18.833063	2.82536206
20.7659567	20.7347897	1.57961666	1.12108341	21.6750388	21.6971033	1.29774221
20.5538623	20.434556	5.98840752	1.56432806	24.1552312	24.4105404	3.42802241
18.3742081	18.6734158	2.66866824	1.27812593	20.3089557	20.5068809	1.95716608
20.9331203	21.0183562	1.59752859	1.12424809	21.8485844	21.7915381	1.42884633
26.1058002	26.3178186	2.35034578	1.23817759	27.7373301	27.925922	1.76602551
20.2261511	20.5362641	2.15689156	1.21187291	18.7147531	18.1556088	2.06535042
13.8130528	13.9246195	1.70757691	1.14312854	15.0571184	15.6855153	2.47083716
25.1867327	25.5074732	2.42237426	1.24755675	26.7686442	26.5754248	1.46742341
23.301765	23.4477292	1.73743633	1.14809341	24.3884316	24.3443501	1.76805942
23.0211085	23.4847218	2.63531367	1.27411339	24.7984193	25.0105199	2.01519648
23.0705435	23.3576929	2.61036866	1.27108754	24.8565096	25.1292767	2.27249568
25.2876345	25.649039	2.56187018	1.26514202	26.899193	26.7129283	1.42403565
16.9994532	17.5280267	3.4643368	1.36428476	19.0988168	19.7240075	2.10796251
23.8197542	23.8505402	2.32802801	1.23522778	25.2922842	25.0813157	1.95901338
18.6788752	18.7322666	1.41805798	1.09124809	19.3258016	19.1129892	1.48392334
21.9564947	22.2631156	3.92012629	1.40710017	24.1802449	24.052584	1.69674905
23.927947	24.0928932	1.75303315	1.15066137	24.8642311	24.7491918	1.49377633
15.3711898	15.2187397	2.30864272	1.2326483	14.0284452	14.0275605	1.58326222
19.5860028	19.4405295	2.44080715	1.24992331	21.0698279	21.5165311	2.02326567
20.0810835	20.0744176	4.99812442	1.49520853	22.6553086	22.6735748	2.52223993
19.0496594	18.8188704	2.83590759	1.29769616	17.3783782	17.0425999	1.87772214
21.5495733	21.5668031	1.27089629	1.06176286	21.1200306	21.1456934	1.33247777
23.7464441	23.9897405	2.92949719	1.30827268	25.4131921	25.7542987	1.67600538
20.7590931	20.7222442	1.78740364	1.15626042	21.6636688	21.6885918	1.3575047
17.8958775	18.2420588	3.10986404	1.32796109	19.9658875	19.6382096	4.74849782

17.700431	17.7854546	1.27584674	1.06279531	18.173097	18.1002106	1.48792108
19.8041828	20.5336389	4.00828382	1.41494519	21.9236752	21.7715282	1.94423585
25.4520905	25.6052907	2.4874386	1.25585093	26.8152176	26.8142116	1.42143519
23.7167922	24.0057306	2.1453097	1.21024278	24.8672292	24.9890188	1.4537534
18.0284195	18.3885293	2.41481197	1.24658194	19.3405022	19.2511865	1.41443911
20.1205426	20.753081	4.5188137	1.45799525	22.4100257	23.027493	2.43708525
21.2238885	21.683262	3.5564069	1.37326029	23.1333081	23.2448144	2.54221921
22.5484015	22.4371285	2.31669643	1.23372192	23.7441069	23.7695118	1.30745599
16.262051	16.3611153	2.8584051	1.30026222	17.8289778	17.9430642	2.26462483
18.9695712	18.8174117	1.57302803	1.11991256	19.6170446	19.6522848	1.26175446
21.2688489	21.2533928	1.29606991	1.06698203	20.8922683	20.9459239	1.19126281
21.9916302	21.891577	3.81405021	1.39748322	23.8406438	23.4800052	1.49173129

