

Supplemental Table 3A. GSEA applying the c5 GO gene set collection.

NAME	SIZE	ES	NES	NOM p-val	FDR q-val	FWER p-val	RANK AT MA LEADING EDGE
HYDROLASE_ACTIVITY_HYDROLYZING_O_GLYCOSYL_COMPOUNDS	36	-0.7818106	-2.3272913	0	0	0	2401 tags=47%, list=10%, signal=52%
SECONDARY_ACTIVE_TRANSMEMBRANE_TRANSPORTER_ACTIVITY	47	-0.6832817	-1.110089	0	3.52E-04	0.001	1575 tags=23%, list=12%, signal=24%
HYDROLASE_ACTIVITY_ACTING_ON_GLYCOSYL_BONDS	46	-0.6652442	-2.0428782	0	0.00165886	0.007	2526 tags=39%, list=10%, signal=43%
ANION_TRANSMEMBRANE_TRANSPORTER_ACTIVITY	58	-0.6233542	-2.01222	0	0.00317833	0.018	1575 tags=24%, list=6%, signal=26%
SERINE_HYDROLASE_ACTIVITY	44	-0.65078	-1.9707515	0	0.00605632	0.043	3403 tags=39%, list=14%, signal=45%
PROTEIN_AMINO_ACID_N_LINKED_GLYCOSYLATION	29	-0.6939393	-1.9522052	0	0.0060648	0.055	4507 tags=55%, list=7%, signal=47%
LIPOPROTEIN_METABOLIC_PROCESS	33	-0.6846137	-1.9355763	0	0.00665539	0.066	3172 tags=55%, list=13%, signal=62%
SERINE_TYPE_PEPTIDASE_ACTIVITY	43	-0.644798	-1.9307067	0	0.00643396	0.072	3403 tags=37%, list=13%, signal=43%
SYMPORTER_ACTIVITY	31	-0.6842873	-1.9233667	0	0.00651516	0.082	1575 tags=32%, list=6%, signal=34%
SERINE_TYPE_ENDOPEPTIDASE_ACTIVITY	39	-0.6136697	-1.858553	0	0.01172743	0.222	3403 tags=36%, list=14%, signal=41%
VACUOLE_ORGANIZATION_AND_BIOGENESIS	12	-0.8189157	-1.824621	0	0.02408944	0.321	2481 tags=58%, list=16%, signal=65%
SOLUTE_SODIUM_SYMPORTER_ACTIVITY	13	-0.8047919	-1.8193982	0.00410678	0.02721026	0.384	351 tags=31%, list=1%, signal=31%
LIPOPROTEIN_BIOSYNTHETIC_PROCESS	26	-0.6720095	-1.806974	0.00200803	0.03107003	0.46	3172 tags=54%, list=13%, signal=62%
EXTERNAL_SIDE_OF_PLASMA_MEMBRANE	16	-0.733018	-1.8014957	0.00205761	0.03104012	0.485	3281 tags=56%, list=13%, signal=65%
VTGUL_TRANSPORT	13	-0.8207377	-1.7995609	0	0.02990531	0.497	1424 tags=38%, list=6%, signal=41%
LYSOSOME_ORGANIZATION_AND_BIOGENESIS	11	-0.8307377	-1.796958	0	0.02897762	0.511	2481 tags=64%, list=10%, signal=71%
PHOSPHATE_TRANSMEMBRANE_TRANSPORTER_ACTIVITY	13	-0.7694588	-1.7954001	0	0.02790158	0.52	124 tags=31%, list=0%, signal=31%
ORGANIC_ANION_TRANSMEMBRANE_TRANSPORTER_ACTIVITY	10	-0.8356974	-1.7939773	0.00217865	0.02710458	0.53	1256 tags=50%, list=5%, signal=53%
RESPONSE_TO_XENOBIOTIC_STIMULUS	12	-0.8045701	-1.755661	0	0.03314876	0.609	2408 tags=42%, list=10%, signal=46%
ANION_TRANSPORT	31	-0.623848	-1.7639052	0.00431035	0.03786528	0.691	1832 tags=23%, list=7%, signal=24%
XENOBIOTIC_METABOLIC_PROCESS	11	-0.808131	-1.7562022	0.00205761	0.03970722	0.716	2408 tags=45%, list=10%, signal=50%
INORGANIC_ANION_TRANSMEMBRANE_TRANSPORTER_ACTIVITY	19	-0.690707	-1.7445287	0.00198807	0.04531192	0.766	1575 tags=26%, list=6%, signal=28%
RNA_PROCESSING	163	0.6663698	2.3943808	0	0	0	5902 tags=69%, list=23%, signal=90%
RNA_BINDING	250	0.63021153	2.3583093	0	0	0	5626 tags=57%, list=22%, signal=72%
RNA_SPLICING	90	0.6980362	2.3115022	0	0	0	5853 tags=72%, list=23%, signal=94%
TRANSCRIPTION_COREPRESSOR_ACTIVITY	91	0.6948065	2.2987466	0	0	0	3893 tags=51%, list=15%, signal=60%
TRANSCRIPTION_COFACTOR_ACTIVITY	218	0.6141208	2.2684004	0	0	0	4045 tags=42%, list=16%, signal=47%
NUCLEOLUS	119	0.65794456	2.2569606	0	0	0	4534 tags=50%, list=18%, signal=61%
TRANSCRIPTION_FACTOR_BINDING	291	0.5925111	2.2406206	0	0	0	4045 tags=40%, list=16%, signal=47%
PORE_COMPLEX	35	0.7798341	2.205133	0	0	0	2644 tags=57%, list=11%, signal=64%
TRANSCRIPTION_REPRESSOR_ACTIVITY	148	0.6523898	2.2047866	0	0	0	3936 tags=39%, list=17%, signal=44%
NUCLEAR_LUMEN	366	0.56409633	2.1808102	0	0	0	5911 tags=52%, list=23%, signal=67%
NUCLEAR_PORE	30	0.7835675	2.1551075	0	0	0	2644 tags=60%, list=11%, signal=67%
TRANSCRIPTION_FROM_RNA_POLYMERASE_II_PROMOTER	437	0.5491329	2.1494484	0	0	0	5450 tags=45%, list=22%, signal=56%
NUCLEAR_ENVELOPE	71	0.6595207	2.0564615	0	1.90E-04	0.002	4827 tags=58%, list=19%, signal=72%
MRNA_METABOLIC_PROCESS	83	0.64272845	2.0901098	0	1.76E-04	0.002	5953 tags=69%, list=24%, signal=80%
GUANYL_NUCLEOTIDE_BINDING	45	0.69481	2.0835226	0	2.47E-04	0.003	3893 tags=51%, list=15%, signal=60%
NUCLEAR_MEMBRANE	48	0.6864833	2.0745378	0	2.31E-04	0.003	4301 tags=58%, list=17%, signal=70%
REGULATION_OF_TRANSCRIPTION_FROM_RNA_POLYMERASE_II_PROMOTER	277	0.5453253	2.0546129	0	4.48E-04	0.026	5450 tags=41%, list=23%, signal=54%
MRNA_PROCESSING_GO_0006397	72	0.634495	2.0523233	0	3.41E-04	0.005	5730 tags=65%, list=23%, signal=84%
ORGANELLE_LUMEN	433	0.5203779	2.0422518	0	4.56E-04	0.007	5911 tags=49%, list=23%, signal=63%
RIBONUCLEOPROTEIN_COMPLEX_BIOGENESIS_AND_ASSEMBLY	82	0.6187583	2.042169	0	4.33E-04	0.007	6108 tags=65%, list=24%, signal=85%
PROTEIN_IMPORT_INTO_NUCLEUS	47	0.67849275	2.0390773	0	4.13E-04	0.007	3787 tags=49%, list=15%, signal=58%
ACTIN_BINDING	74	0.634495	2.0375442	0	3.87E-04	0.008	3875 tags=41%, list=23%, signal=54%
MEMBRANE_ENCLOSED_LUMEN	433	0.5203779	2.034907	0	4.30E-04	0.008	5911 tags=49%, list=23%, signal=63%
GTASE_ACTIVITY	95	0.6132628	2.0327487	0	4.12E-04	0.008	4057 tags=47%, list=16%, signal=56%
TRANSLATION_REGULATOR_ACTIVITY	38	0.6897347	2.0315475	0	3.96E-04	0.008	4195 tags=53%, list=17%, signal=63%
GTP_BINDING	44	0.6892914	2.0288071	0	3.80E-04	0.008	3829 tags=50%, list=17%, signal=63%
NUCLEAR_TRANSPORT	87	0.61596495	2.0280452	0	3.66E-04	0.008	4405 tags=47%, list=18%, signal=57%
NUCLEOSIDE_TRIPHOSPHATASE_ACTIVITY	208	0.5512815	2.0264	0	3.53E-04	0.008	4160 tags=39%, list=17%, signal=47%
ACTIN_FILAMENT_BASED_PROCESS	115	0.58725166	2.02075	0	4.26E-04	0.01	3642 tags=38%, list=14%, signal=45%
NUCLEOTYLASMIC_TRANSPORT	277	0.5453253	2.0184928	0	4.12E-04	0.026	5450 tags=41%, list=23%, signal=54%
NUCLEOPLASM	265	0.5342159	2.019855	0	3.98E-04	0.01	5911 tags=49%, list=23%, signal=64%
ACTIN_FILAMENT_BINDING	24	0.76924264	2.0186236	0	4.25E-04	0.011	1715 tags=50%, list=7%, signal=54%
TRANSLATION_FACTOR_ACTIVITY_NUCLEIC_ACID_BINDING	36	0.7002382	2.0044525	0	5.22E-04	0.014	4195 tags=53%, list=17%, signal=63%
ACTIN_CYTOSKELETON_ORGANIZATION_AND_BIOGENESIS	105	0.5889319	2.0024237	0	5.07E-04	0.014	3642 tags=38%, list=14%, signal=45%
NUCLEAR_IMPORT	48	0.6656467	1.9970423	0	4.92E-04	0.014	3787 tags=48%, list=15%, signal=56%
POSITIVE_REGULATION_OF_TRANSCRIPTION	134	0.5665206	1.9961027	0	4.79E-04	0.014	4626 tags=41%, list=18%, signal=50%
RIBONUCLEOPROTEIN_COMPLEX	134	0.56688994	1.9918624	0	4.66E-04	0.014	5730 tags=60%, list=23%, signal=77%
POSITIVE_REGULATION_OF_NUCLEASE_NUCLEOSIDE_NUCLEOTIDE_AND_NUCLEIC_ACID_METABOLIC_PROCESS	163	0.5508655	1.9854473	0	4.73E-04	0.015	4051 tags=36%, list=16%, signal=42%
TRANSCRIPTION_ACTIVATOR_ACTIVITY	117	0.5699695	1.9827552	0	5.24E-04	0.017	5077 tags=44%, list=20%, signal=55%
REGULATION_OF_TRANSCRIPTION_DNA_DEPENDENT	442	0.50198656	1.9764488	0	6.28E-04	0.021	4628 tags=36%, list=18%, signal=43%
RNA_POLYMERASE_II_TRANSCRIPTION_FACTOR_ACTIVITY_ENHANCER_BINDING	13	0.86638993	1.9584615	0	7.61E-04	0.026	2338 tags=35%, list=19%, signal=50%
REGULATION_OF_RNA_METABOLIC_PROCESS	452	0.49975836	1.9549747	0	7.43E-04	0.026	4628 tags=36%, list=18%, signal=43%
TRANSCRIPTION_FACTOR_ACTIVITY	342	0.5124872	1.954919	0	7.26E-04	0.026	4051 tags=33%, list=16%, signal=39%
POSITIVE_REGULATION_OF_RNA_METABOLIC_PROCESS	111	0.56551677	1.9543072	0	7.10E-04	0.026	4626 tags=43%, list=18%, signal=53%
ACTIN_AMINO_ACID_LIGASE_ACTIVITY	53	0.6471465	1.926952	0	8.03E-04	0.031	2949 tags=24%, list=11%, signal=24%
NUCLEAR_MEMBRANE_PART	40	0.68149596	1.9384768	0	0.00109803	0.042	2644 tags=48%, list=11%, signal=53%
NEGATIVE_REGULATION_OF_CELLULAR_METABOLIC_PROCESS	255	0.5132503	1.9384344	0	0.00107515	0.042	4175 tags=32%, list=17%, signal=38%
POSITIVE_REGULATION_OF_TRANSCRIPTION_FROM_RNA_POLYMERASE_II_PROMOTER	61	0.6256275	1.9334099	0	0.001104	0.044	5043 tags=54%, list=20%, signal=67%
SPICEOSOME	47	0.6489944	1.9226964	0	0.00132921	0.054	5853 tags=68%, list=23%, signal=89%
LIGASE_ACTIVITY_FORMING_CARBON_NITROGEN_BONDS	63	0.6132146	1.9216945	0	0.00132738	0.054	3328 tags=45%, list=11%, signal=47%
PROTEIN_IMPORT	61	0.6055001	1.9215142	0	0.00130185	0.055	3787 tags=43%, list=15%, signal=50%
PROTEIN_CATABOLIC_PROCESS	64	0.6054251	1.920037	0	0.00137141	0.058	5189 tags=50%, list=21%, signal=63%
BIOPOLYMER_CATABOLIC_PROCESS	111	0.5601754	1.9153221	0	0.00139178	0.06	4771 tags=43%, list=18%, signal=53%
NEGATIVE_REGULATION_OF_NUCLEASE_NUCLEOSIDE_NUCLEOTIDE_AND_NUCLEIC_ACID_METABOLIC_PROCESS	288	0.5112786	1.9148763	0	0.00149492	0.06	4175 tags=32%, list=17%, signal=38%
POSITIVE_REGULATION_OF_TRANSCRIPTION_DNA_DEPENDENT	109	0.5629675	1.914654	0	0.00136443	0.061	4626 tags=43%, list=18%, signal=53%
TRANSLATION_INITIATION_FACTOR_ACTIVITY	21	0.7445266	1.9114094	0	0.00142881	0.064	3648 tags=62%, list=15%, signal=72%
NUCLEOPLASM_PART	200	0.5221997	1.9109613	0	0.00142647	0.065	6750 tags=60%, list=27%, signal=81%
PROGRAMMED_CELL_DEATH	436	0.4701324	1.9058014	0	0.00142647	0.071	4465 tags=39%, list=17%, signal=46%
ANTI_APOPTOSIS	118	0.54956144	1.9049568	0	0.00152209	0.072	3642 tags=40%, list=14%, signal=46%
INTRACELLULAR_TRANSPORT	274	0.4987926	1.9038053	0	0.00149713	0.072	4669 tags=45%, list=19%, signal=54%
COATED_MEMBRANE	17	0.7801006	1.8995547	0	0.00167408	0.081	3361 tags=65%, list=13%, signal=75%
NEGATIVE_REGULATION_OF_TRANSCRIPTION	184	0.4949852	1.8980266	0	0.00162655	0.081	3926 tags=42%, list=19%, signal=49%
MEMBRANE_COAT	17	0.7801006	1.8942058	0.00382409	0.00189222	0.093	3361 tags=65%, list=13%, signal=75%
EPIDERMAL_GROWTH_FACTOR_RECEPTOR_SIGNALING_PATHWAY	22	0.7422032	1.8926259	0	0.00193962	0.097	4707 tags=64%, list=19%, signal=78%
CELL_CORTEX	38	0.6514672	1.8920581	0	0.00192993	0.098	3275 tags=39%, list=13%, signal=45%
PHOSPHATASE_REGULATOR_ACTIVITY	45	0.728565	1.8916659	0	0.00193962	0.098	3187 tags=38%, list=18%, signal=46%
SMALL_CONJUGATING_PROTEIN_LIGASE_ACTIVITY	47	0.6409209	1.8887342	0	0.00201773	0.104	4405 tags=40%, list=18%, signal=49%
CELLULAR_PROTEIN_CATABOLIC_PROCESS	54	0.6185707	1.8843225	0	0.00211327	0.109	5189 tags=52%, list=21%, signal=65%
COATED_VESICLE_MEMBRANE	17	0.77576977	1.8840735	0	0.00208308	0.109	3187 tags=65%, list=13%, signal=75%
APOPTOSIS_GO	425	0.4721546	1.8812123	0	0.00210461	0.111	4405 tags=40%, list=18%, signal=49%
RNA_SPLICING_VIA_TRANSESTERIFICATION_REACTIONS	36	0.6637179	1.8813045	0	0.00219635	0.119	6408 tags=69%, list=25%, signal=93%
PROTEASOME_COMPLEX	23	0.7255346	1.8807669	0	0.00218359	0.12	5162 tags=70%, list=21%, signal=87%
SMALL_PROTEIN_CONJUGATING_ENZYME_ACTIVITY	48	0.6231962	1.8799707	0	0.00220655	0.123	4405 tags=38%, list=18%, signal=45%
PROPHOSPHATASE_ACTIVITY	222	0.50415751	1.8751513	0	0.00242151	0.137	4160 tags=37%, list=17%, signal=44%
RESPONSE_TO_HYPOXIA	28	0.68349457	1.8721696	0	0.00250645	0.144	2704 tags=46%, list=11%, signal=52%
NEGATIVE_REGULATION_OF_NUCLEASE_NUCLEOSIDE_NUCLEOTIDE_AND_NUCLEIC_ACID_METABOLIC_PROCESS	207	0.51259136	1.8721144	0	0.0024739	0.144	4706 tags=36%, list=19%, signal=44%
REGULATION_OF_CELL_CYCLE	180	0.5172228	1.8715239	0	0.00247415	0.146	5498 tags=40%, list=22%, signal=51%
TRANSCRIPTION_FACTOR_COMPLEX	64	0.5727531	1.8693227	0	0.00253574	0.151	5901 tags=57%, list=23%, signal=74%
RNA_POLYMERASE_II_TRANSCRIPTION_FACTOR_ACTIVITY	170	0.4949852	1.8681919	0	0.00261028	0.161	4626 tags=42%, list=19%, signal=49%
HYDROLASE_ACTIVITY_ACTING_ON_ACID_ANHYDRIDES	224	0.5013533	1.8612367	0	0.0028543	0.173	4160 tags=37%, list=17%, signal=44%
REGULATION_OF_BINDING	57	0.6059332	1.859686	0	0.00295512	0.179	4151 tags=40%, list=17%, signal=44%
GENERAL_RNA_POLYMERASE_II_TRANSCRIPTION_FACTOR_ACTIVITY	26	0.6964075	1.8581303	0.00187266	0.00303859	0.186	5787 tags=73%, list=23%, signal=95%
REGULATION_OF_PROGRAMMED_CELL_DEATH	336	0.4802664	1.855862	0	0.00314445		

RIBOSOME_BIOGENESIS_AND_ASSEMBLY	17	0.73755115	1.7818667	0	0.00712137	0.515	5582	tags=82%, list=22%, signal=106%
INTERMEDIATE_FILAMENT	23	0.6893657	1.78	0.0019084	0.00730231	0.527	317	tags=17%, list=1%, signal=18%
PERINUCLEAR_REGION_OF_CYTOSOL	53	0.5791446	1.7777379	0	0.00000000	0.542	2901	tags=23%, list=1%, signal=23%
RNA_SPLICING_FACTOR_ACTIVITY_TRANSESTERIFICATION_MECHANISM	19	0.7113275	1.773919	0	0.0079421	0.569	5626	tags=74%, list=22%, signal=95%
KINASE_BINDING	69	0.5502214	1.7727478	0	0.0080038	0.573	4208	tags=39%, list=17%, signal=47%
SMALL_NUCLEAR_RIBONUCLEOPROTEIN_COMPLEX	21	0.69443214	1.7711582	0	0.00816368	0.583	5730	tags=76%, list=23%, signal=99%
REGULATION_OF_TRANSFORMING_GROWTH_FACTOR_BETA_RECEPTOR_SIGNALING_PATHWAY	14	0.76576471	1.769343	0.00204918	0.00000000	0.593	2593	tags=29%, list=2%, signal=3%
I_KAPPA_BKINASE_NF_KAPPA_CASCADE	112	0.5110772	1.7683724	0	0.00838817	0.5	4679	tags=46%, list=19%, signal=57%
REGULATION_OF_MITOTIC_CELL_CYCLE	22	0.681358	1.7682081	0.0035524	0.00836288	0.601	819	tags=23%, list=3%, signal=23%
MYOBLAST_DIFFERENTIATION	17	0.7306395	1.7670319	0.00575816	0.00840922	0.608	2024	tags=24%, list=8%, signal=26%
INTERMEDIATE_FILAMENT_CYTOSKELETON	23	0.6893657	1.7667463	0	0.00836654	0.608	317	tags=17%, list=1%, signal=18%
DEPHOSPHORYLATION	70	0.5492232	1.7667066	0	0.00830678	0.608	4808	tags=37%, list=8%, signal=46%
TRANSLATION	176	0.49123588	1.7666426	0	0.00828283	0.61	5354	tags=44%, list=21%, signal=56%
BASOLATERAL_PLASMA_MEMBRANE	34	0.6284349	1.7619641	0.00182815	0.0089042	0.645	2597	tags=41%, list=10%, signal=46%
RAS_GTPASE_BINDING	24	0.67935413	1.7604394	0.00184843	0.00947367	0.658	3165	tags=50%, list=13%, signal=57%
NEGATIVE_REGULATION_OF_PROTEIN_METABOLIC_PROCESS	48	0.5902338	1.7603033	0	0.00906137	0.666	2046	tags=27%, list=8%, signal=29%
REGULATION_OF_PROTEIN_KINASE_ACTIVITY	155	0.49002585	1.7598573	0	0.0090165	0.66	4585	tags=38%, list=18%, signal=46%
CYTOPLASMIC_VESICLE_MEMBRANE	28	0.6587035	1.7597169	0	0.00898771	0.661	3768	tags=54%, list=15%, signal=63%
MUSCLE_CELL_DIFFERENTIATION	22	0.6882146	1.7596041	0.00375235	0.00894381	0.661	2024	tags=18%, list=8%, signal=20%
NEGATIVE_REGULATION_OF_TRANSCRIPTION_FROM_RNA_POLYMERASE_II_PROMOTER	24	0.6714373	1.7580432	0.00185529	0.00897669	0.668	3757	tags=46%, list=15%, signal=54%
RNA_HELICASE_ACTIVITY	27	0.6605234	1.7562097	0	0.00921011	0.681	3373	tags=30%, list=13%, signal=34%
CYTOSKELETON_ORGANIZATION_AND_BIOGENESIS	205	0.47684762	1.752743	0	0.00969033	0.701	3819	tags=31%, list=15%, signal=36%
JUNCTION	80	0.5429586	1.7509701	0	0.00986887	0.712	2618	tags=31%, list=10%, signal=35%
ENDOSOME_TRANSPORT	23	0.6703815	1.7508383	0.0018797	0.00982084	0.714	4978	tags=61%, list=20%, signal=76%
MYELOID_CELL_DIFFERENTIATION	37	0.6201245	1.747451	0.0018018	0.1026292	0.73	1717	tags=30%, list=7%, signal=32%
ACTIN_CYTOSKELETON	125	0.5125259	1.7471099	0	0.10212672	0.731	4652	tags=38%, list=18%, signal=46%
MYELOID_LEUKOCYTE_DIFFERENTIATION	13	0.60416696	1.7404988	0.00185189	0.10211111	0.736	1745	tags=27%, list=10%, signal=28%
POSITIVE_REGULATION_OF_CELL_ADHESION	13	0.7546882	1.7429764	0.00743494	0.1085975	0.756	2855	tags=38%, list=11%, signal=43%
RNA_PROCESSING	14	0.7559394	1.7419138	0.00369686	0.1094773	0.759	5582	tags=86%, list=22%, signal=110%
REGULATION_OF_DEVELOPMENTAL_PROCESS	433	0.44371867	1.7410092	0	0.11018195	0.76	5040	tags=40%, list=20%, signal=50%
REGULATION_OF_TRANSCRIPTION_FROM_RNA_POLYMERASE_II_PROMOTER	161	0.48156694	1.740442	0	0.11018195	0.761	4585	tags=37%, list=14%, signal=43%
STRUCTURAL_CONSTITUTENT_OF_RIBOSOME	79	0.5363326	1.7375906	0	0.11141186	0.776	5354	tags=53%, list=21%, signal=67%
PROTEIN_SERINE_THREONINE_KINASE_ACTIVITY	203	0.47152406	1.7320479	0	0.11226864	0.808	5316	tags=40%, list=21%, signal=51%
CYTOPLASMIC_VESICLE_PART	28	0.6587035	1.730718	0	0.11242117	0.816	3768	tags=54%, list=15%, signal=63%
PROTEIN_UBIQUITINATION	13	0.60416696	1.7304361	0.00185189	0.11242117	0.816	5121	tags=42%, list=19%, signal=48%
ENZYME_LINKED_RECEPTOR_PROTEIN_SIGNALING_PATHWAY	139	0.4958478	1.7301387	0	0.11233215	0.818	4768	tags=34%, list=19%, signal=41%
PROTEIN_MODIFICATION_BY_SMALL_PROTEIN_CONJUGATION	40	0.59731305	1.7289627	0.00194175	0.11245407	0.822	5121	tags=40%, list=20%, signal=50%
CELLULAR_LOCALIZATION	363	0.44475338	1.7262176	0	0.1128625	0.838	4405	tags=37%, list=18%, signal=45%
RUFFLE	31	0.62826943	1.7243387	0.00357143	0.11313773	0.843	3619	tags=55%, list=14%, signal=64%
NEGATIVE_REGULATION_OF_GROWTH	39	0.597254	1.7223791	0.00383142	0.1135352	0.858	2616	tags=26%, list=10%, signal=29%
REGULATION_OF_KINASE_ACTIVITY	157	0.4851815	1.7200768	0	0.11386955	0.865	4585	tags=38%, list=18%, signal=46%
LEADING_EDGE	47	0.5732438	1.7193012	0	0.11386739	0.869	3619	tags=47%, list=14%, signal=55%
POSITIVE_REGULATION_OF_SIGNAL_TRANSDUCTION	124	0.49870478	1.7170078	0	0.11429608	0.877	4611	tags=44%, list=19%, signal=53%
NUCLEOTIDE_BINDING	21	0.46337837	1.7163544	0	0.11429608	0.877	4808	tags=37%, list=14%, signal=43%
NEGATIVE_REGULATION_OF_PHOSPHATE_METABOLIC_PROCESS	13	0.7635427	1.7163078	0	0.11423124	0.88	2593	tags=23%, list=10%, signal=26%
INTERPHASE	67	0.5473161	1.7160926	0.00172117	0.1141709	0.88	5237	tags=45%, list=21%, signal=56%
ADP_BINDING	11	0.805532	1.7125866	0.00582524	0.11467065	0.89	764	tags=36%, list=3%, signal=37%
STRUCTURAL_MOLECULE_ACTIVITY	204	0.45567204	1.7125509	0	0.11459472	0.891	5322	tags=41%, list=18%, signal=49%
VESICLE_MEDIATED_TRANSPORT	192	0.46760067	1.7109	0	0.11487525	0.901	4617	tags=41%, list=18%, signal=50%
ENZYME_BINDING	177	0.47390518	1.7047313	0	0.11616685	0.912	4841	tags=40%, list=19%, signal=49%
UBIQUITIN_BINDING	11	0.793386	1.7041869	0.00992064	0.11611822	0.913	4706	tags=73%, list=18%, signal=89%
REGULATION_OF_CELLULAR_PROTEIN_METABOLIC_PROCESS	157	0.46169962	1.7037841	0	0.11611822	0.913	3013	tags=27%, list=10%, signal=28%
RNA_EXPORT_FROM_NUCLEUS	21	0.66899335	1.7024788	0.00548446	0.11629653	0.918	4917	tags=52%, list=19%, signal=65%
PROTEIN_TARGETING	107	0.4986622	1.7010429	0	0.11651056	0.921	5895	tags=52%, list=24%, signal=68%
SPLICEOSOME_ASSEMBLY	21	0.67287517	1.6943074	0.00770713	0.11788654	0.944	6727	tags=81%, list=27%, signal=110%
INTRACELLULAR_TRANSPORT	82	0.50742268	1.6927423	0	0.11788654	0.944	4609	tags=42%, list=19%, signal=49%
ORGANELLE_ENVELOPE	162	0.47107145	1.6925672	0	0.11805843	0.945	5073	tags=42%, list=20%, signal=52%
STRUCTURAL_CONSTITUTENT_OF_CYTOSKELETON	56	0.55428946	1.6922845	0	0.11801387	0.946	4624	tags=34%, list=18%, signal=41%
SKELETAL_MUSCLE_DEVELOPMENT	31	0.6197629	1.691943	0	0.11814711	0.948	3939	tags=26%, list=16%, signal=31%
NEGATIVE_REGULATION_OF_PHOSPHORYLATION	12	0.77171656	1.6902683	0.00581395	0.11814711	0.948	2593	tags=59%, list=19%, signal=74%
NUCLEOLAR_PART	17	0.7100589	1.6867696	0.0020202	0.11902136	0.961	5675	tags=76%, list=23%, signal=99%
ENVELOPE	162	0.47107145	1.6851894	0	0.11936823	0.964	5073	tags=42%, list=20%, signal=52%
REGULATION_OF_PROTEIN_METABOLIC_PROCESS	168	0.46882327	1.6834152	0	0.11969071	0.969	3073	tags=26%, list=12%, signal=29%
MRNA_SPLICING_SITE_SELECTION	13	0.7406232	1.6823665	0.00767754	0.11989641	0.97	4818	tags=69%, list=19%, signal=84%
APOTOTIC_PROGRAM	59	0.5482497	1.6818644	0.00174825	0.11989641	0.971	4818	tags=69%, list=19%, signal=84%
REGULATION_OF_CELL_PROLIFERATION	305	0.43899733	1.6815057	0	0.11991339	0.972	3548	tags=26%, list=14%, signal=29%
SMALL_CONJUGATING_PROTEIN_BINDING	12	0.7837699	1.6783366	0.00773694	0.12064917	0.979	4706	tags=67%, list=14%, signal=82%
INTRACELLULAR_TRANSPORT	140	0.4741515	1.6779141	0	0.12064917	0.979	4706	tags=67%, list=14%, signal=82%
RNA_METABOLIC_PROCESS	15	0.72763215	1.676424	0.00592885	0.12131986	0.983	5582	tags=80%, list=22%, signal=103%
TRANSMEMBRANE_RECEPTOR_PROTEIN_TYROSINE_KINASE_SIGNALING_PATHWAY	83	0.50744504	1.6742498	0	0.12133059	0.984	5736	tags=46%, list=23%, signal=59%
DNA_DIRECTED_RNA_POLYMERASE_II_HOLOENZYME	59	0.53508455	1.6741482	0	0.12124284	0.984	6181	tags=61%, list=25%, signal=81%
REGULATION_OF_ACTIN_POLYMERIZATION_AND_OR_DEPOLYMERIZATION	12	0.7496483	1.6720245	0.00389105	0.12161611	0.985	2046	tags=42%, list=8%, signal=45%
ORGANELLE_ORGANIZATION_AND_BIOGENESIS	468	0.42257723	1.6714231	0	0.12162433	0.985	5322	tags=42%, list=20%, signal=52%
REGULATION_OF_MOLECULAR_FUNCTION	321	0.4349031	1.6706224	0	0.12170806	0.985	4871	tags=36%, list=19%, signal=44%
MAGNESIUM_ION_BINDING	61	0.53271115	1.6701593	0	0.12175904	0.985	5407	tags=49%, list=21%, signal=62%
CELL_SUBSTRATE_ADHERENS_JUNCTION	16	0.6898071	1.6688787	0.00760456	0.12195289	0.986	2266	tags=50%, list=9%, signal=55%
POSITIVE_REGULATION_OF_DEVELOPMENTAL_PROCESS	214	0.45381921	1.6684856	0	0.12216999	0.987	5040	tags=45%, list=19%, signal=57%
POST_TRANSLATIONAL_PROTEIN_MODIFICATION	467	0.4217418	1.6676307	0	0.12216999	0.987	4808	tags=31%, list=19%, signal=38%
CELL_MATRIX_JUNCTION	18	0.6835255	1.6673872	0.01115242	0.12213224	0.987	2266	tags=44%, list=9%, signal=49%
REGULATION_OF_CELLULAR_COMPONENT_ORGANIZATION_AND_BIOGENESIS	123	0.4848248	1.6631851	0	0.12318821	0.992	4405	tags=38%, list=17%, signal=46%
NEGATIVE_REGULATION_OF_CELL_PROLIFERATION	155	0.44516957	1.6620421	0.00164474	0.12318821	0.994	3509	tags=26%, list=10%, signal=29%
ECTODERM_DEVELOPMENT	77	0.51529163	1.6592292	0.00173611	0.12414259	0.994	1665	tags=18%, list=7%, signal=19%
CYTOSKELETAL_PART	227	0.44534537	1.6591309	0	0.12408069	0.994	3592	tags=25%, list=14%, signal=29%
ATPASE_ACTIVITY	112	0.48623246	1.658797	0	0.12409508	0.994	4160	tags=33%, list=17%, signal=39%
REGULATION_OF_CYTOSKELETON_ORGANIZATION_AND_BIOGENESIS	80	0.61807526	1.6564481	0.0150009	0.12409508	0.994	5895	tags=50%, list=20%, signal=63%
SECRETORY_PATHWAY	81	0.5027318	1.6538827	0	0.12518803	0.994	4604	tags=38%, list=19%, signal=47%
NEGATIVE_REGULATION_OF_BINDING	18	0.6718733	1.6474241	0.01071429	0.12706049	0.994	3440	tags=39%, list=14%, signal=45%
EPIDERMIS_DEVELOPMENT	6	0.5242307	1.6461148	0.0016835	0.12737961	0.994	1665	tags=19%, list=7%, signal=20%
TRANSCRIPTION_FACTORIZATION	25	0.4234232	1.6453327	0.00560748	0.12737961	0.994	5040	tags=58%, list=19%, signal=74%
POSITIVE_REGULATION_OF_TRANSFERASE_ACTIVITY	86	0.49842203	1.6450092	0	0.12747956	0.994	4585	tags=43%, list=18%, signal=52%
GOLGI_VESICLE_TRANSPORT	47	0.5453441	1.6442453	0	0.12762443	0.994	4604	tags=47%, list=18%, signal=57%
MYOFIBRIL	19	0.6671165	1.6400765	0.0198915	0.12873044	0.994	599	tags=26%, list=2%, signal=27%
POSITIVE_REGULATION_OF_I_KAPPA_BKINASE_NF_KAPPA_CASCADE	87	0.49982587	1.6394261	0.00164474	0.12873044	0.994	4609	tags=47%, list=18%, signal=57%
REGULATION_OF_CELLULAR_COMPONENT_SIZE	14	0.710642	1.6378235	0.02004008	0.12929874	0.995	4746	tags=57%, list=19%, signal=70%
CHROMOSOME	121	0.4692505	1.6353621	0	0.12997476	0.996	6068	tags=45%, list=24%, signal=60%
KINASE_ACTIVATOR_ACTIVITY	12	0.7413255	1.6349207	0.0131579	0.13000614	0.996	4405	tags=42%, list=18%, signal=50%
CELLULAR_MACROMOLECULE_CATABOLIC_PROCESS	99	0.44863924	1.6345682	0.00163132	0.13000614	0.996		

RNA_DEPENDENT_ATPASE_ACTIVITY	18	0.6381389	1.5729166	0.02398524	0.04583609	1	3757	tags=44%, list=15%, signal=52%
REGULATION_OF_TRANSPORT	65	0.5025823	1.5726172	0.00503256	0.04576074	1	2949	tags=26%, list=12%, signal=30%
REGULATION_OF_CELL_GROWTH	45	0.5397814	1.5724726	0.00736648	0.04559885	1	4965	tags=42%, list=20%, signal=53%
TRANSLATIONAL_INITIATION	36	0.5535418	1.5723628	0.01088929	0.04556055	1	3648	tags=42%, list=15%, signal=49%
ADENYL_NUCLEOTIDE_BINDING	16	0.43307868	1.5714543	0	0.04578682	1	4768	tags=38%, list=19%, signal=42%
PROTEIN_KINASE_REGULATOR_ACTIVITY	39	0.55002505	1.5707995	0.01974865	0.04590825	1	3653	tags=28%, list=15%, signal=33%
POSITIVE_REGULATION_OF_CASPASE_ACTIVITY	48	0.5773355	1.5697871	0.01498127	0.04611751	1	4817	tags=43%, list=19%, signal=53%
REGULATION_OF_NUCLEOCYTOPLASMIC_TRANSPORT	22	0.61606365	1.5697684	0.01714286	0.04598208	1	2370	tags=32%, list=9%, signal=37%
ACTIN_FILAMENT_BUNDLE_FORMATION	12	0.7030536	1.5690141	0.03118908	0.04618751	1	4316	tags=42%, list=17%, signal=50%
PROTEIN_AUTOPROCESSING	32	0.56341404	1.5690104	0.01824817	0.04603232	1	7206	tags=59%, list=29%, signal=83%
STEROID_HORMONE_RECEPTOR_SIGNALING_PATHWAY	15	0.66526484	1.5681324	0.02970297	0.04624765	1	3729	tags=53%, list=15%, signal=63%
PURINE_NUCLEOTIDE_METABOLIC_PROCESS	12	0.70936537	1.5674949	0.02480916	0.04630781	1	2432	tags=33%, list=14%, signal=37%
CYTOSKELETON_DEPENDENT_INTRACELLULAR_TRANSPORT	26	0.6043526	1.5667729	0.01757469	0.04649865	1	3559	tags=38%, list=14%, signal=45%
UBIQUITIN_LIGASE_COMPLEX	25	0.6016522	1.5666163	0.01289135	0.04641552	1	6709	tags=52%, list=27%, signal=71%
INDUCTION_OF_APOPTOSIS_BY_EXTRACELLULAR_SIGNALS	27	0.5871265	1.5635796	0.01788656	0.04765374	1	5049	tags=52%, list=19%, signal=65%
REGULATION_OF_PROTEIN_IMPORT_INTO_NUCLEUS	30	0.65366715	1.5635076	0.01890359	0.04752604	1	3430	tags=44%, list=14%, signal=51%
NEGATIVE_REGULATION_OF_TRANSCRIPTION_FACTOR_ACTIVITY	16	0.6649386	1.5634167	0.02309059	0.04739911	1	3430	tags=40%, list=14%, signal=46%
MEMBRANE_FUSION	27	0.5810604	1.5630187	0.02281369	0.04741807	1	4516	tags=48%, list=18%, signal=59%
DNA_METABOLIC_PROCESS	251	0.41553983	1.55879	0	0.04902728	1	4247	tags=26%, list=17%, signal=31%
CHROMOSOMAL_PART	94	0.49950208	1.5569358	0.00338409	0.04965719	1	6068	tags=47%, list=24%, signal=61%
CALCIUM_ION_TRANSMEMBRANE_TRANSPORTER_ACTIVITY	11	0.7181926	1.5564916	0.0248566	0.04975615	1	1698	tags=36%, list=7%, signal=39%
PROTEIN_AMINO_ACID_PHOSPHORYLATION	273	0.41239893	1.5564026	0	0.04961956	1	6318	tags=42%, list=25%, signal=56%
REPLICATION_FORK	18	0.6232971	1.555453	0.01798561	0.04991534	1	6046	tags=72%, list=24%, signal=95%

Supplemental Table 3B. GSEA applying the c2 curated gene sets.