Case SEM*	Linear Control				Linear Case	
	Mean (Geomean)	2.50% Threshold#	97.50% Threshold+	Hi/Lo Ratio	Mean (Geomean)	Fold Change
1.31958238	784870.363	234993.603	2621439.39	11.1553649	6182300.59	7.87684296
2.51914507	1402.43707	309.093217	6363.22515	20.5867512	25296.8514	18.0377801
1.39337851	221154.746	62252.4685	785662.365	12.6205817	1095113.32	4.95179661
1.19689228	5717714.3	2519407.8	12976167.2	5.15048308	15410791.8	2.69527139
1.20903507	8171985.29	3317683.72	20128905.9	6.06715638	21275366	2.60345133
1.19232998	185820.09	102361.264	337325.903	3.29544489	360819.98	1.94177056
1.25371435	1216238.01	381240.269	3880059.42	10.1774648	3860342.16	3.17400223
1.70277826	114036.096	10829.1266	1200856.89	110.89139	1128390.99	9.89503348
1.38639063	741054.436	132817.118	4134720.63	31.1309317	3695572.11	4.98691045
1.28518227	274669.653	71111.3587	1060919.37	14.9191267	888399.589	3.23442936
1.30517226	10469142.1	1603674.25	68344888.3	42.6176877	49001982.2	4.68061103
1.35671921	1017750.65	323072.622	3206141.02	9.92390194	2759587.09	2.71145697
1.33149304	282497.5	51225.2276	1557920.61	30.4131515	75214.235	0.26624744
1.41096197	1105833.45	64025.426	19099718.5	298.314587	8464077.34	7.65402543
1.59120624	98421.4761	21093.9969	459220.08	21.7701786	348010.355	3.53591887
1.12361985	1783100.61	727804.113	4368548.79	6.00236893	3348396.19	1.8778504
1.73491737	1539320.64	46110.3961	51387718	1114.44972	18683108.5	12.1372429
1.35026765	339772.156	49619.2727	2326618.5	46.8894115	1298987.09	3.82311226
1.17303679	2002152.28	799351.462	5014832.56	6.27362656	3776411	1.88617571
1.28961597	72215249.9	13527285.9	385520226	28.4994514	223752743	3.09841403
1.38315065	1226530.02	271878.391	5533267.57	20.3519947	430231.351	0.35077116
1.49859829	14392.7311	5042.87121	41077.9298	8.14574239	34091.3563	2.36865095
1.18709605	38191088.8	6742938.58	216309143	32.0793583	114331226	2.99366239
1.29027998	10340230.4	3501940.63	30531747.1	8.71852219	21960865.8	2.12382751
1.36802766	8512246.66	1274127.43	56868992.6	44.6336775	29178842.4	3.42786618
1.44355395	8808979.6	1343352.49	57764527.4	43.0002757	30377705.5	3.44849312
1.17126891	40957790.2	6479844.2	258885944	39.9524951	125159535	3.05581756
1.39584079	131022.33	11473.3412	1496238.17	130.409977	561457.31	4.28520321
1.35083746	14806776.3	2825944.58	77581360.1	27.453249	41090004.6	2.77508107
1.19304696	419663.998	211632.079	832188.923	3.93224377	657121.929	1.56582869
1.26674185	4069710.41	279701.885	59214984.6	211.707492	19009864.5	4.67106074
1.19658314	15959885.8	5311303.6	47957709.4	9.02936699	30540727.2	1.91359309
1.22812549	42382.7575	8222.61625	218458.223	26.5679702	16710.2448	0.39426988
1.3704747	786999.281	136901.669	4524180.56	33.0469351	2201152.91	2.79689317
1.51246154	1109196.45	47352.9051	25981864.6	548.685758	6605831.08	5.95551047
1.32547533	542648.832	70346.4857	4185962.55	59.5049278	170377.838	0.31397439
1.13697165	3069502.3	1918722.39	4910478.14	2.55924368	2279096.51	0.74249709
1.25979248	14073171.5	1711896.61	115692825	67.5816661	44682051.1	3.17498094
1.14647274	1774637.65	568529.917	5539442.51	9.74344946	3322110.86	1.8719939
2.00708216	243891.084	26388.9905	2254078.69	85.4173897	1024073.23	4.19889574

1.19448328	212990.706	132128.217	343341.05	2.59854449	295561.118	1.38767144
1.34627089	915488.835	60235.769	13913988.7	230.992131	3978174.78	4.34541048
1.17031189	45903172.3	7694281.2	273852900	35.5917458	118082307	2.5724215
1.1821377	13786875.5	3088484.75	61544074.7	19.9269479	30604261.4	2.21981125
1.16773239	267359.147	47494.5459	1505034.15	31.6885681	663852.05	2.48299734
1.48940856	1139952.78	59297.8524	21914660.9	369.569218	5573011.54	4.88880914
1.51780773	2449215.92	203725.149	29444860.7	144.532282	9200673.82	3.7565793
1.12737337	6134020.09	1181957.06	31833815.1	26.9331401	14050391	2.29056814
1.44131583	78589.6129	10031.423	615698.015	61.3769365	232839.734	2.96272911
1.10957669	513345.724	211254.751	1247422.04	5.90482359	804116.25	1.56642242
1.0814131	2526745.53	1519881.71	4200618.33	2.76377977	1946253.65	0.77026104
1.19585025	4170041.15	302428.687	57498656.5	190.123024	15022730.8	3.60253779