NAME	SIZE	ES	NES	NOM p-val	FDR q-val	FWER p-val	RANK AT MA	LEADING EDGE
HCC_SURVIVAL_GOOD_VS_POOR_UP	139	-0.6216995	-2.2713902	0	0	0	3947	tags=44%, list=16%, signal=52%
LSIAO_VLIVER_SPECIFIC_GENES	248	-0.5581823	-2.1965322	0	0	0	3956	tags=38%, list=16%, signal=44%
SANSOM_APC_5_DN	330	-0.5329908	-2.156622	0	0	0	2646	tags=29%, list=11%, signal=32%
HSOA0102_GLYCAN_STRUCTURES_DEGRADATION	30	0.7589494	2.141388	0	0	0	2217	tags=53%, list=19%, signal=63%
HSOA0511_N_GLYCAN_DEGRADATION	16	-0.8259946	-2.0183804	0	0.00101479	0.015	4169	tags=81%, list=17%, signal=97%
HSOA0040_PENTOSE_AND_GLUUCURONATE_INTERCONVERSIONS	25	-0.7428018	-2.0083268	0	9.01E-04	0.016	676	tags=40%, list=3%, signal=41%
HSOA04612_ANTIGEN_PROCESSING_AND_PRESENTATION	81	-0.5766249	-1.9629775	0	0.0019349	0.038	5665	tags=49%, list=23%, signal=64%
HSOA0563_GLYCOSYLPHOSPHATIDYLINOSITOL_ANCHOR_BIOSYNTHESIS	23	0.7395217	1.9576146	0.00214592	0.00194623	0.011	2918	tags=57%, list=19%, signal=69%
HSOA0040_GLUTATHIONE_METABOLISM	39	-0.6544321	-1.9483595	0	0.00206639	0.053	1452	tags=36%, list=6%, signal=38%
FETAL_LIVER_VS_ADULT_LIVER_GNF2	70	-0.5900008	-1.9416324	0	0.00202713	0.057	4168	tags=41%, list=17%, signal=50%
HSOA1031_GLYCAN_STRUCTURES_BIOSYNTHESIS_2	61	-0.5881043	-1.8783379	0	0.00511191	0.149	2918	tags=39%, list=12%, signal=44%
LEE_DNA_DN	16	-0.7489029	-1.783597	0	0.00116155	0.529	2357	tags=38%, list=5%, signal=40%
HSOA4940_TYPE_1_DIABETES_MELLITUS	44	-0.6025121	-1.8685457	0	0.00495361	0.169	2330	tags=34%, list=9%, signal=38%
HSOA00980_METABOLISM_OF_XENOBODIES_BY_CYTOCHROME_P450	70	-0.5630037	-1.8664087	0	0.00471974	0.174	902	tags=21%, list=4%, signal=22%
HSOA00860_PORPHYRIN_AND_CHLOROPHYLL_METABOLISM	40	-0.6289949	-1.8601896	0	0.0048141	0.185	1547	tags=28%, list=6%, signal=29%
APFEL_ILMATINIB_UP	31	-0.6387288	-1.8467257	0.0045977	0.00554749	0.227	4199	tags=58%, list=17%, signal=70%
LEE_CIP_DN	66	-0.551506	-1.8370739	0	0.00624868	0.273	4487	tags=36%, list=10%, signal=43%
INTRINSICPATHWAY	21	-0.7046621	-1.817842	0.00224719	0.00804175	0.352	3956	tags=52%, list=16%, signal=62%
HSOA3320_PPAR_SIGNALING_PATHWAY	68	-0.5451407	-1.8175415	0	0.0076185	0.352	4143	tags=32%, list=16%, signal=39%
NO2I12PATHWAY	16	-0.7438682	-1.8046514	0.00210526	0.00878688	0.441	3180	tags=63%, list=13%, signal=71%
TOBI1PATHWAY	16	-0.7489029	-1.783597	0	0.00116155	0.529	2357	tags=38%, list=5%, signal=40%
STATIN_PATHWAY_PHARMGB	18	-0.7093565	-1.7671908	0.00646552	0.01355003	0.591	948	tags=39%, list=4%, signal=40%
DIAB_NEPH_UP	60	-0.5342867	-1.7426834	0	0.0179455	0.688	2951	tags=42%, list=12%, signal=47%
HSOA0510_N_GLYCAN_BIOSYNTHESIS	41	-0.5780637	-1.7379285	0	0.01823682	0.709	4507	tags=41%, list=18%, signal=50%
HSOA0531_GLYCOSAMINOGLYCAN_DEGRADATION	17	-0.6572881	-1.6512216	0.00840336	0.01908786	0.741	1574	tags=41%, list=10%, signal=45%
WIELAND_HEPATITIS_B_INDUCED	93	-0.492596	-1.7223066	0	0.02020508	0.773	2999	tags=32%, list=12%, signal=36%
HSOA0414_RENIN_ANGIOTENSIN_SYSTEM	17	-0.6987255	-1.7122463	0.01279318	0.02184191	0.817	2371	tags=47%, list=9%, signal=52%
GLUTATHIONE_METABOLISM	31	-0.5991247	-1.7013884	0.00865801	0.02423617	0.857	1409	tags=29%, list=6%, signal=31%
HSOA0150_ANDROGEN_AND_ESTROGEN_METABOLISM	44	-0.5405994	-1.6841319	0	0.00510894	0.862	6166	tags=37%, list=10%, signal=43%
YU_CMVC_DN	44	-0.5490752	-1.6978747	0	0.02354499	0.869	2622	tags=34%, list=10%, signal=38%
DCPATHWAY	21	-0.6544923	-1.6918993	0.00636943	0.02467615	0.891	3312	tags=33%, list=13%, signal=38%
HSOA4514_CELL_ADHESION_MOLECULES	133	-0.4683649	-1.6892378	0	0.02471314	0.897	2898	tags=33%, list=12%, signal=37%
CTLA4PATHWAY	17	-0.6707446	-1.6892378	0.01072966	0.01908786	0.911	1357	tags=48%, list=18%, signal=63%
ROSS_MLL_FUSION	73	-0.4985997	-1.6731197	0	0.02752006	0.938	1526	tags=25%, list=6%, signal=26%
RESISTANCE_XENOGRAFTS_UP	28	-0.5943926	-1.6620537	0.00430108	0.03026863	0.952	1027	tags=25%, list=4%, signal=26%
BENNETT_SLE_UP	28	-0.5967727	-1.6608531	0.0045977	0.02970834	0.953	1160	tags=26%, list=5%, signal=27%
TSA_CDA_DN	18	-0.6572881	-1.6512216	0.0121596	0.01319176	0.971	2503	tags=44%, list=18%, signal=49%
GLYCOSPHINGOLIPID_METABOLISM	22	-0.6090599	-1.6390017	0.01162791	0.03759005	0.985	3248	tags=55%, list=10%, signal=63%
HSOA0590_ARACHIDONIC_ACID_METABOLISM	54	-0.511451	-1.613154	0.00205761	0.04457585	0.994	3428	tags=31%, list=14%, signal=36%
HSOA0592_ALPHA_LINOLENIC_ACID_METABOLISM	16	-0.6767966	-1.6128293	0.01622718	0.04363716	0.995	1442	tags=20%, list=6%, signal=21%
HSOA04610_COMPLEMENT_AND_COAGULATION_CASCADES	68	-0.4852642	-1.611866	0.00665189	0.04220560	0.995	1142	tags=25%, list=6%, signal=26%
HSOA0361_GAMMA_HEXACHLOROCYCLOHEXANE_DEGRADATION	23	-0.6174572	-1.6084304	0.01079914	0.04426694	0.996	3547	tags=39%, list=14%, signal=46%
FLECHNER_KIDNEY_TRANSPLANT_REJECTION_UP	81	-0.4742707	-1.6025659	0.00221729	0.0449154	0.996	2533	tags=33%, list=10%, signal=37%
BRENTANI_IMMUNE_FUNCTION	52	-0.4956814	-1.5886543	0.00683371	0.04989203	0.997	3716	tags=42%, list=15%, signal=50%
UVC_HIGH_ALL_DN	281	0.7311077	2.7616491	0	0	0	3473	tags=54%, list=14%, signal=62%
RAS_ONCOGENIC_SIGNATURE	247	0.7131648	2.7165884	0	0	0	3040	tags=54%, list=18%, signal=64%
UVC_XPCS_ALL_DN	448	0.6717067	2.6503847	0	0	0	4567	tags=54%, list=18%, signal=64%
UVC_XPCS_BHR_DN	382	0.6777778	2.6371446	0	0	0	4150	tags=55%, list=18%, signal=66%
UVC_NHEK3_ALL	382	0.6697695	2.6117747	0	0	0	4771	tags=55%, list=17%, signal=65%
UVC_TTD_ALL_DN	337	0.6719916	2.605418	0	0	0	4567	tags=55%, list=18%, signal=66%
ET743_SARCOMA_72HRS_DN	205	0.7012043	2.586437	0	0	0	4764	tags=59%, list=19%, signal=72%
UVC_XPCS_4HR_DN	223	0.6950709	2.5749629	0	0	0	4764	tags=58%, list=19%, signal=71%
UVC_NHEK1_DN	252	0.6801975	2.5491471	0	0	0	4522	tags=48%, list=18%, signal=58%
UVC_TTD_4HR_DN	277	0.6625095	2.5246081	0	0	0	4567	tags=57%, list=18%, signal=69%
ET743_SARCOMA_DN	247	0.6700792	2.493253	0	0	0	4764	tags=57%, list=19%, signal=69%
CHEN_HOXAS_TARGETS_UP	198	0.6797255	2.4865031	0	0	0	4553	tags=57%, list=18%, signal=69%
UVC_NHEK3_C1	56	0.7993145	2.4646053	0	0	0	2882	tags=64%, list=11%, signal=72%
ET743_SARCOMA_48HRS_DN	171	0.6763258	2.4612324	0	0.00423026	0.996	4166	tags=57%, list=18%, signal=69%
UVC_TTD_BHR_DN	157	0.684579	2.4589424	0	0	0	4228	tags=54%, list=17%, signal=64%
UVC_TTD-XPCS_COMMON_DN	136	0.6956368	2.4438024	0	0	0	4713	tags=59%, list=19%, signal=72%
REOVIRUS_HEK293_UP	231	0.6547243	2.4264152	0	0	0	4279	tags=52%, list=17%, signal=62%
HYPOXIA_REVIEW	80	0.7407181	2.4245412	0	0	0	4279	tags=54%, list=17%, signal=62%
LEI_MYB_REGULATED_GENES	305	0.6307245	2.4140236	0	0	0	4720	tags=41%, list=11%, signal=46%
BAF57_BT549_DN	308	0.6272466	2.3931077	0	0	0	4317	tags=47%, list=17%, signal=56%
NGUYEN_KERATO_DN	80	0.7314832	2.389196	0	0	0	3202	tags=55%, list=13%, signal=63%
HDAC1_COLON_SUL_UP	122	0.6705246	2.385207	0	0	0	3468	tags=54%, list=17%, signal=62%
SMITH_HTERT_UP	101	0.7100272	2.37374	0	0	0	5076	tags=70%, list=20%, signal=88%
UVC_NHEK3_CO	79	0.7328426	2.3713799	0	0	0	4265	tags=61%, list=17%, signal=73%
MENSE_HYPOXIA_UP	98	0.7055276	2.371113	0	0	0	1845	tags=43%, list=7%, signal=46%
UVC_SCC_DN	99	0.7057959	2.366092	0	0	0	3392	tags=53%, list=19%, signal=65%
STEMCELL_COMMON_UP	169	0.6554166	2.357283	0	0	0	4413	tags=47%, list=18%, signal=69%
DIAB_NEPH_DN	357	0.6136923	2.3564508	0	0	0	5089	tags=54%, list=20%, signal=67%
UVC_NHEK1_C6	121	0.67588675	2.329886	0	0	0	4522	tags=46%, list=18%, signal=56%
MRNA_PROCESSING_REACTOME	106	0.6834881	2.3248386	0	0	0	5626	tags=69%, list=22%, signal=89%
ADIP_DIFF_CLUSTER2	39	0.8046276	2.3217697	0	0	0	2251	tags=69%, list=18%, signal=72%
HYPOXIA_REG_UP	36	0.8241779	2.318427	0	0	0	3010	tags=75%, list=12%, signal=85%
ZUCCH1_EPITHELIAL_DN	42	0.79983157	2.3175628	0	0	0	2954	tags=71%, list=12%, signal=81%
ROME_INSULIN_2E_UP	183	0.6374897	2.3169801	0	0	0	4716	tags=56%, list=19%, signal=68%
ET743_SARCOMA_24HRS_DN	102	0.6725107	2.3071294	0	0	0	5166	tags=58%, list=20%, signal=70%
HCC_SURVIVAL_GOOD_VS_POOR_DN	133	0.66835696	2.306035	0	0	0	4558	tags=57%, list=18%, signal=69%
HDAC1_COLON_SUL48HRS_UP	83	0.69606674	2.3040853	0	0	0	3484	tags=58%, list=14%, signal=67%
HDAC1_COLON_SUL24HRS_UP	60	0.7386663	2.302893	0	0	0	3155	tags=53%, list=13%, signal=61%
CMV_HCMV_TIMECOURSE_14HRS_UP	189	0.6324057	2.2972062	0	0	0	2581	tags=53%, list=10%, signal=60%
UVC_NHEK2_DN	80	0.70636415	2.2931325	0	0	0	3755	tags=59%, list=15%, signal=69%
CROAQUINIST_IL6_STROMA_UP	38	0.7948322	2.290348	0	0	0	1781	tags=45%, list=7%, signal=48%
GALINDO_ACT_UP	76	0.7045212	2.275783	0	0	0	4010	tags=63%, list=16%, signal=75%
UVC_HIGH_D3_DN	44	0.7707451	2.2747					

PASSERINI_GROWTH	32	0.7768467	2.1254287	0	0	0	2194	tags=47%, list=9%, signal=51%
FLECHNER_KIDNEY_TRANSPLANT_WELL_UP	499	0.53676116	2.1221223	0	0	0	4754	tags=52%, list=19%, signal=63%
BHATTACHARYA_ESC_UP	67	0.6568999	2.1208148	0	0	0	3709	tags=46%, list=9%, signal=49%
UVB_NHEK1_C2	22	0.82801056	2.1183314	0	0	0	1835	tags=59%, list=7%, signal=64%
BRCA1_OVEREXP_DN	104	0.628125	2.118226	0	0	0	5005	tags=60%, list=20%, signal=74%
LVAD_HEARTFAILURE_UP	83	0.6528801	2.1174629	0	0	0	2616	tags=45%, list=10%, signal=50%
VERNELL_FRB_CLSTR2	18	0.8802312	2.1162043	0	0	0	2131	tags=72%, list=4%, signal=76%
EMT_DN	54	0.6821163	2.1149676	0	0	0	2036	tags=41%, list=8%, signal=44%
FSH GRANULOSA_DN	75	0.651781	2.1141446	0	0	0	3717	tags=43%, list=15%, signal=50%
UVB_NHEK1_UP	170	0.5861571	2.113819	0	0	0	4167	tags=43%, list=17%, signal=51%
BLEO_MOUSE_LYMPH_HIGH_24HRS_DN	34	0.7578431	2.1113348	0	0	0	3450	tags=65%, list=14%, signal=75%
BRCA1_MES_UP	40	0.72991526	2.1097836	0	0	0	3691	tags=60%, list=20%, signal=70%
FSH_OVARY_MCV152_DN	44	0.71253186	2.1053412	0	0	0	5014	tags=66%, list=20%, signal=82%
INOS_ALL_UP	53	0.69055915	2.1046143	0	0	0	3452	tags=58%, list=14%, signal=68%
UVB_HIGH_D4_DN	45	0.7182838	2.1024406	0	0	0	3473	tags=49%, list=14%, signal=57%
INFLIN_ADIP_INSENS_UP	21	0.8484626	2.1008787	0	0	0	2241	tags=71%, list=2%, signal=78%
MYC_TARGETS	41	0.7352754	2.100487	0	0	0	5005	tags=71%, list=20%, signal=88%
LEE_TCELLS9_UP	27	0.7720896	2.0992036	0	0	0	3668	tags=52%, list=15%, signal=61%
DMIT1_KO_UP	73	0.6541672	2.0989451	0	0	0	5022	tags=56%, list=20%, signal=70%
CMV_UV-CMV_COMMON_HCMV_6HRS_DN	27	0.78365064	2.0900497	0	0	0	3827	tags=67%, list=15%, signal=79%
BRCA1_OVEREXP_PROSTATE_UP	157	0.58371794	2.0888524	0	0	0	3014	tags=38%, list=12%, signal=43%
ESR_FIBROBLAST_UP	50	0.686892	2.0886297	0	0	0	3431	tags=50%, list=14%, signal=58%
AS3_FIBRO_DN	36	0.7421328	2.087326	0	0	0	2273	tags=44%, list=9%, signal=49%
UVB_HIGH_D6_DN	29	0.77306877	2.0845647	0	0	0	2682	tags=55%, list=11%, signal=62%
ADIP_VS_FIBRO_DN	26	0.775795	2.082162	0	0	0	4088	tags=65%, list=16%, signal=78%
LH GRANULOSA_DN	75	0.651781	2.0811195	0	0	0	3717	tags=43%, list=15%, signal=50%
VHL_NORMAL_UP	463	0.5237346	2.0722256	0	0	0	4623	tags=46%, list=11%, signal=51%
HDAC1_COLON_SUL16HRS_UP	40	0.72637904	2.0764806	0	0	0	4632	tags=52%, list=13%, signal=60%
HUMAN_CD34_ENRICHED_TRANSCRIPTION_FACTORS	181	0.56800765	2.0751934	0	0	0	4692	tags=46%, list=19%, signal=57%
CANCER_NEOPLASTIC_META_UP	61	0.67552286	2.0739715	0	0	0	5162	tags=66%, list=21%, signal=82%
CMV_HCMV_TIMECOURSE_20HRS_DN	34	0.73703194	2.0738475	0	0	0	3960	tags=53%, list=11%, signal=63%
IDX_TSA_DN_CLUSTER3	80	0.63549864	2.0725622	0	0	0	2700	tags=43%, list=11%, signal=47%
RIBAVIRIN_RSV_DN	42	0.70265734	2.068854	0	0	0	2146	tags=40%, list=9%, signal=44%
AD12_24HRS_DN	19	0.82272886	2.065237	0	0	0	1495	tags=58%, list=6%, signal=62%
MRNA_SPLICING	60	0.6785124	2.0642505	0	1.25E-05	0.001	5626	tags=72%, list=2%, signal=76%
GERY_CEBP_TARGETS	111	0.6055935	2.0624789	0	0	0	4601	tags=35%, list=9%, signal=38%
AGEING_KIDNEY_SPECIFIC_UP	173	0.5752395	2.0601087	0	0	0	3117	tags=39%, list=12%, signal=45%
CIS_XPC_DN	180	0.5702676	2.0579672	0	0	0	5478	tags=48%, list=21%, signal=61%
HDAC1_COLON_SUL12HRS_UP	23	0.80439687	2.0556948	0	0	0	2817	tags=63%, list=11%, signal=68%
TGFBETA_ALL_UP	79	0.6358222	2.0528662	0	0	0	2888	tags=46%, list=11%, signal=51%
UVB_HIGH_D5_DN	33	0.7468514	2.0497942	0	0	0	5438	tags=73%, list=22%, signal=93%
SCHUMACHER_MYC_UP	51	0.67054915	2.049625	0	0	0	3919	tags=57%, list=16%, signal=67%
P53_SIGNALING	93	0.6154286	2.0471282	0	1.25E-05	0.001	5118	tags=43%, list=19%, signal=54%
CMV_UV_HCMV_6HRS_DN	103	0.6001117	2.037961	0	1.24E-05	0.001	4602	tags=44%, list=19%, signal=57%
HSOA4520_ADHERENS_JUNCTION	75	0.6280697	2.0362694	0	1.23E-05	0.001	3133	tags=39%, list=12%, signal=44%
UVB_NHEK1_C1	33	0.7150144	2.0353777	0	1.22E-05	0.001	4323	tags=52%, list=17%, signal=62%
SHEPARD_CRASH_AND_BURN_MUT_VS_WT_UP	158	0.57865924	2.0318677	0	3.58E-05	0.003	4228	tags=43%, list=17%, signal=51%
HDAC1_COLON_CURL2HRS_UP	24	0.80910015	2.0297481	0	3.55E-05	0.003	4217	tags=60%, list=12%, signal=67%
LINDSTEDT_DEND_8H_VS_48H_DN	64	0.63993996	2.0296137	0	3.53E-05	0.003	3141	tags=41%, list=12%, signal=46%
TARTE_PLASMA_BLAISTIC	287	0.5311172	2.0293057	0	3.50E-05	0.003	4300	tags=44%, list=17%, signal=53%
LI_FETAL_VS_WT_KIDNEY_DN	152	0.57273483	2.0283394	0	4.46E-05	0.004	5282	tags=48%, list=21%, signal=64%
ZNF16 EARLY_UP	46	0.6873441	2.0280666	0	4.41E-05	0.004	2868	tags=50%, list=15%, signal=62%
CHANG_SERUM_RESPONSE_UP	141	0.5747282	2.026016	0	4.47E-05	0.004	4628	tags=48%, list=18%, signal=59%
HSOA4115_P53_SIGNALING_PATHWAY	68	0.6404768	2.0193105	0	7.95E-05	0.007	2729	tags=31%, list=11%, signal=35%
PASSERINI_APOPTOSIS	42	0.6877942	2.0173488	0	7.89E-05	0.007	4151	tags=62%, list=17%, signal=74%
ELONGINA_KO_DN	174	0.5557595	2.0171781	0	7.82E-05	0.007	4141	tags=39%, list=12%, signal=46%
IGFR_IR_UP	18	0.8152073	2.0133336	0	7.77E-05	0.007	1466	tags=50%, list=6%, signal=53%
HYPOXIA_NORMAL_UP	200	0.5489671	2.009447	0	8.80E-05	0.008	4930	tags=50%, list=20%, signal=61%
GREENBAUM_E2A_UP	33	0.7146635	2.005369	0	9.82E-05	0.009	4979	tags=42%, list=19%, signal=52%
IL1R1PATHWAY	32	0.6518238	2.001622	0	1.16E-04	0.01	3764	tags=53%, list=15%, signal=63%
RUIZ_TENASCIN_TARGETS	77	0.6206814	1.9996426	0	1.18E-04	0.011	2886	tags=35%, list=11%, signal=39%
HSOA5222_SMALL_CELL_LUNG_CANCER	87	0.60124296	1.9992994	0	1.17E-04	0.011	4151	tags=45%, list=17%, signal=54%
DORSEY_DOXYCYCLINE_UP	29	0.7327021	1.9981546	0	1.17E-04	0.011	3043	tags=45%, list=12%, signal=51%
HALMOS_CEBP_DN	43	0.6817201	1.9975718	0	1.16E-04	0.011	1316	tags=35%, list=7%, signal=37%
GN_CAMP_GRANULOSA_DN	59	0.6446625	1.9970189	0	1.15E-04	0.011	4206	tags=44%, list=19%, signal=53%
BRCA1_OVEREXP_PROSTATE_DN	76	0.6189387	1.9967678	0	1.14E-04	0.011	5076	tags=51%, list=20%, signal=64%
UVB_HIGH_D9_DN	22	0.78159994	1.9943372	0	1.45E-04	0.014	3045	tags=55%, list=12%, signal=62%
HDAC1_COLON_TSA_DN	82	0.6458734	1.993618	0	1.44E-04	0.014	3347	tags=45%, list=19%, signal=56%
UVB_SCC_UP	85	0.6056986	1.9933167	0	1.43E-04	0.014	4862	tags=49%, list=19%, signal=61%
HDAC1_COLON_CUR2HRS_UP	26	0.752353	1.991717	0	1.42E-04	0.014	4765	tags=65%, list=19%, signal=81%
HSOA5220_CHRONIC_MYELOID_LEUKEMIA	76	0.62831086	1.9868186	0	1.61E-04	0.016	4522	tags=45%, list=18%, signal=54%
IL6PATHWAY	21	0.7786122	1.9848444	0	1.70E-04	0.017	5118	tags=37%, list=10%, signal=48%
MOREAUX_TACT_HI_VS_LOW_DN	155	0.58497496	1.9847448	0	1.82E-04	0.017	4218	tags=39%, list=12%, signal=46%
UVB_NHEK1_C1	49	0.6621438	1.9835559	0	1.78E-04	0.018	4133	tags=43%, list=16%, signal=51%
UVB_HIGH_D7_DN	31	0.7139043	1.9806664	0	1.96E-04	0.02	3384	tags=58%, list=13%, signal=67%
HSOA5211_RENAL_CELL_CARCINOMA	69	0.61717255	1.9747648	0	2.15E-04	0.022	4628	tags=49%, list=18%, signal=60%
ZUCCH1_EPITHELIAL_UP	133	0.57277714	1.9731601	0	2.13E-04	0.022	3324	tags=57%, list=15%, signal=66%
EGF_HDMC_UP	43	0.67631227	1.9712064	0	2.12E-04	0.022	3647	tags=60%, list=14%, signal=71%
HSOA5215_PROSTATE_CANCER	87	0.59314257	1.9682002	0	2.30E-04	0.024	4151	tags=37%, list=17%, signal=44%
CORDERO_KRAS_KD_VS_CONTROL_UP	75	0.61574644	1.9643278	0	2.47E-04	0.026	2586	tags=37%, list=10%, signal=41%
MMS_MOUSE_LYMPH_HIGH_4HRS_UP	64	0.6849493	1.959171	0	2.82E-04	0.027	3653	tags=51%, list=12%, signal=56%
UVB_LOW_ALL_DN	56	0.6391825	1.9574432	0	2.92E-04	0.03	3308	tags=41%, list=13%, signal=47%
FERRARI_4HPR_UP	24	0.75102735	1.9512345	0	3.18E-04	0.033	2807	tags=63%, list=11%, signal=70%
PARP_KO_UP	30	0.70516104	1.9505106	0	3.44E-04	0.036	1739	tags=47%, list=7%, signal=50%
HSOA5210_COLORECTAL_CANCER	84	0.59412563	1.9466124	0	3.58E-04	0.038	4509	tags=49%, list=19%, signal=56%
ALZHEIMERS_INCIPIENT_DN	139	0.5512001	1.9461124	0	3.58E-04	0.038	5369	tags=50%, list=21%, signal=63%
KERATINOCYTEPATHWAY	44	0.6564637	1.9435986	0	3.74E-04	0.04	3073	tags=61%, list=20%, signal=76%
CHAUHAN_ZME2	46	0.6570756	1.9434426	0	3.72E-04	0.04	5451	tags=48%, list=14%, signal=55%
OX1STRESS_REPTHERE_DN	27	0.71913266	1.9394723	0	3.73E-04	0.041	3309	tags=41%, list=12%, signal=46%
HSOA3010_RIBOSOME	86	0.58615047	1.9408609	0	3.76E-04	0.041	5829	tags=59%, list=23%, signal=77%
HSOA4010_MAPK_SIGNALING_PATHWAY	256	0.51420504	1.9369632	0	4.45E-04	0.049	4763	tags=36%, list=19%, signal=44%
PASSERINI_PROLIFERATION	64	0.6140659	1.9357102	0	4.43E-04	0.049	3509	tags=42%, list=14%, signal=49%
BREASTCA_TWO_CLASSES	133	0.5495684	1.9356145	0	4.04E-04	0.049	4214	tags=46%, list=19%, signal=56%
CIRCADIAN_EXERCISE	42	0.66840845	1.9353153	0	4.38E-04	0.049	3091	tags=55%, list=12%, signal=62%
TPA_RESIST_MIDDLE_UP	45	0.65197	1.9339422	0	4.53E-04	0.051	3014	tags=44%, list=12%, signal=50%
TNFA_NFKB_DEP_UP	18	0.7888152	1.9334419	0	4.59E-04	0.052	3070	tags=72%, list=12%, signal=82%
BASSO_REGULATORY_HUBS	131	0.55684376	1.9291279	0	5.08E-04	0.058	4743	tags=53%, list=20%, signal=65%
AD12_32HRS_DN	15	0.81983685	1.9290789	0	5.05E-04	0.058	1495	tags=60%, list=6%, signal=64%
IRITANI_ADPROX_VASC	149	0.54856527	1.9274249	0	5.02E-04	0.058	2614	tags=35%, list=10%, signal=39%
GH_GHRR_KO_24HRS_DN	160	0.5415715	1.9261227	0	5.16E-04	0.059	3914	tags=41%, list=16%, signal=48%
HSOA5218_MELANOMA	71	0.6037318	1.9260519	0	5.13E-04	0.059	3623	tags=31%, list=14%, signal=36%
WNT_TARGETS	23	0.7531391	1.9258152	0	5.11E-04	0.06	942	tags=39%, list=12%, signal=46%
FLECHNER_KIDNEY_TRANSPLANT_REJECTION_PBL_UP	60	0.6210923	1.9237087	0	5.16E-04	0.06	4627	tags=52%, list=18%, signal=63%
CMV_ALL_DN	101	0.573777	1.9231741	0	5.22E-04	0.061	4443	tags=44%, list=18%, signal=53%
CHEN_LUNG_SURVIVAL	21	0.74561137	1.9227023	0	5.19E-04	0.061	2524	tags=48%, list=10%, signal=53%
METPATHWAY	35	0.684638</						