Log2 SEM	Linear SEM	Percent Difference (Case/Control -1)	Standard Error of the Difference (%)	Spearman_r	Spearman_p	Pearson_r
0.45750684	1.37316676	6.876842961	0.373166757	0.73854895	0.00013169	0.83197268
1.36167578	2.56983509	17.03778008	1.569835091	0.6277666	0.00231321	0.7420945
0.53241112	1.44634439	3.951796609	0.446344392	0.66469405	0.00101236	0.73140054
0.29996135	1.23111143	1.69527139	0.23111143	0.68315777	0.00064162	0.73072856
0.32017776	1.24848437	1.603451332	0.248484373	0.66469405	0.00101236	0.6873952
0.27648773	1.2112425	0.941770562	0.211242498	0.61873566	0.0027879	0.67474599
0.38985148	1.31025851	2.174002234	0.310258514	0.66469405	0.00101236	0.6688653
0.88166989	1.84250673	8.895033484	0.842506733	0.60930288	0.00336817	0.65032412
0.56765236	1.48210983	3.986910449	0.482109827	0.64623033	0.00155081	0.6468117
0.43915769	1.35581252	2.234429362	0.355812515	0.6374125	0.00188306	0.62039345
0.51655781	1.43053799	3.680611028	0.430537985	0.64623033	0.00155081	0.61189732
0.48815354	1.40264852	1.711456971	0.402648522	0.59083916	0.00479766	0.59261464
0.51896668	1.43292855	-0.733752564	0.432928551	-0.5819853	0.00564362	-0.582019
0.72218996	1.64968429	6.654025431	0.649684295	0.59083916	0.00479766	0.56265096
0.72759747	1.65587925	2.53591887	0.655879251	0.49852054	0.02143549	0.55602188
0.23551153	1.1773241	0.877850398	0.177324103	0.57237543	0.00669779	0.5544996
1.02398211	2.03352413	11.13724287	1.033524133	0.57237543	0.00669779	0.55216102
0.55949872	1.47375706	2.823112258	0.473757056	0.57237543	0.00669779	0.54451502
0.28559043	1.218909	0.886175714	0.218909003	0.55391171	0.00917926	0.5362033
0.47921245	1.3939825	2.098414026	0.3939825	0.60930288	0.00336817	0.53346218
0.54391737	1.45792588	-0.649228845	0.457925879	-0.5910311	0.00478056	-0.5253662
0.61469439	1.5312336	1.368650947	0.531233599	0.40659815	0.06738084	0.52189444
0.40379845	1.3229866	1.993662388	0.322986602	0.64623033	0.00155081	0.52043725
0.41819639	1.33625597	1.123827505	0.33625597	0.49868247	0.02138653	0.51854995
0.57143493	1.48600084	2.427866179	0.486000841	0.55391171	0.00917926	0.51463146
0.63266305	1.55042426	2.448493118	0.550424261	0.49852054	0.02143549	0.51117009
0.40882886	1.32760766	2.055817559	0.327607662	0.64644024	0.00154354	0.50651336
0.65751355	1.57736173	3.285203208	0.577361731	0.55409164	0.00915188	0.49108521
0.53020605	1.44413544	1.775081074	0.444135441	0.48005681	0.02763346	0.49061003
0.28410876	1.21765781	0.565828689	0.217657807	0.53544799	0.01236741	0.48780302
0.59928503	1.5149656	3.671060738	0.514965599	0.60930288	0.00336817	0.48699293
0.32868114	1.25586478	0.91359309	0.255864784	0.55391171	0.00917926	0.47960708
0.42302149	1.34073256	-0.605730119	0.34073256	-0.535448	0.01236741	-0.474698
0.55705539	1.47126323	1.796893169	0.471263227	0.49852054	0.02143549	0.47368483
0.83252031	1.78079359	4.955510468	0.780793592	0.46159309	0.03517097	0.47223005
0.55370625	1.46785174	-0.686025607	0.467851736	-0.4615931	0.03517097	-0.4714819
0.20438509	1.15219515	-0.257502914	0.152195149	-0.415839	0.06081117	-0.4699208
0.511171	1.42520653	2.174980942	0.425206528	0.46159309	0.03517097	0.4653491
0.28768873	1.22068312	0.871993902	0.220683117	0.46159309	0.03517097	0.46485664
1.0852099	2.12168415	3.19889574	1.121684148	0.3877382	0.08243519	0.46127618