PASSERINI_TRANSCRIPTION	72	0.59117603	1.8761597	0	8.99E-04	0.128	3623 tags=39%, list=14%, signal=45%
IFN_BETA_UP	65	0.59661084	1.8755304	0	9.08E-04	0.129	3369 tags=42%, list=13%, signal=48%
HSAD5215_THYROID_CANCER	29	0.65905265	1.8745605	0	9.10E-04	0.13	3468 tags=49%, list=15%, signal=50%
PS3GENES_ALL	17	0.7739747	1.8731967	0	9.26E-04	0.133	1739 tags=41%, list=7%, signal=44%
INTEGRINPATHWAY	35	0.65929353	1.8723502	0	9.80E-04	0.139	5054 tags=60%, list=20%, signal=75%
HSAD4350_TGF_BETA_SIGNALING_PATHWAY	88	0.5866635	1.8717066	0	9.82E-04	0.14	3187 tags=32%, list=13%, signal=36%
HSAD0970_AMINOACID_TRNA_BIOSYNTHESIS	97	0.6339693	1.8711178	0	9.78E-04	0.141	4374 tags=59%, list=17%, signal=51%
INSULIN_SIGNALING	98	0.5519564	1.8709336	0	9.80E-04	0.141	4200 tags=42%, list=17%, signal=51%
POD1_KO_MOST_UP	29	0.68167794	1.8708454	0	9.76E-04	0.141	3689 tags=41%, list=15%, signal=48%
5FU_RESIST_GASTRIC_UP	20	0.7427864	1.8701516	0.00186916	0.00100336	0.145	1785 tags=45%, list=7%, signal=48%
CMV_HCMV_TIMECOURSE_18HRS_UP	72	0.5866122	1.8687562	0	0.00102459	0.148	4766 tags=53%, list=19%, signal=65%
IDX_TSA_DN_CLUSTERS	42	0.6352265	1.8675905	0	0.00103955	0.154	4754 tags=57%, list=19%, signal=70%
OKUMURA_MC_LPS	174	0.5111778	1.866848	0	0.00106565	0.156	4866 tags=40%, list=19%, signal=50%
LIZUKA_G1_S1_G2	25	0.7059018	1.8630265	0	0.00109204	0.159	3614 tags=52%, list=14%, signal=61%
HDACL_COLON_CUR_DN	48	0.621775	1.8622995	0	0.00110599	0.162	5885 tags=60%, list=23%, signal=79%
PDGFPATHWAY	27	0.7071788	1.8622587	0	0.0011387	0.164	5118 tags=59%, list=20%, signal=74%
TNFALPHA_4HRS_UP	38	0.64306563	1.8616799	0	0.00112184	0.165	4475 tags=61%, list=18%, signal=74%
NOUZOVA_CPG_H4_UP	109	0.5459977	1.8582488	0	0.00118845	0.174	5399 tags=51%, list=21%, signal=65%
TRANSLATION_FACTORS	39	0.6521746	1.8581234	0	0.00117972	0.174	6049 tags=69%, list=24%, signal=91%
CORDERO_ARAS_KO_VS_CONTROL_DN	54	0.59982175	1.8580975	0.00176991	0.00128491	0.188	2456 tags=28%, list=10%, signal=31%
RACCYCDPATHWAY	22	0.74098134	1.8524692	0	0.00132799	0.193	3453 tags=55%, list=14%, signal=63%
5FU_RESIST_GASTRIC_DN	16	0.7819534	1.8508569	0.00194175	0.00136501	0.199	2223 tags=50%, list=9%, signal=55%
TNFALPHA_ALL_UP	74	0.5798275	1.8493191	0	0.00140112	0.204	3272 tags=43%, list=13%, signal=50%
ST_P38_MAPK_PATHWAY	37	0.6422738	1.8492762	0	0.00142526	0.207	4907 tags=57%, list=20%, signal=70%
ST_TUMOR_NECROSIS_FACTOR_PATHWAY	29	0.684963	1.8469577	0	0.00142537	0.208	3133 tags=52%, list=12%, signal=59%
IT1_TO_S_CELL_CYCLE_REACTOME	67	0.5799131	1.8454963	0	0.00143754	0.211	2700 tags=28%, list=11%, signal=32%
FLECHNER_KIDNEY_TRANSPLANT_WELL_PBL_DN	40	0.6340644	1.8437128	0	0.00148472	0.219	3395 tags=49%, list=13%, signal=52%
ST_JNK_MAPK_PATHWAY	47	0.6339494	1.8434948	0	0.00148472	0.22	4737 tags=55%, list=19%, signal=68%
TAKEDA_NUPS_HOXA9_16D_DN	205	0.50319064	1.8428289	0	0.00149092	0.222	3016 tags=30%, list=12%, signal=34%
SRC_ONCOGENIC_SIGNATURE	56	0.5973204	1.8407339	0.00344234	0.00156081	0.231	4429 tags=46%, list=18%, signal=56%
RAY_P210_DIFF	53	0.6086353	1.8404403	0	0.00155485	0.231	4427 tags=49%, list=18%, signal=59%
SIG_CD4PATHWAYMAP	23	0.6314017	1.8397493	0.00190476	0.00156797	0.245	3247 tags=45%, list=17%, signal=53%
RNA_TRANSCRIPTION_REACTOME	35	0.6477278	1.8363087	0	0.00167457	0.249	5009 tags=60%, list=20%, signal=75%
CMV_HCMV_TIMECOURSE_16HRS_UP	56	0.59623724	1.8359889	0	0.00168559	0.252	4089 tags=45%, list=16%, signal=53%
FASPATHWAY	27	0.6900375	1.8356276	0.00187617	0.0016908	0.253	3133 tags=52%, list=12%, signal=59%
AMINOACID_TRNA_BIOSYNTHESIS	62	0.7113668	1.8345276	0.00378072	0.00172406	0.283	4620 tags=70%, list=26%, signal=86%
HDACL_COLON_BUT4HRS_DN	109	0.5328054	1.8276474	0	0.00190411	0.283	5063 tags=48%, list=19%, signal=59%
H2O2_CSRESCUED_UP	53	0.5982325	1.8273069	0	0.00190814	0.283	2181 tags=32%, list=9%, signal=35%
ST_FAS_SIGNALING_PATHWAY	62	0.5874385	1.8266273	0	0.00191795	0.285	5050 tags=56%, list=18%, signal=70%
FETAL_LIVER_ENRICHED_TRANSCRIPTION_FACTORS	72	0.56081617	1.8251083	0	0.00195582	0.292	5794 tags=51%, list=23%, signal=67%
HDACL_COLON_CUR24HRS_DN	24	0.7123019	1.8237416	0	0.00200999	0.299	4880 tags=54%, list=19%, signal=67%
TGF_BETA_C1_UP	16	0.7789454	1.8208697	0.00184843	0.00208065	0.31	1683 tags=50%, list=7%, signal=54%
ABRAHAM_AL_VS_MM_DN	18	0.750754	1.8195858	0	0.00212322	0.319	3030 tags=61%, list=12%, signal=69%
RADIATION_SENSITIVITY	24	0.7050675	1.8191439	0	0.00213212	0.32	2194 tags=33%, list=9%, signal=36%
KIM_TH_CELLS_DN	17	0.7386057	1.818889	0	0.00213212	0.32	3525 tags=59%, list=20%, signal=74%
GALF_FLT3ANDAPL_UP	50	0.5988208	1.8187535	0	0.00212773	0.321	4852 tags=60%, list=19%, signal=74%
IL1_CORNEA_UP	62	0.5960504	1.8169756	0	0.00216937	0.323	1965 tags=31%, list=8%, signal=33%
UVC_LOW_ALL_UP	18	0.72821635	1.8161019	0.00182815	0.00219478	0.328	2661 tags=50%, list=11%, signal=56%
IGFBP3_PATHWAY	20	0.7123543	1.8158388	0.00373134	0.00219478	0.329	5118 tags=59%, list=20%, signal=74%
ABRAHAM_MM_VS_AL_UP	19	0.73952895	1.8147545	0	0.00221694	0.335	3030 tags=58%, list=12%, signal=66%
EGFP_PATHWAY	80	0.55413246	1.8140482	0	0.00224716	0.341	5243 tags=44%, list=21%, signal=55%
HSAD511_PATHOGENIC_ESCHERICHIA_COLI_INFECTION_EPEC	27	0.68479115	1.8112559	0	0.00232944	0.354	5118 tags=56%, list=20%, signal=70%
HSAD513_PATHOGENIC_ESCHERICHIA_COLI_INFECTION_EHEC	57	0.6302113	1.8099877	0.0018013	0.00232944	0.354	2548 tags=49%, list=19%, signal=63%
HSAD5120_EPITHELIAL_CELL_SIGNALING_IN_HELICOBACTER_PYLORI_INFECTION	6	0.570373	1.8094398	0	0.00236978	0.359	3841 tags=43%, list=15%, signal=51%
JISON_SICKLE_CELL	31	0.6547976	1.8091326	0.00185185	0.00236694	0.361	2657 tags=39%, list=11%, signal=43%
HDACL_COLON_BUT24HRS_UP	69	0.5684614	1.8084614	0.00173913	0.00236694	0.362	3656 tags=53%, list=20%, signal=68%
CXCR4_PATHWAY	24	0.6911953	1.8084401	0	0.00236589	0.362	3611 tags=50%, list=14%, signal=58%
ZELLER_MYC_UP	24	0.6970999	1.8084277	0	0.00235773	0.362	4964 tags=67%, list=20%, signal=83%
MENSEN_MYC_UP	29	0.6628009	1.8086897	0	0.00240147	0.368	5453 tags=69%, list=23%, signal=88%
R05_MOUSE_ACR1_DN	77	0.54754317	1.8058778	0	0.0024274	0.372	2254 tags=29%, list=10%, signal=32%
GLYCOGEN_METABOLISM	34	0.6453088	1.8045838	0	0.00246326	0.378	5041 tags=50%, list=20%, signal=62%
CMV_24HRS_DN	70	0.5654599	1.8030046	0	0.00253202	0.385	4427 tags=44%, list=18%, signal=54%
HSAD3050_PROTEASOME	27	0.7038081	1.8027197	0	0.00255412	0.387	5443 tags=73%, list=22%, signal=93%
INDISTEDT_DEND_PATHWAY	50	0.5963388	1.8014317	0	0.00261268	0.392	4046 tags=48%, list=17%, signal=57%
SA_B_CELL_RECEPTOR_COMPLEXES	24	0.68899584	1.8005438	0.00178891	0.00262411	0.394	4907 tags=58%, list=20%, signal=72%
HDACL_COLON_CUR48HRS_UP	60	0.5794875	1.7992228	0	0.0027074	0.406	5213 tags=62%, list=21%, signal=78%
BOQUEST_CD31PLUS_VS_CD31MINUS_DN	246	0.4849497	1.7970018	0	0.00273379	0.409	4423 tags=38%, list=18%, signal=45%
XU_ATRA_PLUSNSC_DN	15	0.664166	1.795917	0	0.00277447	0.415	5766 tags=56%, list=20%, signal=70%
WNT_SIGNALING	60	0.5836642	1.7947481	0	0.00283089	0.425	2787 tags=33%, list=11%, signal=37%
TAVOR_CEBP_UP	48	0.59738934	1.7943476	0.00188679	0.00284193	0.428	2263 tags=42%, list=9%, signal=46%
WILLERT_WNT_NCCIT_ALL_UP	18	0.74107856	1.7931885	0	0.00287264	0.433	2221 tags=44%, list=9%, signal=49%
FLECHNER_KIDNEY_TRANSPLANT_WELL_PBL_UP	147	0.5990525	1.7925044	0	0.00288848	0.435	4608 tags=43%, list=18%, signal=49%
HSAD4530_TIGHT_JUNCTION	204	0.50871706	1.7919898	0	0.00291322	0.447	5378 tags=65%, list=24%, signal=82%
ADIP_DIFF_CLUSTERS3	33	0.6435216	1.789664	0.00179533	0.00302896	0.453	4368 tags=58%, list=17%, signal=70%
TGF_BETA_SIGNALING_PATHWAY	49	0.60651934	1.7896545	0.00190114	0.00301791	0.453	3281 tags=33%, list=11%, signal=37%
RADMACHER_AMLNONMALKARYTYPE_SIG	72	0.5858953	1.789458	0	0.00302912	0.455	4573 tags=53%, list=18%, signal=64%
BCL2_FAMILY_AND_REG_NETWORK	22	0.5954535	1.7892337	0.0034094	0.00304926	0.46	3453 tags=52%, list=14%, signal=61%
RASPATHWAY	21	0.70008457	1.7885724	0.00557621	0.00304926	0.46	4573 tags=53%, list=18%, signal=64%
JISON_SICKLECELL_DIFF	334	0.462928	1.7882609	0	0.0030639	0.464	4665 tags=41%, list=19%, signal=50%
HYPERTROPHY_MODEL	17	0.7534171	1.7860044	0.00380228	0.00319986	0.474	1996 tags=65%, list=8%, signal=70%
WERNER_FIBRO_DN	160	0.4988043	1.7843947	0	0.00324439	0.487	5128 tags=64%, list=24%, signal=81%
UVC_HIGH_ALL_UP	19	0.7268118	1.7828668	0.00189036	0.00335907	0.495	1574 tags=42%, list=6%, signal=45%
AGED_MOUSE_HIPPOCAMPUS_ANY_UP	43	0.6000412	1.7823502	0	0.00335223	0.496	2307 tags=35%, list=9%, signal=38%
INSULINPATHWAY	21	0.69214725	1.7813337	0.00178253	0.0033907	0.501	5118 tags=57%, list=20%, signal=72%
STEFFEN_AML_PML_PLZ2_TRGT	44	0.595468419	1.7805667	0.00359713	0.0034297	0.502	5282 tags=49%, list=21%, signal=60%
HSC_LATEPROGENITORS_ADULT	436	0.45228374	1.7803442	0	0.0034297	0.505	4966 tags=37%, list=20%, signal=45%
NICK_RHAPC_UP	30	0.6469352	1.7803088	0.0037594	0.0033923	0.505	4333 tags=43%, list=16%, signal=52%
DAC_BLADDER_UP	28	0.6667161	1.7796527	0.00191205	0.00340059	0.508	2024 tags=43%, list=9%, signal=47%
HDACL_COLON_BUT12H_DN	54	0.4762717	1.7783171	0	0.0034297	0.514	4724 tags=50%, list=19%, signal=61%
UVC_HIGH_D8_DN	28	0.646822	1.7772958	0.00178253	0.00349335	0.519	4661 tags=61%, list=19%, signal=74%
CD35PATHWAY	18	0.7227585	1.7762953	0.00194932	0.00353915	0.525	1777 tags=33%, list=7%, signal=36%
HSC_LATEPROGENITORS_SHARED	429	0.45289496	1.7754347	0	0.00357047	0.528	4966 tags=37%, list=20%, signal=45%
HOFMANN_HSC_CD4_LOW_AND_HIGH_RISK	47	0.5961116	1.7752822	0	0.00358621	0.531	1777 tags=30%, list=7%, signal=36%
CELL_CYCLE_ARREST	31	0.65572894	1.7738849	0	0.00365545	0.543	3827 tags=45%, list=15%, signal=53%
LEE_MYC_TGFA_UP	59	0.57617134	1.7731153	0	0.00371501	0.552	3362 tags=42%, list=13%, signal=49%
DER_IFNB_UP	93	0.5354725	1.7729717	0.00172117	0.00370828	0.553	3369 tags=37%, list=13%, signal=42%
ST_GA13_PATHWAY	35	0.625405523	1.7697953	0.00194553	0.00370828	0.553	6219 tags=67%, list=21%, signal=82%
ADIPOGENESIS_HMSC_CLASS3_UP	62	0.5664107	1.7695541	0	0.00391596	0.576	5467 tags=53%, list=22%, signal=68%
APOPTOSIS_GENMAP	42	0.60752696	1.7685574	0	0.00394122	0.579	4527 tags=57%, list=18%, signal=70%
CELLCYCLEPATHWAY	23	0.6845789	1.7684045	0.00185529	0.00392935	0.579	3209 tags=43%, list=13%, signal=50%
HSAD5221_ACUTE_MYELOID_LEUKEMIA	53	0.58238065	1.7676659	0	0.00394987	0.582	4089 tags=42%, list=16%, signal=49%
HDACL_COLON_CLUSTER7	22	0.7425383	1.767154	0.0019084	0.00393804	0.582	2972 tags=47%, list=16%, signal=52%
TNFALPHA_30MIN_UP	40	0.6069112	1.766181	0.00179533	0.00400335	0.59	3272 tags=45%, list=13%, signal=52%
BASSO_HCL_DIFF	83	0.53873557	1.7614816	0	0.0042751	0.62	2419 tags=28%, list=10%, signal=31%
NING_COPD_DN	121	0.515256	1.7602355	0	0.00437963	0.628	3827 tags=39%, list=15%, signal=46%
IRFANI_ADROXD_DN	57	0.5696043	1.7601651	0	0.0045204	0.64	3184 tags=34%, list=12%, signal=41%
AGED_MOUSE_HIPPOCAMPUS_MULT_UP	19	0.72325674	1.7598271	0.00187617	0.0043984	0.631	2985 tags=53%, list=12%, signal=60%
DAC_PANCSO_UP	44	0.5947263	1.7594664	0	0.0044237	0.634	2278 tags=34%, list=9%, signal=37%
LEE_TCELLS1_UP	174	0.48258436	1.7592226	0	0.00440841	0.635	3945 tags=54%, list=16%, signal=64%
BIOSOMAL_PROTEINS	88	0.48368436	1.7574422	0	0.00547459	0.736	4423 tags=57%, list=20%, signal=74%
OLDWERNER_FIBRO_UP	19	0.7225494	1.75718	0.00366972	0.00452047	0.644	3063 tags=58%, list=12%, signal=66%
BRG1_ALAB_UP	40	0.6121016	1.7566342	0.00176678	0.00452046	0.645	3760 tags=58%, list=15%, signal=67%
CMV_HCMV_TIMECOURSE_24HRS_UP	70	0.5999637	1.75433				