0.27102428	1.20666423	0.387671436	0.206664228	0.40646594	0.06747857	0.46020664
0.65936401	1.57938622	3.34541048	0.579386219	0.55391171	0.00917926	0.45972443
0.39937613	1.31893744	1.572421495	0.318937439	0.51698426	0.01640182	0.4560586
0.36614368	1.28890299	1.219811254	0.28890299	0.53544799	0.01236741	0.45460483
0.38878767	1.30929271	1.482997339	0.309292711	0.53562192	0.01233366	0.4539502
0.79135728	1.73070194	3.888809135	0.730701935	0.49852054	0.02143549	0.45233143
0.75617011	1.68900092	2.756579299	0.68900092	0.46159309	0.03517097	0.44106993
0.34890756	1.27359587	1.290568138	0.273595866	0.39709901	0.07467888	0.4404019
0.64932883	1.56843836	1.962729114	0.568438357	0.44312937	0.04423114	0.4353341
0.22180584	1.16619241	0.566422417	0.166192413	0.49852054	0.02143549	0.4346391
0.14662665	1.10697808	-0.229738957	0.10697808	-0.4800568	0.02763346	-0.4319855
0.54745657	1.46150683	2.602537789	0.461506825	0.49852054	0.02143549	0.43040683

Pearson_p	kNN Cluster (of 10)	MDA Rank in kNN Cluster	Mean MDA/kNN Cluster	K-Means Cluster (of 10)	Random Forest MDA (5000 trees)	Random Forest Rank
2.9295E-06	4	1	0.0007344	4	0.0049772	1
0.00011745	4	4	0.0007344	4	0.00085881	29
0.00016498	4	2	0.0007344	4	0.0031442	4
0.00016845	3	1	0.00033721	3	0.0037711	2
0.00057525	3	3	0.00033721	3	0.0020749	10
0.00079285	4	3	0.0007344	4	0.0010836	26
0.00091572	3	2	0.00033721	8	0.0027521	8
0.00141426	1	5	0.00023685	4	0.0026253	9
0.00153076	1	2	0.00023685	1	0.0028762	5
0.00269513	1	4	0.00023685	4	0.0027619	7
0.00319935	3	5	0.00033721	3	0.0015228	15
0.00464138	3	6	0.00033721	3	0.0013809	18
0.00564018	2	1	9.3739E-05	2	0.001924	11
0.00792466	1	3	0.00023685	1	0.0028357	6
0.00886238	8	2	0.0002152	8	0.0010858	25
0.00909006	3	9	0.00033721	3	0.00055105	39
0.00944914	1	37	0.00023685	1	0.00011405	124
0.01070504	1	10	0.00023685	1	0.00084476	30
0.01222138	8	6	0.0002152	8	0.00045302	51
0.0127581	1	1	0.00023685	3	0.0035895	3
0.01445597	5	2	0.00014449	5	0.0010888	24
0.01523792	8	1	0.0002152	8	0.0014461	17
0.01557614	1	7	0.00023685	1	0.0016999	13
0.01602317	8	5	0.0002152	8	0.0005169	45
0.01698436	1	11	0.00023685	1	0.00077167	33
0.01787154	1	17	0.00023685	1	0.00043841	52
0.01912347	1	6	0.00023685	1	0.001868	12
0.02378174	6	1	0.00010891	6	0.0012369	20
0.02393836	4	5	0.0007344	4	0.00063745	36
0.02488038	1	8	0.00023685	4	0.0014596	16
0.02515765	5	1	0.00014449	3	0.0013369	19
0.02780041	3	4	0.00033721	3	0.0016616	14
0.02967513	2	4	9.3739E-05	2	0.00057921	38
0.0300742	8	4	0.0002152	10	0.00052168	44
0.03065458	1	28	0.00023685	1	0.00015452	102
0.03095647	7	3	0.00011122	7	0.00034279	63
0.03159394	5	8	0.00014449	5	5.0476E-05	168
0.03352032	1	20	0.00023685	1	0.00024881	73
0.03373321	8	8	0.0002152	8	0.00024644	75
0.0353131	6	7	0.00010891	6	0.00034365	62

0.03579611	8	3	0.0002152	8	0.00094032	28
0.03601556	1	16	0.00023685	3	0.00046278	50
0.03771846	1	15	0.00023685	1	0.00046817	49
0.03841093	3	12	0.00033721	3	0.0002654	71
0.03872597	1	26	0.00023685	4	0.00016841	95
0.03951366	1	70	0.00023685	6	0.00001873	204
0.04534428	6	12	0.00010891	6	0.0001369	111
0.04570997	1	36	0.00023685	4	0.00011532	121
0.04855892	6	10	0.00010891	6	0.00015484	101
0.04896007	2	9	9.3739E-05	9	0.00021024	81
0.05051522	2	7	9.3739E-05	2	0.00030032	67
0.05145822	1	9	0.00023685	1	0.0011303	22