HANSON_NFKAPPB_IND	18	0.7085586	1.7227672	0.00749064	0.00645628	0.801	2625	tags=39%, list=10%, signal=43%
MTORPATHWAY	22	0.6718085	1.7218733	0.00394477	0.00652996	0.804	6325	tags=77%, list=25%, signal=103%
IFN_BETA_GLIOMA_DN	42	0.5964664	1.7209897	0.00184502	0.00719411	0.807	3070	tags=43%, list=11%, signal=49%
TPA_RESIST_MIDDLE_DN	109	0.50138724	1.7206128	0	0.00658692	0.809	5089	tags=44%, list=20%, signal=55%
ZHAN_MM_MOLECULAR_CLASSI_DN	46	0.5811705	1.717947	0.00179533	0.00686432	0.822	3885	tags=35%, list=15%, signal=41%
HDACI_COLON_BUT16HRS_UP	41	0.5941353	1.716112	0	0.00709045	0.832	3252	tags=44%, list=13%, signal=50%
MATSUDA_VALPHAINCT_DIFF	402	0.43741652	1.7159786	0	0.00700300	0.833	3206	tags=30%, list=15%, signal=41%
VIPATHWAY	27	0.64852333	1.7158551	0.00186567	0.00700743	0.833	3668	tags=44%, list=15%, signal=52%
ET743_RESIST_DN	40	0.5858864	1.7157241	0.0019305	0.00699449	0.834	3838	tags=45%, list=15%, signal=53%
CHIARETTI_T_ALL_DIFF	258	0.45574695	1.7156636	0	0.00698055	0.834	3610	tags=35%, list=14%, signal=40%
GENOTOXINS_24HRS_DISCR	39	0.5931986	1.7156047	0.00589391	0.00696763	0.836	3469	tags=56%, list=22%, signal=72%
BRCA_BRCA1_POS	101	0.50999495	1.7146239	0	0.00719411	0.836	4152	tags=36%, list=12%, signal=43%
TNFR1PATHWAY	28	0.6462937	1.7145214	0.00559702	0.00702708	0.836	3471	tags=46%, list=14%, signal=54%
OXSTRESS_BREASTCA_UP	27	0.6474071	1.7144907	0.00716846	0.00701682	0.837	670	tags=30%, list=3%, signal=30%
ATLRPATHWAY	34	0.60922284	1.7144572	0.00175747	0.00700687	0.837	1954	tags=38%, list=8%, signal=41%
CDL_MOTILITY	106	0.5034483	1.7139978	0	0.00703873	0.838	2437	tags=29%, list=10%, signal=33%
LEE_E2F1_UP	59	0.55339295	1.7123518	0	0.007128	0.84	3108	tags=37%, list=12%, signal=42%
DAC_PANC_UP	361	0.44317648	1.7121248	0	0.00712165	0.84	2402	tags=20%, list=10%, signal=22%
BRCA_PROGNOSIS_NEG	87	0.5154575	1.7118624	0	0.0071378	0.842	5202	tags=47%, list=21%, signal=59%
KIM_TH_CELLS_UP	43	0.5846967	1.7113221	0.00362319	0.00716098	0.845	3668	tags=42%, list=15%, signal=49%
HADDAD_HPLCYMPHO_ENRICHED	267	0.45828533	1.7112876	0	0.00714694	0.845	4852	tags=36%, list=19%, signal=44%
LIAN_MYELOID_DIFF_FT	34	0.60780877	1.7105985	0.00184162	0.00719334	0.847	2975	tags=50%, list=12%, signal=57%
TENDINI_MEGAKARYOCYTIC_GENES	53	0.564804	1.7103169	0	0.00719759	0.848	2617	tags=28%, list=10%, signal=32%
FTDINSPATHWAY	22	0.67961286	1.7092061	0.00194082	0.00719474	0.851	5069	tags=50%, list=20%, signal=63%
AGED_MOUSE_HYPOTH_UP	43	0.58951634	1.7101386	0	0.00718477	0.852	4253	tags=49%, list=17%, signal=59%
HADDAD_CD45CD7_PLUS_V_MINUS_DN	76	0.53069655	1.7055433	0.00541516	0.0076023	0.876	5336	tags=51%, list=21%, signal=65%
NELSON_ANDROGEN_UP	62	0.54954904	1.7043442	0.00188679	0.00768403	0.878	3571	tags=40%, list=14%, signal=47%
CMV_SHRS_DN	44	0.5839791	1.7036412	0	0.00784988	0.883	3833	tags=39%, list=15%, signal=46%
KANG_TERT_UP	82	0.52455354	1.7022743	0	0.00788584	0.884	3641	tags=38%, list=14%, signal=44%
CMV_UV_HCMV_6HRS_UP	118	0.49367222	1.7012135	0	0.00795944	0.89	4895	tags=40%, list=19%, signal=49%
ERYTHPATHWAY	15	0.7269006	1.7010244	0.00587084	0.00794749	0.89	1996	tags=27%, list=8%, signal=29%
HSAD4310_WNT_SIGNALING_PATHWAY	23	0.49378415	1.699484	0	0.00838756	0.901	3187	tags=27%, list=16%, signal=42%
FSH GRANULOSA_UP	77	0.52509946	1.6986263	0.00168067	0.00815359	0.901	4205	tags=40%, list=17%, signal=58%
CHIARETTI_T_ALL	236	0.45207253	1.698322	0	0.00816684	0.902	2656	tags=30%, list=11%, signal=33%
VEGF_MMMEC_6HRS_UP	49	0.56794626	1.6975577	0.00346021	0.00824507	0.903	1781	tags=33%, list=7%, signal=35%
VENTRICLES_UP	193	0.46825664	1.6980408	0	0.00839819	0.903	5336	tags=40%, list=17%, signal=49%
ESR_FIBROBLAST_DN	18	0.6949327	1.6967995	0.00553506	0.00828566	0.905	5114	tags=61%, list=23%, signal=77%
PROTEASOME_DEGRADATION	32	0.6120799	1.696618	0.00182149	0.00831246	0.905	5162	tags=63%, list=21%, signal=79%
HEARTFAILURE_ATTRIA_DN	107	0.4977936	1.6951052	0	0.00837898	0.906	5317	tags=51%, list=21%, signal=65%
BAF57_BTF59_UP	44	0.5839791	1.694984	0	0.00849988	0.908	3468	tags=38%, list=14%, signal=44%
LINDSTEDT_DEND_8H_VS_48H_UP	66	0.54537244	1.6949079	0.00184502	0.00845029	0.91	1023	tags=26%, list=4%, signal=27%
UVB_NHEK4_6HRS_UP	26	0.6324222	1.6908504	0	0.00877931	0.92	4261	tags=58%, list=17%, signal=69%
ABRAHAM_AL_VS_MM_UP	23	0.6588734	1.6901956	0.00374532	0.00881611	0.921	2616	tags=39%, list=10%, signal=44%
ABRAHAM_MM_VS_AL_DN	22	0.667689	1.6898738	0.01123596	0.00883803	0.922	2616	tags=41%, list=10%, signal=46%
TAKEDA_NURP_HOXA9_6H_DN	37	0.5926794	1.6894868	0.00369688	0.00884788	0.923	2310	tags=30%, list=14%, signal=37%
OLD_FIBRO_DN	151	0.47729295	1.6884862	0	0.00895878	0.927	5128	tags=39%, list=20%, signal=49%
SIG_PIP3_SIGNALING_IN_CARDIAC_MYOCYTES	65	0.5327793	1.6880794	0.00170648	0.00899828	0.931	2378	tags=32%, list=9%, signal=36%
OLDWERNER_FIBRO_DN	100	0.49898943	1.6873232	0	0.00908265	0.933	5128	tags=43%, list=20%, signal=54%
OXSTRESS_IRF_HNF1B_DN	46	0.56559162	1.6873032	0.01022147	0.00916162	0.933	3468	tags=39%, list=14%, signal=45%
TPA_SENS_MIDDLE_UP	66	0.5336318	1.6865059	0	0.00913905	0.937	3668	tags=41%, list=15%, signal=48%
PROTEASOME	17	0.70091665	1.6857573	0.00551471	0.0091777	0.938	5089	tags=82%, list=24%, signal=108%
HSAD5214_GLIOMA	64	0.53681266	1.6851085	0	0.00920533	0.938	4989	tags=34%, list=16%, signal=41%
HDACI_COLON_BUT12HRS_UP	44	0.5803891	1.6847268	0.00368324	0.0092394	0.939	3472	tags=36%, list=14%, signal=43%
MAMMARY_DEV_UP	55	0.54898196	1.6846159	0.00171821	0.00920841	0.939	3462	tags=33%, list=14%, signal=38%
TRNA_SYNTHETASES	20	0.68289614	1.6844883	0.00763359	0.00919791	0.939	4602	tags=75%, list=18%, signal=92%
P53PATHWAY	16	0.70543975	1.6844418	0.00756144	0.00918029	0.939	4151	tags=50%, list=17%, signal=60%
ADDA_K562_HEMIN_TREATMENT	66	0.5380475	1.6842717	0	0.00916276	0.939	2281	tags=39%, list=14%, signal=45%
GLEEVECPATHWAY	22	0.6511681	1.6841569	0.00572519	0.00916245	0.939	4151	tags=50%, list=17%, signal=60%
HIVNEFPATHWAY	55	0.5466153	1.6831013	0.00355872	0.00925947	0.94	4325	tags=47%, list=17%, signal=57%
GCRPATHWAY	17	0.70068645	1.6820902	0.00732601	0.00931398	0.941	1819	tags=35%, list=7%, signal=38%
HIV_NHEK5_C6	27	0.64682864	1.6798661	0.00545455	0.00931398	0.941	4132	tags=40%, list=17%, signal=42%
HADDAD_HSC_CD10_UP	254	0.44490317	1.6813107	0	0.00934338	0.942	4852	tags=34%, list=19%, signal=42%
HIPPOCAMPUS_DEVELOPMENT_NEONATAL	26	0.63674384	1.6799735	0.0019305	0.0094621	0.943	3083	tags=35%, list=12%, signal=39%
LEE_DENA_UP	59	0.5362821	1.6799735	0.0019305	0.0094621	0.943	2895	tags=34%, list=12%, signal=38%
OLD_FIBRO_UP	4	0.53855858	1.6798661	0.0019305	0.0094621	0.943	3289	tags=36%, list=16%, signal=43%
AGED_MOUSE_NEOCORTEX_UP	66	0.5245727	1.6781412	0.0017301	0.00965239	0.948	4455	tags=39%, list=18%, signal=48%
LE_MYLIN_UP	88	0.5151295	1.6778897	0	0.00967594	0.949	3760	tags=33%, list=15%, signal=39%
HSP27PATHWAY	15	0.72084175	1.677041	0.00747664	0.00973381	0.951	4453	tags=67%, list=18%, signal=81%
GH_GHRHR_KO_6HRS_UP	58	0.5284502	1.6730418	0.00183135	0.01016283	0.956	5236	tags=46%, list=19%, signal=53%
HSC_MATURE_ADULT	316	0.4370583	1.6725228	0	0.01020086	0.957	3452	tags=28%, list=14%, signal=32%
HDACI_COLON_CUR24HRS_UP	35	0.59512186	1.6709664	0.00186567	0.01039252	0.958	5118	tags=63%, list=20%, signal=79%
HASLINGER_B_CLL_1Q3I4	19	0.67781633	1.6698241	0.00585938	0.01053647	0.959	2970	tags=37%, list=12%, signal=42%
UV_CMV_UNIQUE_HCMV_6HRS_DN	77	0.5139133	1.6678748	0	0.01073701	0.961	4602	tags=35%, list=18%, signal=43%
IS3_FIBRO_C4	46	0.6808891	1.6678748	0.00567108	0.01073701	0.961	2286	tags=39%, list=14%, signal=45%
LH GRANULOSA_UP	79	0.5151616	1.6668668	0	0.01080234	0.961	4205	tags=47%, list=17%, signal=56%
HSAD4012_ERBB_SIGNALING_PATHWAY	87	0.49984416	1.6653562	0	0.01096633	0.963	5014	tags=41%, list=20%, signal=52%
E2F3_ONCOGENIC_SIGNATURE	225	0.45274857	1.6644491	0	0.01102886	0.965	5687	tags=39%, list=23%, signal=50%
CDROS_BRAIN_ZWIS	47	0.5803891	1.6633236	0.00177305	0.01113128	0.965	2703	tags=36%, list=14%, signal=43%
ALCALAY_AML_NPMC_UP	131	0.4745711	1.6633536	0	0.01111264	0.97	4789	tags=41%, list=19%, signal=51%
L1_FETAL_VS_WT_KIDNEY_UP	175	0.45974106	1.6628684	0	0.0111836	0.971	2636	tags=27%, list=10%, signal=30%
ZHAN_MMPC_SIM_BC_AND_MM	44	0.57295144	1.6624744	0	0.0112121	0.971	5588	tags=52%, list=22%, signal=67%
BEA_MOUSE_SGN	81	0.5096566	1.6624097	0.00172110	0.01118709	0.971	4278	tags=43%, list=17%, signal=50%
HYPOXIA_RCC_NOVHL_UP	62	0.5328584	1.6620603	0	0.01124335	0.971	2762	tags=35%, list=11%, signal=40%
APOPTOSIS_KEGG	49	0.5640094	1.6612136	0.00180832	0.01133318	0.972	4453	tags=49%, list=18%, signal=59%
HDACI_COLON_BUT12HRS_DN	72	0.522111	1.6607891	0.00340716	0.01136455	0.973	4957	tags=46%, list=20%, signal=57%
APOPTOSIS	66	0.52769274	1.6603326	0	0.01140811	0.973	4466	tags=45%, list=19%, signal=56%
WNTPATHWAY	25	0.6335768	1.6599281	0.01509434	0.01142268	0.976	4205	tags=40%, list=17%, signal=48%
WELCHS_BRCA_UP	39	0.57080626	1.6598452	0.00377359	0.01140793	0.976	3198	tags=41%, list=13%, signal=47%
UCALPAINPATHWAY	17	0.7096781	1.6595173	0.00738007	0.0114146	0.976	3422	tags=53%, list=14%, signal=61%
NSFPATHWAY	79	0.5690705	1.6571914	0.01565558	0.01168126	0.976	6209	tags=47%, list=20%, signal=58%
HOFMANN_MANTEL_LYMPHOMA_VS_LYMPH_NODES_UP	47	0.5880507	1.6567934	0.00177936	0.01171778	0.979	2700	tags=34%, list=11%, signal=38%
REN_E2F1_TARGETS	38	0.58043146	1.6547432	0.01088929	0.01198265	0.979	3415	tags=37%, list=14%, signal=43%
PASSERINI_INFLAMMATION	24	0.6397561	1.6527739	0.00572519	0.01220711	0.98	3790	tags=54%, list=15%, signal=64%
HSAD3022_BASAL_TRANSCRIPTION_FACTORS	62	0.62812923	1.6493966	0.00365633	0.01217423	0.98	7206	tags=36%, list=14%, signal=43%
GOLDRATH_HP	144	0.46743512	1.6493907	0	0.01254174	0.983	5643	tags=42%, list=22%, signal=54%
DEATHPATHWAY	33	0.58446666	1.6493813	0.00356506	0.01252513	0.983	4325	tags=48%, list=17%, signal=58%
EPOPATHWAY	19	0.67399094	1.6489323	0.01862197	0.01258762	0.983	5118	tags=58%, list=20%, signal=73%
HSAD4810_REGULATION_OF_ACTIN_CYTOSKELETON	203	0.48480412	1.6483144	0	0.01263738	0.983	4089	tags=32%, list=18%, signal=35%
PARK_RARALPHA_MOD	60	0.52231085	1.6447046	0	0.01307447	0.984	1646	tags=25%, list=7%, signal=27%
YAGI_AML_PROG_ASSOC	120	0.47772205	1.6446258	0.00162075	0.01305679	0.984	4652	tags=44%, list=18%, signal=54%
BRCA1_SW480_DN	17	0.67961265	1.6440837	0.01307999	0.01307985	0.984	3400	tags=41%, list=14%, signal=48%
ADIP_DIFF_CLUSTER4	34	0.59578975	1.644032	0.00353982	0.0130688	0.984	5282	tags=50%, list=21%, signal=63%
PS3HYPXIPATHWAY	19	0.66628974	1.640477	0.0188329	0.01354772	0.985	2970	tags=37%, list=12%, signal=42%
IGLESIAS_E2FMINUS_UP	138	0.47110742	1.6406838	0	0.0135319	0.986	3070	tags=34%, list=12%, signal=39%
SIG_REGULATION_OF_THE_ACTIN_CYTOSKELETON_BY_RHO_GTPASES	35	0.5812761	1.639825	0.00922509	0.01367215	0.987	5050	tags=49%, list=20%, signal=61%
SANS								

ET743_SARCOMA_UP	64	0.5068681	1.6014864	0.00368324	0.01872273	0.999	3395	tags=38%, list=13%, signal=43%
TSADAC_PANCS0_UP	41	0.55402154	1.6003743	0.00556586	0.01893527	0.999	2864	tags=29%, list=11%, signal=33%
JNK_UP	31	0.59373753	1.5997425	0.00736648	0.01933552	0.999	2698	tags=39%, list=14%, signal=47%
SERUM_FIBROBLAST_CELLCYCLE	129	0.4955634	1.599494	0.00316957	0.01903224	0.999	4562	tags=26%, list=18%, signal=32%
IFN_ALL_UP	18	0.6555095	1.5992167	0.01526718	0.01903968	0.999	2555	tags=39%, list=10%, signal=43%
JECHLINGER_EMT_UP	54	0.52460635	1.5987259	0.00877193	0.01911083	0.999	4200	tags=44%, list=17%, signal=53%
IGF1RPATHWAY	15	0.66811866	1.5985992	0.01410425	0.01913553	0.999	4907	tags=60%, list=18%, signal=64%
CALCINEURINPATHWAY	19	0.6431034	1.5983986	0.01590457	0.01911383	0.999	2831	tags=32%, list=11%, signal=36%
UV-CMV_UNIQUE_HCMV_6HRS_UP	101	0.47353075	1.5976845	0	0.01923525	0.999	4895	tags=40%, list=19%, signal=49%
HIPPOCAMPUS_DEVELOPMENT_PRENATAL	32	0.57304585	1.5967075	0.01612903	0.01937794	0.999	4894	tags=53%, list=19%, signal=66%
SA_GL_AND_S_PHASES	15	0.6820643	1.596652	0.02398524	0.01931867	0.999	3642	tags=47%, list=14%, signal=55%
CMV_HCMV_TIMECOURSE_8HRS_DN	10	0.69010353	1.595173	0.02119461	0.01965996	0.999	4567	tags=47%, list=24%, signal=57%
TELPATHWAY	15	0.6918701	1.5951359	0.02411874	0.01964403	0.999	2194	tags=40%, list=9%, signal=44%
HDAC1_COLON_BUT48HRS_UP	92	0.477533	1.5934587	0.00169205	0.01994115	0.999	3400	tags=33%, list=14%, signal=38%
BCRPATHWAY	35	0.56549764	1.5931699	0.01243339	0.01995466	0.999	1954	tags=29%, list=8%, signal=31%
HSC_LTHSC_ADULT	348	0.41101065	1.5930954	0	0.01993781	0.999	4279	tags=31%, list=19%, signal=34%
FALT_BCLL_IG_MUTATED_VS_WT_DN	43	0.5488349	1.5907708	0.0036036	0.02037635	0.999	4463	tags=47%, list=18%, signal=56%
MUNSHI_MM_UP	66	0.5056777	1.5906805	0.01071429	0.02036694	0.999	5340	tags=50%, list=21%, signal=63%
SHEPARD_NEG_REG_OF_CELL_PROLIFERATION	108	0.46346977	1.5904819	0.0017094	0.02038459	0.999	4629	tags=31%, list=18%, signal=38%
RETINUTARY_FETAL_UP	47	0.6520764	1.5902983	0.02782328	0.02037852	0.999	5901	tags=47%, list=23%, signal=61%
CMV_I866_UP	50	0.52353655	1.5902714	0.01546392	0.02034456	0.999	6029	tags=44%, list=24%, signal=58%
HDAC1_COLON_BUT16HRS_DN	102	0.4681224	1.5901251	0.00166667	0.02032972	0.999	5063	tags=45%, list=20%, signal=56%
HOFFMANN_BIVSIII_BI_TABLE2	192	0.43545997	1.586165	0	0.021114	0.999	4155	tags=28%, list=17%, signal=33%
CARM_ERPATHWAY	27	0.5921399	1.5852101	0.01645398	0.02132521	0.999	5863	tags=48%, list=23%, signal=63%
FERNANDEZ_MYC_TARGETS	172	0.44282252	1.5845326	0	0.02140075	0.999	3442	tags=27%, list=14%, signal=31%
HDAC1_COLON_TSA_UP	108	0.46179155	1.5838236	0	0.02151563	0.999	2524	tags=28%, list=10%, signal=31%
IDX_TSA_DN_CLUSTER4	26	0.59771806	1.5804923	0.01495854	0.02213396	0.999	4124	tags=54%, list=16%, signal=64%
PROTEASOMEPATHWAY	21	0.63219521	1.5795518	0.01848891	0.02213396	0.999	5966	tags=49%, list=20%, signal=60%
LEE_MYC_E2F1_UP	53	0.51483417	1.5739474	0.01272727	0.02352076	1	2324	tags=32%, list=9%, signal=35%
HSAD0271_METHIONINE_METABOLISM	18	0.6397296	1.5722215	0.01330799	0.02390595	1	3742	tags=39%, list=13%, signal=45%
UNDERHILL_PROLIFERATION	18	0.6353768	1.5721992	0.01886793	0.02386372	1	5273	tags=61%, list=20%, signal=79%
CREB_BRAIN_BWUP_UP	46	0.53247538	1.5720868	0.01424888	0.02386372	1	3625	tags=44%, list=15%, signal=51%
ZHAN_MULTIPLE_MYELOMA_VS_NORMAL_UP	62	0.5077916	1.5719552	0.0034188	0.02381447	1	5197	tags=44%, list=21%, signal=55%
BRENTANI_CYTOSKELETON	19	0.62579995	1.5701253	0.01734104	0.02423529	1	2080	tags=32%, list=8%, signal=34%
BLEO_HUMAN_LYMPH_HIGH_24HRS_UP	89	0.4746543	1.5691733	0	0.02443869	1	2514	tags=46%, list=19%, signal=57%
UVF_LOW_C3_DN	44	0.65483245	1.5688174	0.01775528	0.02401784	1	4029	tags=42%, list=19%, signal=52%
CMV_HCMV_TIMECOURSE_48HRS_DN	105	0.4652098	1.5666784	0.00671141	0.02494928	1	5042	tags=42%, list=20%, signal=52%
ALZHEIMERS_CASP82_MRD_DIFF	72	0.4933495	1.5654536	0.00177936	0.02519257	1	4881	tags=43%, list=19%, signal=53%
UVXSTRESS_RPETOV_DN	331	0.40405595	1.5653769	0	0.02518329	1	4840	tags=33%, list=18%, signal=39%
GLYCOLYSIS	107	0.46529168	1.5652132	0.02676543	0.02514778	1	5082	tags=42%, list=20%, signal=52%
KANNAN_P53_DN	53	0.51197106	1.564907	0.00541516	0.02517788	1	3008	tags=32%, list=12%, signal=36%
TGFBIETA_LATE_UP	15	0.66666263	1.5644927	0.01744186	0.02521596	1	3801	tags=47%, list=15%, signal=55%
HCMVPATHWAY	33	0.57088625	1.5641949	0.00540541	0.02523806	1	2679	tags=39%, list=11%, signal=44%
SPRYPATHWAY	16	0.6643945	1.5638964	0.02557486	0.02526785	1	3691	tags=44%, list=15%, signal=51%
ADIP_DIFF_CLUSTER1	18	0.63311047	1.5630876	0.0281369	0.02526785	1	4907	tags=44%, list=15%, signal=51%
NUCLEOTIDE_METABOLISM	55	0.5148237	1.5629277	0.00728597	0.02545966	1	3834	tags=36%, list=15%, signal=43%
ZHANG_EFT_EWISL1_UP	15	0.66706884	1.5626082	0.02697842	0.025507	1	5374	tags=53%, list=21%, signal=68%
MITOCHONDRIPATHWAY	85	0.4736544	1.5613056	0.00340716	0.02572215	1	3094	tags=34%, list=12%, signal=39%
HTERT_UP	66	0.49816178	1.5611616	0.00772643	0.02576438	1	5428	tags=60%, list=20%, signal=74%
ZHAN_MM_CD138_MS_VS_REST	66	0.4941358	1.5607352	0.0071048	0.02576438	1	4132	tags=36%, list=16%, signal=43%
UV_4NQO_FIBRO_DN	43	0.5292159	1.5599074	0.01492537	0.02616534	1	3623	tags=37%, list=14%, signal=43%
TUMOR_SUPPRESSOR	27	0.5868492	1.557734	0.02162162	0.02636386	1	4154	tags=41%, list=17%, signal=49%
CELL_CYCLE_REGULATOR	44	0.53594345	1.555818	0.01017331	0.02636386	1	5056	tags=49%, list=20%, signal=60%
FRASOR_ER_UP	22	0.6278006	1.5553993	0.0261194	0.02685467	1	4261	tags=50%, list=17%, signal=60%
IL6_SCAR_FIBRO_UP	29	0.58493036	1.5540504	0.00550459	0.02713554	1	2225	tags=34%, list=9%, signal=38%
FRASOR_ER_DN	24	0.5955319	1.5540307	0.01971326	0.02709482	1	4336	tags=46%, list=17%, signal=55%
RHOPATHWAY	30	0.55240774	1.5512955	0.02540835	0.027675	1	1927	tags=35%, list=12%, signal=39%
RELAPATHWAY	16	0.6589134	1.5489072	0.03041825	0.02825468	1	5054	tags=50%, list=14%, signal=58%
ZHAN_MM_CD138_LB_VS_REST	35	0.5324945	1.5473361	0.01751314	0.02863402	1	3126	tags=34%, list=10%, signal=38%
KENNY_WIT_DN	44	0.53945494	1.5465523	0.00291748	0.02863402	1	5105	tags=50%, list=20%, signal=62%
PYRUVATE_METABOLISM	37	0.5472911	1.5439043	0.01604278	0.02946273	1	4744	tags=43%, list=19%, signal=53%
ZMPSTE24_KO_UP	32	0.55263084	1.5435735	0.02803738	0.02948919	1	3026	tags=34%, list=12%, signal=39%
DORSAM_HOX9A_UP	33	0.5863975	1.5407369	0.01083033	0.03027143	1	4875	tags=61%, list=19%, signal=75%
TUMOR_SUPPRESSOR	24	0.59161804	1.5399663	0.02676543	0.03027143	1	6778	tags=28%, list=17%, signal=33%
CANTHARIDIN_DN	48	0.51747584	1.5395688	0.00874126	0.03038641	1	4221	tags=38%, list=19%, signal=45%
GLYCOLYSIS_AND_GLUCEONEOGENESIS	48	0.52666944	1.5390177	0.01598579	0.03056809	1	4587	tags=44%, list=18%, signal=54%
TSA_PANCS0_UP	33	0.5289655	1.5369636	0.00952381	0.03103687	1	2202	tags=32%, list=9%, signal=35%
SANA_TNFA_ENDOTHELIAL_DN	80	0.4628997	1.5360887	0.00728597	0.03123327	1	4119	tags=37%, list=16%, signal=45%
OEGG_RESIST_MEDULLOBLASTOMA_UP	25	0.5847435	1.5360848	0.03106796	0.03124205	1	867	tags=24%, list=3%, signal=25%
GNATENKO_PLATELET	42	0.5178522	1.5356041	0.01073345	0.0313408	1	5134	tags=43%, list=20%, signal=54%
TPOPATHWAY	23	0.59210753	1.5350949	0.02339347	0.03145676	1	5118	tags=48%, list=20%, signal=60%
UBIQUITIN_MEDIATED_PROTEOLYSIS	24	0.5799012	1.5349979	0.02747253	0.03145255	1	6322	tags=50%, list=25%, signal=67%
HSAD5223_DN_SMALL_CELL_LUNG_CANCER	54	0.5038266	1.5347166	0.0084984	0.03144698	1	4089	tags=31%, list=14%, signal=37%
GLUCEONEOGENESIS	53	0.51197106	1.5338306	0.00932836	0.03170811	1	3408	tags=32%, list=12%, signal=36%
VEGF_HUVEC_2HRS_UP	30	0.5687288	1.5313785	0.01633394	0.03237901	1	2402	tags=33%, list=10%, signal=37%
OEGG_RESIST_MEDULLOBLASTOMA_DN	47	0.51996827	1.531348	0.01234568	0.03239878	1	5934	tags=55%, list=24%, signal=72%
SHEPARD_BWUP_MULTIPLE_MYELOMA_UP	160	0.43176004	1.5285782	0.00298243	0.03243616	1	5124	tags=46%, list=20%, signal=55%
BECKER_TAMOXIFEN_RESISTANT_DN	47	0.5176605	1.5280721	0.01757469	0.03250582	1	2894	tags=32%, list=12%, signal=36%
G13_SIGNALING_PATHWAY	39	0.5333944	1.5276153	0.01258993	0.03292356	1	3825	tags=38%, list=15%, signal=45%
ZHAN_MMPC_EARLYS	48	0.50724465	1.5270516	0.01202749	0.03338021	1	4897	tags=40%, list=19%, signal=49%
CALRES_MOUSE_UP	29	0.56311154	1.5265309	0.02932904	0.03396494	1	4088	tags=45%, list=20%, signal=55%
BRCA2_BRCA1_UP	49	0.5060846	1.5257863	0.012939	0.03363711	1	5128	tags=45%, list=20%, signal=56%
ARFPATHWAY	16	0.6476581	1.5255086	0.02095238	0.03363431	1	4641	tags=50%, list=18%, signal=61%
FERRANDO_MLL_T_ALL_DN	84	0.46273848	1.5253531	0.00547445	0.03362433	1	5243	tags=48%, list=21%, signal=60%
TRISOME_ARSENITE_SPECIFIC_DN	61	0.5793524	1.5211813	0.02490927	0.03436316	1	3147	tags=46%, list=20%, signal=55%
CALRES_RHESUS_UP	66	0.48025054	1.5206752	0.00900901	0.03492704	1	2827	tags=38%, list=15%, signal=45%
HSAD0504_HUNTINGTONS_DISEASE	29	0.5513614	1.5206618	0.02798508	0.03487577	1	3739	tags=38%, list=15%, signal=45%
BRENTANI_TRANSPORT_OF_VESICLES	22	0.59387954	1.520413	0.03130755	0.03490246	1	3488	tags=45%, list=14%, signal=53%
RETT_UP	21	0.6103588	1.519276	0.02591722	0.03491222	1	5124	tags=46%, list=20%, signal=55%
G3CRPATHWAY	38	0.53767973	1.51884	0.01694915	0.03523544	1	5560	tags=53%, list=22%, signal=67%
CANCER_UNDIFFERENTIATED_MYELOMA	35	0.5330047	1.5187061	0.02509653	0.03523022	1	6521	tags=51%, list=26%, signal=69%
MAGRANDES_MULTIPLE_MYELOMA_IGL_VS_IGK_DN	68	0.4766328	1.518006	0.0070922	0.03591666	1	4554	tags=40%, list=18%, signal=48%
IDX_TSA_DN_CLUSTER2	64	0.4895332	1.5174857	0.01029896	0.03543693	1	2586	tags=36%, list=10%, signal=40%
HSAD05020_PARKINSONS_DISEASE	15	0.6511597	1.516924	0.02504817	0.03553075	1	5316	tags=53%, list=21%, signal=68%
VERNELL_PRB_CLSTR1	63	0.48292428	1.5139052	0.008726	0.03638125	1	4247	tags=27%, list=17%, signal=32%
AMINOSUGARS_METABOLISM	12	0.64464441	1.511533	0.0247357	0.03706896	1	5120	tags=33%, list=16%, signal=40%
GAMMA_UV_FIBRO_UP	35	0.53314614	1.5112958	0.03435805	0.03712008	1	3655	tags=40%, list=15%, signal=47%
TSA_HEPATOMA_UP	35	0.5330766	1.5109535	0.02367942	0.03716667	1	3564	tags=49%, list=14%, signal=57%
DER_IFNG_UP	63	0.48982704	1.5108355	0.01115242	0.03714857	1	3120	tags=32%, list=12%, signal=36%
YAGI_AML_PROG_FAB	179	0.41971686	1.5106468	0	0.03716436	1	3243	tags=27%, list=13%, signal=31%
HSAD4910_INSULIN_SIGNALING_PATHWAY	116	0.42817608	1.5103813	0.00852242	0.0374772	1	5069	tags=44%, list=20%, signal=55%
AGUIRRE_PANCREAS_CHR9	22	0.5847973	1.5105611	0.03649635	0.03709715	1	6672	tags=59%, list=27%, signal=80%
AGED_RHESUS_DN	108	0.44435105	1.5093546	0.00343053	0.03744079	1	4914	tags=39%, list=20%, signal=48%
ZHAN_TONSIL_PCBC	43	0.5196937	1.5077932	0.01645338	0.03785208	1	1421	tags=26%, list=6%, signal=27%
TGFBIETA_C2_UP	18	0.61895356	1.5072734	0.0250091	0.03844731	1	3671	tags=3

HSA04920_ADIPOCYTOKINE_SIGNALING_PATHWAY
HSC_EARLYPROGENITORS_FETAL
CELL_CYCLE
TOLLPATHWAY
STA_CD4_UP
CANCERDRUGS_PROBCELL_UP
CCR3PATHWAY

72	0.45232767	1.4699223	0.01073345	0.04827194	1	4866	tags=40%, list=19%, signal=50%
420	0.37431073	1.4696546	0	0.04832366	1	5143	tags=35%, list=20%, signal=44%
77	0.45127663	1.4690061	0.01041667	0.04830496	1	6002	tags=39%, list=24%, signal=51%
4	0.524761	1.4690039	0.03315881	0.04843476	1	3784	tags=41%, list=15%, signal=48%
38	0.5385774	1.4680119	0.05027933	0.04876502	1	2954	tags=43%, list=12%, signal=49%
20	0.58069533	1.466416	0.0458891	0.04932635	1	3195	tags=35%, list=13%, signal=40%
22	0.570208	1.4647925	0.06148282	0.04991756	1	6470	tags=59%, list=26%, signal=79%

Supplemental Table 3C. GSEA applying the c3 TFT gene sets.

NAME	SIZE	ES	NES	NOM p-val	FDR q-val	FWER p-val	RANK AT 69	LEADING EDGE
RGITAMWNTT_VSHNF1_Q1	60	-0.5123529	1.6453307	0	0.0082862	0.153	459	tags=20%, list=3%, signal=21%
VSHNF1_Q1	196	-0.3947922	-1.5033293	0.00255754	0.02331588	0.574	2063	tags=17%, list=8%, signal=18%
VSHNF1_Q6	214	-0.3827675	-1.4855314	0	0.01894972	0.641	2017	tags=16%, list=8%, signal=18%
VSHNF1_C	193	-0.3742104	-1.4303702	0.00526316	0.02559373	0.848	1306	tags=13%, list=5%, signal=14%
GCCATNTG_VSYY1_Q6	220	0.6033725	2.2612326	0	0	0	5196	tags=33%, list=13%, signal=38%
VSACH1_Q1	498	0.5696757	2.254964	0	0	0	4484	tags=40%, list=18%, signal=48%
GTGACGY_VSE4F1_Q6	224	0.6003385	2.2321308	0	0	0	4484	tags=42%, list=18%, signal=51%
VSE4F1_Q6	212	0.5912382	2.2029307	0	0	0	4497	tags=42%, list=18%, signal=51%
VSCREBP1CIUN_Q1	181	0.5969891	2.1893024	0	0	0	5353	tags=54%, list=21%, signal=68%
VY1_Q1	234	0.587297	2.1872487	0	0	0	3196	tags=33%, list=13%, signal=38%
VSACH2_Q1	219	0.5893837	2.171019	0	0	0	3309	tags=34%, list=13%, signal=39%
VSAPI_Q6	208	0.580066	2.1502216	0	0	0	5284	tags=46%, list=21%, signal=57%
VSCREB_Q2	231	0.57855797	2.1452096	0	0	0	3309	tags=33%, list=13%, signal=38%
VSAPI_Q4	199	0.5804868	2.136413	0	0	0	5519	tags=50%, list=21%, signal=63%
VSCREB_Q2	210	0.5794024	2.1351106	0	0	0	5284	tags=48%, list=22%, signal=61%
VSRF_Q5_Q1	196	0.5751735	2.1277399	0	0	0	4728	tags=49%, list=22%, signal=61%
VSAPI_Q2	237	0.57590884	2.1230717	0	0	0	3309	tags=33%, list=13%, signal=38%
TGACGTCA_VSATF3_Q6	187	0.5812837	2.1147983	0	0	0	4497	tags=42%, list=18%, signal=50%
CGTSACC_VSPAX3_B	112	0.6125472	2.1100082	0	0	0	5714	tags=54%, list=23%, signal=70%
VSAPI_Q1	208	0.5835429	2.0991522	0	0	0	3162	tags=30%, list=12%, signal=34%
VSCREB_Q4_Q1	171	0.58120596	2.098078	0	0	0	5529	tags=55%, list=22%, signal=69%
VSAPI_Q2_Q1	235	0.5598912	2.0869715	0	0	0	3202	tags=31%, list=13%, signal=35%
VSRF_C	187	0.57098204	2.0851989	0	0	0	3722	tags=39%, list=15%, signal=45%
VSCREB_Q4	204	0.5614275	2.0822608	0	0	0	5284	tags=46%, list=21%, signal=57%
VSAPI_Q6_Q1	221	0.55951864	2.0698264	0	0	0	4147	tags=37%, list=16%, signal=44%
VSAPI_C	239	0.55339086	2.068624	0	0	0	3207	tags=30%, list=13%, signal=34%
VSCREBP1_Q2	198	0.5668533	2.0682285	0	0	0	5519	tags=45%, list=22%, signal=57%
VSAPI_Q2	231	0.55759868	2.0608742	0	0	0	3309	tags=33%, list=13%, signal=38%
VSNRF2_Q1	191	0.5636902	2.046085	0	0	0	6110	tags=61%, list=24%, signal=80%
VSCREB_Q2_Q1	181	0.56607276	2.0443614	0	0	0	4464	tags=39%, list=18%, signal=47%
KCCGN5WTTT_UNKNOWN	88	0.6146676	2.0394237	0	0	0	5547	tags=61%, list=22%, signal=78%
VSR_C	37	0.7195514	2.026539	0	0	0	5604	tags=55%, list=22%, signal=70%
GCCMKCATNK_UNKNOWN	91	0.61896497	2.026182	0	0	0	5416	tags=58%, list=24%, signal=74%
VSAF2_Q2	200	0.55270433	2.017518	0	0	0	5620	tags=44%, list=21%, signal=56%
VSAF3_Q6	203	0.54582006	2.0100446	0	0	0	4084	tags=37%, list=16%, signal=44%
TGASTMAGC_VSNFE2_Q1	168	0.55788183	2.0097554	0	0	0	3155	tags=30%, list=12%, signal=34%
VSAF1_Q1	212	0.5470428	2.0091538	0	0	0	4084	tags=35%, list=16%, signal=43%
VFXR_IR1_Q6	91	0.60076696	2.0087833	0	0	0	4565	tags=38%, list=18%, signal=47%
VSAF6_Q1	97	0.6025183	2.0047493	0	0	0	3144	tags=36%, list=12%, signal=41%
VSNMUE1_Q6	193	0.54704887	1.9993665	0	0	0	5446	tags=52%, list=22%, signal=66%
VSAPI_Q1	222	0.5385724	1.9982202	0	0	0	3162	tags=29%, list=11%, signal=33%
VSCPEB_Q2	212	0.54038805	1.9951693	0	0	0	4961	tags=42%, list=20%, signal=51%
TMTCCGANR_UNKNOWN	109	0.587319	1.9888239	0	0	0	4985	tags=50%, list=20%, signal=63%
VSAF1_Q6	192	0.5395014	1.9753034	0	0	0	4212	tags=34%, list=16%, signal=40%
VY1_Q2	186	0.5452208	1.9700062	0	0	0	5162	tags=50%, list=21%, signal=63%
TCCCRNRTCC_UNKNOWN	144	0.558287	1.9684423	0	0	0	6022	tags=49%, list=24%, signal=64%
VSPAX3_B	73	0.60719323	1.9550816	0	0	0	3646	tags=38%, list=14%, signal=45%
GCCNANNTCC_UNKNOWN	98	0.582975	1.9534918	0	0	0	5679	tags=54%, list=23%, signal=70%
VSE4B4_Q1	175	0.5405115	1.9509376	0	0	0	4161	tags=34%, list=17%, signal=43%
VSRF_Q1	48	0.65185314	1.9480112	0	0	0	4050	tags=48%, list=16%, signal=57%
VSHSF2_Q1	195	0.52965844	1.9433587	0	3.20E-05	0.001	4895	tags=38%, list=19%, signal=47%
VSE2F1_Q6_Q1	193	0.5329531	1.942727	0	3.14E-05	0.001	3671	tags=30%, list=15%, signal=34%
VSE2F1_Q6	192	0.53691244	1.9402316	0	3.08E-05	0.001	6002	tags=45%, list=24%, signal=64%
VSAF2_Q1	156	0.54588	1.9399536	0	3.02E-05	0.001	4433	tags=38%, list=18%, signal=46%
VSHN_B	201	0.52276105	1.9284623	0	6.24E-05	0.002	5604	tags=40%, list=22%, signal=51%
VSRF_Q4	196	0.52531165	1.9238101	0	6.12E-05	0.002	3722	tags=34%, list=15%, signal=39%
VSRF_Q6	214	0.51795614	1.9179518	0	6.06E-05	0.002	4427	tags=36%, list=17%, signal=43%
VSCREB_Q3	202	0.5201336	1.9161655	0	8.79E-05	0.003	4900	tags=40%, list=19%, signal=49%
VSHIF1_Q5	192	0.5230604	1.9150733	0	8.63E-05	0.003	4748	tags=38%, list=19%, signal=47%
VSE2F1_Q4_Q1	187	0.5269587	1.9129777	0	8.48E-05	0.003	5736	tags=40%, list=23%, signal=52%
TTCWCWAA_VSCPEB_Q2	52	0.6298663	1.9079359	0	8.34E-05	0.003	3703	tags=44%, list=15%, signal=52%
VSNKAPPAB_Q1	212	0.5172478	1.8935771	0	1.08E-04	0.004	4464	tags=35%, list=16%, signal=43%
VSE2F_Q3_Q1	192	0.5242049	1.9018143	0	1.07E-04	0.004	5736	tags=40%, list=23%, signal=52%
VSAF1_Q1	195	0.51944815	1.9013222	0	1.05E-04	0.004	5507	tags=45%, list=22%, signal=57%
ATCMNTCCGY_UNKNOWN	41	0.6552566	1.8943037	0	1.03E-04	0.004	4570	tags=54%, list=18%, signal=65%
VSNMCMAX_B	218	0.5103272	1.8892225	0	1.02E-04	0.004	3170	tags=29%, list=11%, signal=33%
VSE2F_Q1	58	0.6028261	1.8889593	0	1.26E-04	0.005	6046	tags=55%, list=24%, signal=72%
VSMAZ_Q6	146	0.5332769	1.876554	0	1.49E-04	0.006	5467	tags=42%, list=22%, signal=54%
VSELK1_Q2	182	0.5175156	1.8746837	0	1.46E-04	0.006	6213	tags=60%, list=25%, signal=80%
VSHF1_Q1	55	0.6302799	1.8740788	0	1.68E-04	0.007	1885	tags=33%, list=17%, signal=43%
VSTFII_Q6	171	0.52374285	1.873763	0	1.65E-04	0.007	4550	tags=36%, list=18%, signal=43%
VSMAZR_Q1	183	0.5114655	1.8720929	0	1.86E-04	0.008	5489	tags=44%, list=22%, signal=56%
TCCATTKW_UNKNOWN	192	0.51396286	1.8720459	0	1.84E-04	0.008	4910	tags=40%, list=20%, signal=49%
TTRAYTA_VSE4B4_Q1	207	0.5091463	1.8717519	0	1.81E-04	0.008	4161	tags=34%, list=17%, signal=43%
VSCPEB_C	165	0.514555	1.8705193	0	1.79E-04	0.008	5209	tags=38%, list=21%, signal=47%
VSE2F_Q4	188	0.5105552	1.8689679	0	1.76E-04	0.008	5736	tags=39%, list=23%, signal=51%
VSP1_Q1	151	0.51106423	1.8682902	0	1.74E-04	0.008	5336	tags=41%, list=21%, signal=52%
VSGAP_B	182	0.5167688	1.8643873	0	1.71E-04	0.008	5465	tags=39%, list=23%, signal=51%
VSAF2_Q6	203	0.5076914	1.8622507	0	1.69E-04	0.008	4758	tags=38%, list=19%, signal=47%
GKCCGNNNNNNTGAYG_UNKNOWN	45	0.62706494	1.8590322	0	1.67E-04	0.008	4171	tags=53%, list=23%, signal=64%
VSHIF1_Q3	183	0.5153509	1.8577324	0	1.65E-04	0.008	3361	tags=37%, list=13%, signal=38%
GCAANCGAAY_UNKNOWN	163	0.5615126	1.8503408	0	1.62E-04	0.008	6199	tags=62%, list=25%, signal=81%
VSE2F1DP2_Q1	189	0.50749	1.8550315	0	1.61E-04	0.008	5755	tags=40%, list=23%, signal=52%
VSE2F_Q4_Q1	192	0.5121753	1.8546622	0	1.59E-04	0.008	5736	tags=41%, list=23%, signal=52%
RGAANNTTCC_VSHSF1_Q1	351	0.48139387	1.8530291	0	1.76E-04	0.009	4895	tags=36%, list=19%, signal=44%
VSRF_Q6_Q1	189	0.5126237	1.8490425	0	1.93E-04	0.01	4699	tags=41%, list=21%, signal=49%
WYAAANRNNNGCG_UNKNOWN	47	0.6193501	1.8488982	0	1.91E-04	0.01	2915	tags=38%, list=12%, signal=43%
GCGNRMNMYC_UNKNOWN	65	0.58417284	1.846254	0	1.89E-04	0.01	2891	tags=38%, list=11%, signal=43%
VSHSF_Q5	151	0.51976216	1.8447096	0	1.86E-04	0.01	4090	tags=33%, list=15%, signal=39%
VSE2F1DP1R8_Q1	186	0.5029712	1.8444108	0	1.84E-04	0.01	5736	tags=39%, list=23%, signal=50%
TGAYRTCA_VSATF3_Q6	431	0.47029677	1.8441186	0	1.82E-04	0.01	4535	tags=32%, list=16%, signal=43%
VSE2F4DP2_Q1	189	0.50749	1.8409696	0	1.98E-04	0.011	5755	tags=40%, list=23%, signal=52%
VSNFKB_Q6	212	0.4935854	1.8352027	0	1.96E-04	0.011	4480	tags=36%, list=18%, signal=44%
TTCYRGA_UNKNOWN	241	0.49137568	1.8325168	0	1.94E-04	0.011	5002	tags=39%, list=20%, signal=48%
VSE2F_Q6	186	0.49912423	1.8308983	0	1.91E-04	0.011	5736	tags=37%, list=17%, signal=43%
VSE2F1DP1_Q1	189	0.50749	1.8318052	0	1.89E-04	0.011	5755	tags=40%, list=23%, signal=52%
VY1_Q1	205	0.49771935	1.830329	0	2.03E-04	0.012	4717	tags=40%, list=19%, signal=48%
VSPAX4_Q4	175	0.50707585	1.8259888	0	2.36E-04	0.014	5050	tags=35%, list=20%, signal=43%
GCGNMMNTNCGG_UNKNOWN	61	0.5863429	1.825174	0	2.33E-04	0.014	5620	tags=62%, list=22%, signal=80%
AAGWRRNYGGC_UNKNOWN	91	0.5499313	1.8251439	0	2.31E-04	0.014	5567	tags=56%, list=22%, signal=72%
VSHOP_Q1	195	0.49513888	1.8229665	0	2.62E-04	0.016	3618	tags=29%, list=14%, signal=33%
VSTAXCREB_Q1	114	0.53641105	1.8204235	0	2.60E-04	0.016	4900	tags=44%, list=19%, signal=54%
YCCGYRCCG_UNKNOWN	238	0.4876269	1.8193318	0	2.57E-04	0.016	4765	tags=38%, list=19%, signal=46%
VSE2F_Q2	189	0.5008548	1.8164422	0	2.86E-04	0.018	5755	tags=40%, list=23%, signal=51%
WGGATGY_VSTEF1_Q6	296	0.4755865	1.8165135	0	3.15E-04	0.02	3119	tags=25%, list=12%, signal=29%
VSNRF2_Q4	206	0.49294198	1.8139392	0	3.29E-04	0.021	3155	tags=26%, list=13%, signal=29%
CCANWAAAGG_VSRF_Q4	76	0.5601231	1.8121537	0	3.56E-04	0.023	3722	tags=39%, list=15%, signal=46%
YRTCANRCCG_UNKNOWN	52	0.5988969	1.8106446	0	3.53E-04	0.023	3094	tags=33%, list=12%, signal=37%
VSHLF_Q1	209	0.4926715	1.80579					

VSCETS1P54_01	198	0.4755724	1.7451237	0	5.03E-04	0.042	5219	tags=44%, list=21%, signal=55%
VSOCI1_05	207	0.4765539	1.7450839	0	4.99E-04	0.042	4732	tags=29%, list=19%, signal=35%
SCGSSAAA_VSEF1DP2_01	135	0.5002014	1.7442088	0	5.07E-04	0.043	6002	tags=42%, list=21%, signal=45%
SMTTTTGT_UNKNOWN	335	0.450915	1.7420851	0	5.04E-04	0.043	3694	tags=28%, list=15%, signal=33%
VSCREL_01	216	0.47413778	1.7414826	0	5.11E-04	0.044	4788	tags=38%, list=19%, signal=46%
VSNFY_Q6_01	211	0.47765926	1.7406372	0	5.08E-04	0.044	4414	tags=35%, list=18%, signal=42%
VSTCF1HAFG_01	171	0.48608774	1.7400863	0	5.04E-04	0.044	4553	tags=33%, list=18%, signal=40%
VSRABE_02	211	0.46659163	1.7378961	0	5.34E-04	0.047	4329	tags=28%, list=17%, signal=33%
WGTTNNNNNAA_UNKNOWN	449	0.44225937	1.7321546	0	5.84E-04	0.052	5044	tags=33%, list=20%, signal=40%
VSCBP_Q2_01	219	0.46616068	1.7316371	0	5.80E-04	0.052	4058	tags=31%, list=16%, signal=36%
ACAWNNRRCGG_UNKNOWN	53	0.5651108	1.7299749	0	5.88E-04	0.053	5807	tags=64%, list=23%, signal=83%
VSMAD_Q6	206	0.4714284	1.7293311	0	5.84E-04	0.053	5465	tags=35%, list=19%, signal=45%
CCTNMAGA_UNKNOWN	101	0.50661385	1.7286557	0	6.11E-04	0.056	6232	tags=49%, list=25%, signal=64%
VSCBP_Q3	204	0.46687302	1.7280988	0	6.18E-04	0.057	4931	tags=37%, list=20%, signal=45%
VSFZ5_01	189	0.4728711	1.7273991	0	6.14E-04	0.057	3672	tags=29%, list=15%, signal=33%
VSRBEP1_Q6	206	0.46697426	1.7273611	0	6.10E-04	0.057	4277	tags=32%, list=17%, signal=38%
VSRNT_02	197	0.47261047	1.7262137	0	6.06E-04	0.057	4852	tags=39%, list=19%, signal=48%
VSPAX4_01	214	0.46513355	1.721596	0	6.33E-04	0.06	4720	tags=37%, list=19%, signal=45%
WCTCNATGGY_UNKNOWN	60	0.5480697	1.7198224	0	6.39E-04	0.061	4416	tags=48%, list=18%, signal=58%
VSNFAT_Q6	193	0.47256094	1.718066	0	6.56E-04	0.063	5402	tags=37%, list=21%, signal=46%
AAANWWTGC_UNKNOWN	168	0.47432628	1.7146043	0	6.72E-04	0.065	4063	tags=29%, list=16%, signal=34%
GCTNWTGTC_UNKNOWN	247	0.45930308	1.7141201	0	6.78E-04	0.066	5392	tags=36%, list=21%, signal=45%
VSMAX_01	209	0.46714696	1.7120004	0	6.84E-04	0.067	4669	tags=35%, list=19%, signal=43%
GTCTNYATER_UNKNOWN	115	0.48325285	1.7118066	0	6.79E-04	0.067	5402	tags=45%, list=21%, signal=57%
VSEZF_Q6_01	190	0.46781695	1.7059667	0	7.55E-04	0.075	5736	tags=37%, list=23%, signal=47%
VSHSF1_01	212	0.46763918	1.7049329	0	7.51E-04	0.075	4895	tags=33%, list=19%, signal=41%
VST3R_06	210	0.46404332	1.7031096	0	7.67E-04	0.076	4594	tags=30%, list=18%, signal=36%
VSGAPREP_01	144	0.4423102	1.7030381	0	7.62E-04	0.076	3670	tags=21%, list=12%, signal=27%
VSTATSA_04	160	0.4737202	1.7007922	0	7.86E-04	0.078	5496	tags=36%, list=22%, signal=45%
VSTEF_Q6	205	0.4597248	1.7006199	0	7.81E-04	0.078	5176	tags=28%, list=15%, signal=33%
TTCNRGNNTTCT_VSHSF_Q6	119	0.49224594	1.7004067	0	7.77E-04	0.078	5871	tags=45%, list=21%, signal=56%
VSKB1_01	112	0.49954384	1.6997451	0	8.01E-04	0.081	3485	tags=34%, list=18%, signal=40%
VSEZF1_Q3_01	201	0.46258408	1.6968845	0	7.96E-04	0.081	3833	tags=30%, list=15%, signal=36%
TAAWWATAG_VRSRFFC4_Q2	137	0.48079428	1.6966588	0	7.92E-04	0.081	4827	tags=33%, list=19%, signal=40%
VSPBX1_Q2	110	0.4953985	1.693737	0	8.43E-04	0.087	5131	tags=32%, list=20%, signal=40%
VSIUSF2_06	198	0.46007645	1.6923735	0	8.76E-04	0.091	4699	tags=37%, list=19%, signal=46%
VSRAR_03	53	0.55583024	1.6917329	0	8.71E-04	0.091	4205	tags=36%, list=20%, signal=43%
VSTST1_01	215	0.4616795	1.6909156	0	8.66E-04	0.091	4113	tags=29%, list=16%, signal=34%
VSTEF1_Q6	177	0.46887946	1.6897116	0.00160772	8.80E-04	0.093	3668	tags=35%, list=21%, signal=41%
VSMYC_Q2	147	0.48325285	1.6883767	0	8.94E-04	0.094	5124	tags=42%, list=20%, signal=50%
VSRABE_01	217	0.4544079	1.6884076	0	9.43E-04	0.099	4394	tags=29%, list=17%, signal=35%
VSGR_01	164	0.4659245	1.6838434	0	9.56E-04	0.101	5562	tags=39%, list=22%, signal=50%
VSFREAC7_01	158	0.4757018	1.6835059	0	9.50E-04	0.101	5465	tags=38%, list=22%, signal=48%
VINGRIF_01	195	0.46007645	1.6774192	0	0.00106029	0.113	4090	tags=37%, list=19%, signal=46%
CTAWWWATAG_VRSRFFC4_Q2	303	0.44222742	1.6768737	0	0.00123443	0.114	4685	tags=36%, list=20%, signal=43%
VSTFC1P_Q6	194	0.45648012	1.6760206	0	0.00107475	0.116	5740	tags=41%, list=23%, signal=52%
VRSRFFC4_Q2	184	0.46206728	1.6754515	0	0.00106888	0.116	5290	tags=29%, list=15%, signal=36%
VSIK1_01	215	0.45386162	1.6751808	0	0.0010721	0.117	4240	tags=31%, list=17%, signal=37%
VZFS_B	197	0.4584608	1.6677737	0	0.00114517	0.124	4789	tags=36%, list=20%, signal=45%
VSRVY_02	201	0.45702133	1.6675481	0	0.00114779	0.125	3671	tags=25%, list=12%, signal=29%
VSTAT3_02	119	0.48620528	1.6654506	0	0.00115769	0.127	2948	tags=26%, list=12%, signal=29%
VSPAX5_01	123	0.48005432	1.6650977	0	0.00117711	0.13	2590	tags=24%, list=10%, signal=27%
YHGTCAWV_UNKNOWN	167	0.46231526	1.6579358	0	0.00122773	0.132	4762	tags=35%, list=20%, signal=42%
VSCACCBINDINGFACTOR_Q6	220	0.448023	1.6618226	0	0.0012413	0.138	3691	tags=27%, list=15%, signal=31%
VSZIC2_01	203	0.45504257	1.6614687	0	0.0012348	0.138	3671	tags=26%, list=15%, signal=30%
VSPR_01	118	0.4811773	1.6612622	0	0.0012837	0.138	5682	tags=33%, list=23%, signal=42%
VSPR_Q2	212	0.45327958	1.6598136	0	0.00129847	0.139	4816	tags=35%, list=20%, signal=43%
VSCMYB_01	191	0.45374638	1.6595982	0	0.00125652	0.141	5402	tags=41%, list=21%, signal=52%
VSPZ1_01	199	0.45549163	1.6592832	0	0.00125788	0.142	4448	tags=30%, list=18%, signal=36%
VSIUSF_C	229	0.44500091	1.6585641	0	0.00125147	0.142	4699	tags=35%, list=19%, signal=43%
VSNFAT_Q1	167	0.46231526	1.6579358	0	0.00126822	0.146	4816	tags=35%, list=20%, signal=43%
VSRBEP1_Q2	75	0.5076376	1.6570964	0	0.00128011	0.147	3282	tags=27%, list=13%, signal=31%
VSETF_Q6	85	0.49651808	1.6559469	0	0.00128137	0.148	5905	tags=48%, list=23%, signal=63%
VSPUJF2_01	85	0.5087266	1.6556565	0	0.00127496	0.148	3365	tags=25%, list=13%, signal=28%
VSAHRAANT_01	115	0.48325285	1.6526267	0	0.00126862	0.148	4895	tags=42%, list=20%, signal=50%
VFOXO1_Q2	192	0.45697334	1.652134	0	0.00128663	0.151	4717	tags=33%, list=19%, signal=40%
VSP1_Q4_01	198	0.44959164	1.6519011	0	0.00128826	0.152	5200	tags=35%, list=21%, signal=45%
VSP1_Q6	195	0.4531975	1.6507376	0	0.00131237	0.156	4642	tags=35%, list=21%, signal=42%
VSIUSF_Q2	216	0.46226472	1.6494268	0	0.00132123	0.157	4428	tags=32%, list=18%, signal=38%
VSOCI1_01	213	0.44284758	1.647346	0	0.00135318	0.162	4674	tags=28%, list=19%, signal=34%
VLEF1_Q6	219	0.44470325	1.6461449	0	0.0013696	0.165	2767	tags=20%, list=11%, signal=24%
VSCACCBINDINGPROTEIN_Q6	196	0.45132855	1.645847	0	0.00137799	0.166	3671	tags=30%, list=15%, signal=35%
GGAMTNNNNNTCCY_UNKNOWN	90	0.49433017	1.6453785	0.00178253	0.00139426	0.168	4722	tags=44%, list=21%, signal=55%
VSMYCMAX_Q3	206	0.44768456	1.6427157	0	0.00139767	0.172	4789	tags=36%, list=20%, signal=45%
VSRABE_03	194	0.45145378	1.6386571	0	0.00153308	0.183	3883	tags=24%, list=15%, signal=28%
VSDR4_Q2	205	0.44454336	1.6370566	0	0.00154118	0.185	4407	tags=32%, list=18%, signal=38%
ATGGYGA_UNKNOWN	77	0.5031793	1.6368246	0	0.00153394	0.185	5824	tags=55%, list=23%, signal=71%
VTAAGAT_UNKNOWN	492	0.4191192	1.6327177	0	0.00163126	0.197	5118	tags=36%, list=20%, signal=44%
VSTAT6_01	206	0.4447451	1.6301475	0.00160772	0.00166905	0.201	3094	tags=26%, list=12%, signal=30%
VSETS1_B	203	0.44236588	1.6259817	0	0.00177907	0.215	3040	tags=27%, list=12%, signal=30%
VSR1F7_01	211	0.4384015	1.6256049	0	0.00177806	0.216	3191	tags=22%, list=10%, signal=25%
VSPAX4_Q5	215	0.4424934	1.6248983	0	0.00172714	0.218	4451	tags=39%, list=20%, signal=48%
VSCBPGAMMA_Q6	209	0.4439958	1.6235765	0	0.00184403	0.223	5722	tags=41%, list=23%, signal=52%
VSFREAC2_01	214	0.4376504	1.6213793	0	0.0018945	0.223	5257	tags=31%, list=21%, signal=39%
VSDR3_Q3	186	0.4447468	1.6205156	0	0.00190742	0.233	5456	tags=34%, list=22%, signal=44%
VSMYCMAX_Q2	108	0.421846	1.6199307	0	0.00192088	0.236	3824	tags=34%, list=22%, signal=44%
ACTAYRNNCCCR_UNKNOWN	324	0.4197102	1.6170073	0	0.00194877	0.241	6112	tags=44%, list=24%, signal=57%
GAANNYNGACNY_UNKNOWN	59	0.52644324	1.6169757	0.00361011	0.00194007	0.241	4185	tags=41%, list=17%, signal=49%
VSP3_Q3	193	0.4415886	1.6155157	0	0.00198037	0.245	5123	tags=32%, list=20%, signal=40%
VSDR3_Q4	161	0.4189088	1.6146252	0.0016789	0.0019785	0.245	2904	tags=29%, list=14%, signal=32%
VSTITF1_Q3	191	0.4436619	1.6143755	0	0.00199808	0.249	4853	tags=34%, list=19%, signal=42%
VSPUJF2_02	211	0.43577394	1.6118054	0	0.00208783	0.259	4533	tags=28%, list=18%, signal=34%
VSDZD_01	162	0.44689396	1.6113809	0	0.00211438	0.264	3819	tags=29%, list=15%, signal=33%
VSMETS1BHOXA9_01	115	0.46226132	1.6093917	0	0.0021922	0.273	3723	tags=29%, list=15%, signal=33%
GCNRRNWCITY_UNKNOWN	62	0.523537	1.6038619	0.00358423	0.00229005	0.279	5589	tags=53%, list=25%, signal=68%
VSTFIA_Q6	214	0.43666732	1.6028023	0	0.00232802	0.294	4714	tags=33%, list=19%, signal=40%
VRSRFFC4_01	211	0.43613017	1.599262	0	0.00247381	0.311	4687	tags=35%, list=21%, signal=42%
VSRFFC4_01	210	0.43165374	1.599262	0	0.00259903	0.326	3282	tags=32%, list=19%, signal=38%
VSRFP1_Q4	203	0.43455395	1.5947862	0	0.00262224	0.329	4050	tags=29%, list=16%, signal=34%
VSMZF1_02	192	0.43589994	1.593626	0	0.00263744	0.333	5306	tags=39%, list=21%, signal=49%
VSPC2_01	209	0.43249202	1.5912454	0	0.00270722	0.339	4694	tags=39%, list=19%, signal=41%
CCCNNNNNNAAGWV_UNKNOWN	79	0.49543133	1.5906682	0.00168067	0.00270963	0.341	6289	tags=48%, list=25%, signal=64%
VSNF2_01	223	0.4321129	1.5897217	0	0.0026983	0.341	4218	tags=26%, list=12%, signal=30%
VSGCM_Q2	191	0.43605175	1.5892298	0	0.00270686	0.343	4765	tags=30%, list=19%, signal=37%
VSTAT1_Q3	198	0.4327644	1.587327	0.00162075	0.00276871	0.351	4205	tags=29%, list=17%, signal=35%
TCAANTGAY_VSRBEP1_01	378	0.4086896	1.5870233	0	0.00277083	0.352	4762	tags=35%, list=21%, signal=43%
VSEGR1_01	198	0.43723772	1.5865226	0	0.00277073	0.352	4230	tags=30%, list=16%, signal=36%
VSAHR_Q5	168	0.43573183	1.5860454	0	0.00276799	0.354	6114	tags=46%, list=24%, signal=60%
VSHOX13_01	33	0.57651097	1.5855402	0.0093633	0.0027839	0.358	3694	tags=36%, list=15%, signal=43%
SNACANNINSYAGA_UNKNOWN	58	0.5132772	1.5835614	0.00683761	0.00285555	0.365	4658	tags=40%, list=21%, signal=49%
VSTAT_C	246	0.4203104	1.5811874	0	0.0029424	0.372	47	

VSNKX2_Q2	199	0.42294714	1.5485935	0.00159744	0.00386437	0.509	4894	tags=33%, list=19%, signal=41%
VSEGR3_Q1	61	0.49937695	1.5476586	0.00719425	0.00390614	0.516	4230	tags=36%, list=17%, signal=43%
VSP30_Q1	192	0.42549054	1.5480661	0.00159744	0.00386437	0.511	5963	tags=40%, list=24%, signal=36%
GTGGGTGK_UNKNO	235	0.41550505	1.5454593	0.0	0.00401152	0.528	3771	tags=22%, list=15%, signal=26%
VSTATS_A2	115	0.45556486	1.5442215	0.00327869	0.00404129	0.534	3950	tags=30%, list=16%, signal=36%
VSPAX2_Q2	205	0.4192184	1.543143	0.0	0.00407626	0.542	4789	tags=29%, list=19%, signal=35%
VSSDVS_Q1	212	0.4492117	1.5425111	0.0	0.00409923	0.545	2407	tags=17%, list=10%, signal=30%
YTAAYCTG_UNKNO	122	0.4442327	1.5405111	0.0	0.00416889	0.554	3797	tags=25%, list=15%, signal=30%
VSOCT_C	219	0.4145554	1.5357249	0.0015748	0.00443313	0.573	4533	tags=26%, list=18%, signal=32%
VSOCT1_03	183	0.42132202	1.5353551	0.0015949	0.00442879	0.574	5116	tags=32%, list=20%, signal=39%
VSMYOGENIN_Q6	195	0.4236658	1.534865	0.00160772	0.00445665	0.576	3967	tags=27%, list=16%, signal=31%
VSR_Q6_Q2	215	0.41217034	1.5304961	0.0	0.00464879	0.596	4335	tags=30%, list=18%, signal=36%
TGANVYRGA_VSTCF11MAFG_01	243	0.40982375	1.5297115	0.0	0.00468645	0.6	3526	tags=25%, list=14%, signal=29%
VFOXO1_Q1	204	0.4180894	1.527244	0.0	0.00480921	0.613	5367	tags=34%, list=21%, signal=43%
VSCP2_Q2	192	0.41566935	1.5250849	0.0	0.00493744	0.622	2516	tags=21%, list=10%, signal=23%
VSTAT_Q1	214	0.40711328	1.5248692	0.0	0.00494472	0.622	5532	tags=39%, list=22%, signal=50%
VSP5_Q2	210	0.41322288	1.5233305	0.0	0.00505224	0.631	4885	tags=30%, list=19%, signal=36%
VSP2_Q6_Q1	201	0.4143872	1.5219736	0.0	0.00511947	0.64	5306	tags=36%, list=21%, signal=46%
VSCART1_Q1	180	0.4205784	1.5190113	0.00160256	0.0052855	0.657	3023	tags=20%, list=12%, signal=23%
VSMZF1_Q1	194	0.4173223	1.5186862	0.0	0.00534476	0.661	5529	tags=36%, list=22%, signal=45%
VSF1_Q6	204	0.4127792	1.5185127	0.0	0.00535069	0.663	4736	tags=30%, list=19%, signal=37%
VSRF1_Q1	202	0.41229278	1.5169601	0.0	0.0054428	0.667	3835	tags=26%, list=15%, signal=31%
VSMZF2_Q3	199	0.4126448	1.5167708	0.0	0.0054253	0.667	6045	tags=34%, list=24%, signal=44%
VCEBDELTA_Q6	192	0.4177657	1.5158852	0.0	0.0054388	0.669	4952	tags=33%, list=20%, signal=41%
VSPXR_Q2	212	0.41157782	1.5157633	0.0	0.00545257	0.671	5464	tags=37%, list=22%, signal=47%
VSTBP_Q1	203	0.4129004	1.5153368	0.0	0.00547092	0.673	3881	tags=22%, list=15%, signal=26%
VSHM1_Q1	36	0.53212595	1.5149045	0.02692308	0.0054897	0.676	4708	tags=33%, list=19%, signal=41%
VSP2_Q2	203	0.4139933	1.5147861	0.00160256	0.00549733	0.677	4414	tags=39%, list=24%, signal=51%
TGCTGAY_UNKNO	441	0.38410035	1.5141935	0.0	0.00550074	0.681	4727	tags=29%, list=19%, signal=36%
VSP1_Q6_Q1	179	0.41798806	1.5112747	0.0	0.00566912	0.687	5074	tags=37%, list=20%, signal=47%
VSTCF1_Q1	189	0.41647455	1.509832	0.0	0.00575686	0.697	4333	tags=28%, list=17%, signal=34%
CCCNNGGARG_VSOFL1_Q1	205	0.4000943	1.5093987	0.0	0.00577127	0.697	4046	tags=27%, list=17%, signal=34%
VSTEL2_Q6	171	0.4142381	1.5042753	0.0	0.00614178	0.712	4854	tags=35%, list=19%, signal=43%
VSGATA1_Q5	227	0.4060646	1.5042449	0.00154083	0.00612271	0.712	5169	tags=33%, list=21%, signal=41%
VSPALPACP_Q1	209	0.4088173	1.503605	0.00165289	0.00614901	0.712	5533	tags=36%, list=22%, signal=46%
VSOFL1_Q1	221	0.4049436	1.4999182	0.00158228	0.00622425	0.727	4058	tags=24%, list=16%, signal=28%
VSNFL_Q6_Q1	215	0.40424126	1.4981571	0.0	0.00655699	0.741	4186	tags=29%, list=17%, signal=35%
VSCIZ_Q1	190	0.40862522	1.4968895	0.00472441	0.0066972	0.752	5547	tags=35%, list=22%, signal=45%
VSM1_Q1	189	0.41186494	1.4966098	0.00163399	0.00668668	0.752	4646	tags=29%, list=17%, signal=35%
ACTWSNACTY_UNKNO	66	0.46776146	1.4952933	0.01054482	0.00676449	0.757	5798	tags=41%, list=23%, signal=53%
VSIK2_Q1	217	0.4042674	1.4928585	0.0	0.0069591	0.769	4205	tags=26%, list=17%, signal=31%
VSP1SITEFACTOR_Q6	194	0.4099466	1.4928447	0.0	0.00696474	0.769	4732	tags=29%, list=19%, signal=36%
VSNMYC_Q1	217	0.40212667	1.4926401	0.0	0.00696311	0.771	5285	tags=32%, list=18%, signal=39%
TAAYNRNNTCC_UNKNO	140	0.42604497	1.489513	0.00165837	0.0072595	0.783	4538	tags=31%, list=21%, signal=39%
VSNKX_Q6_Q1	187	0.41007212	1.489276	0.0015926	0.007345	0.786	4852	tags=34%, list=21%, signal=43%
VSTAT1_Q1	55	0.49430287	1.48685	0.02210884	0.00748528	0.791	5044	tags=42%, list=20%, signal=52%
VSHOX4_Q2	218	0.40074226	1.4862827	0.0	0.00750626	0.792	5924	tags=35%, list=24%, signal=46%
TAANNVSGG_UNKNO	63	0.47444242	1.4846295	0.01413428	0.00762194	0.797	4661	tags=44%, list=19%, signal=54%
WTAAGG_UNKNO	186	0.43177068	1.482571	0.00340	0.0076329	0.806	3646	tags=29%, list=17%, signal=35%
VSRP8_Q1	186	0.40766916	1.4820172	0.0	0.00783339	0.805	4355	tags=26%, list=17%, signal=32%
YGCAANTGR_UNKNO	103	0.43935657	1.4815328	0.00661157	0.00787136	0.807	4911	tags=34%, list=20%, signal=42%
VSPARA_Q2	105	0.4244656	1.4799403	0.00692042	0.00798887	0.811	2935	tags=24%, list=12%, signal=27%
VSP2_Q1	199	0.40378116	1.4796737	0.0	0.00798884	0.811	4413	tags=31%, list=19%, signal=38%
TGNNNNNCCAR_UNKNO	332	0.38441548	1.4769592	0.0	0.00827881	0.824	4090	tags=24%, list=16%, signal=29%
VSHF1_Q1	198	0.40393284	1.4752611	0.00156006	0.00844701	0.828	4962	tags=35%, list=20%, signal=43%
VSTGF_Q1	187	0.40586546	1.4738735	0.0	0.00858542	0.831	4713	tags=27%, list=19%, signal=33%
VSP3_DECAMER_Q2	152	0.39885747	1.473862	0.0	0.00858542	0.831	4413	tags=27%, list=19%, signal=33%
YTCCNNGGAMR_UNKNO	37	0.5078941	1.4686892	0.03799655	0.00907459	0.851	4716	tags=35%, list=18%, signal=43%
VSLXR_Q3	61	0.46850148	1.4680699	0.01576182	0.00913152	0.856	4309	tags=38%, list=17%, signal=45%
VSMAD3_Q6	193	0.40564933	1.4673324	0.00652529	0.00921062	0.859	5611	tags=34%, list=22%, signal=44%
VSOX1_Q1	212	0.4026778	1.4653813	0.00340	0.00924265	0.863	6009	tags=39%, list=23%, signal=50%
VBRN2_Q1	200	0.40109733	1.4652284	0.00462963	0.00933253	0.866	4710	tags=31%, list=19%, signal=37%
VSFREAC4_Q1	120	0.42690524	1.460494	0.01192504	0.00977306	0.877	4050	tags=23%, list=16%, signal=28%
VSPIT1_Q1	196	0.40292558	1.45921	0.00819672	0.00992551	0.884	4821	tags=30%, list=19%, signal=36%
VCEBP_Q1	218	0.3953636	1.4586787	0.0015949	0.00995642	0.886	4732	tags=29%, list=19%, signal=36%
VSTALIBETAIF2_Q1	205	0.4001791	1.457464	0.0	0.01009549	0.889	3048	tags=22%, list=16%, signal=25%
VSEV1_Q6	20	0.5806355	1.4573501	0.04117647	0.01007562	0.889	5100	tags=34%, list=13%, signal=34%
CCAWYNGAAR_UNKNO	112	0.42483522	1.4560109	0.01369683	0.01018664	0.891	5540	tags=30%, list=22%, signal=43%
VSRF2_Q3	203	0.39657247	1.4532407	0.00160256	0.0103861	0.893	6099	tags=39%, list=23%, signal=50%
GTRYCATR_UNKNO	129	0.41430914	1.4487114	0.0066778	0.01106714	0.908	5136	tags=35%, list=20%, signal=44%
VGR_Q6_Q1	211	0.39253774	1.446775	0.00474684	0.01129537	0.911	5900	tags=33%, list=23%, signal=42%
VSOX_Q1	195	0.3993897	1.4465898	0.00470958	0.01127299	0.911	6318	tags=41%, list=25%, signal=54%
VSMYD_Q1	205	0.39058092	1.4442209	0.00634921	0.01151988	0.919	5722	tags=32%, list=23%, signal=41%
VSHANDLE47_Q1	221	0.39366078	1.443123	0.00314465	0.01205127	0.92	4347	tags=27%, list=16%, signal=31%
AAAYRNTG_UNKNO	316	0.37449753	1.4419156	0.0	0.01184796	0.922	5067	tags=33%, list=20%, signal=41%
VSNFY_Q6	205	0.3911145	1.4400618	0.00310559	0.01198546	0.928	3860	tags=26%, list=15%, signal=31%
VSR_Q1	112	0.4252936	1.4397427	0.0066335	0.01200109	0.929	5819	tags=43%, list=23%, signal=56%
VSP2GAMMA_Q1	205	0.39749562	1.4390986	0.0015698	0.01204266	0.93	4213	tags=26%, list=16%, signal=31%
VSTATA_Q1	225	0.39060307	1.4388157	0.00311042	0.01205387	0.932	4865	tags=26%, list=15%, signal=31%
VSE47_Q1	207	0.390714	1.4369321	0.00310212	0.012355	0.939	4205	tags=26%, list=17%, signal=30%
VSOCT1_07	127	0.41229102	1.4354383	0.00998336	0.01258051	0.942	4533	tags=28%, list=18%, signal=34%
VSR_Q6	221	0.3875628	1.4334089	0.0	0.01261492	0.947	4462	tags=28%, list=18%, signal=34%
VSPARG_Q1	34	0.50257266	1.4302602	0.04428044	0.01333404	0.954	4085	tags=50%, list=16%, signal=60%
VSTATS_A1	205	0.38781828	1.4264894	0.00486224	0.01385354	0.96	4863	tags=31%, list=19%, signal=38%
VSEZ_Q2	130	0.40648556	1.423831	0.00827815	0.01424795	0.963	4976	tags=30%, list=20%, signal=37%
VSM1_Q6	198	0.38595024	1.4194788	0.0	0.01456568	0.967	3765	tags=27%, list=15%, signal=31%
VSM1_Q1	210	0.3858928	1.4161267	0.00162338	0.01551469	0.971	3890	tags=23%, list=15%, signal=27%
VSP3_Q6	210	0.38578758	1.4154922	0.0016129	0.0155755	0.972	4458	tags=26%, list=18%, signal=32%
VSTATS_B1	205	0.38838905	1.4149129	0.0048	0.01564007	0.973	4872	tags=30%, list=18%, signal=37%
VFOXO1_Q2	49	0.46074576	1.4144468	0.0048	0.01564007	0.973	4717	tags=27%, list=16%, signal=31%
VSR_Q2	100	0.42371798	1.4130254	0.02054795	0.01589677	0.975	4014	tags=26%, list=16%, signal=31%
VSOCT1_Q5_Q1	221	0.38276157	1.4122726	0.00646204	0.01602938	0.977	4674	tags=24%, list=19%, signal=30%
VSGATA_Q3	197	0.389669	1.4104489	0.00961539	0.01633475	0.981	5805	tags=35%, list=23%, signal=45%
VSRARB_Q1	211	0.38029878	1.4092579	0.00638976	0.01649886	0.982	3646	tags=29%, list=17%, signal=35%
VSM1_Q1	198	0.38595024	1.4044325	0.00321027	0.01734834	0.988	3787	tags=25%, list=15%, signal=31%
VSGATA1_Q1	196	0.38157842	1.4031935	0.00165017	0.01754049	0.988	5905	tags=36%, list=23%, signal=48%
VSOCT1_B	223	0.37837377	1.4022907	0.00783699	0.01766032	0.989	4755	tags=26%, list=19%, signal=32%
RAAGYNNCTTY_UNKNO	118	0.40523122	1.398706	0.01845638	0.01859511	0.99	2251	tags=19%, list=10%, signal=23%
VSHF3_Q1	163	0.39106995	1.394893	0.00796178	0.01917338	0.992	6250	tags=37%, list=25%, signal=49%
VSELK1_Q1	198	0.37804627	1.3932247	0.00324149	0.01948391	0.992	4842	tags=38%, list=19%, signal=47%
YCATAA_UNKNO	456	0.35885853	1.3915104	0.0	0.01982982	0.992	4789	tags=28%, list=19%, signal=34%
VFOX_Q2	176	0.3821689	1.3875383	0.01149425	0.02066875	0.993	4816	tags=30%, list=19%, signal=36%
VSHNFEALPHA_Q6	70	0.38589802	1.387317	0.0045839	0.02066875	0.993	4853	tags=34%, list=21%, signal=43%
GCKCATGS_UNKNO	47	0.4637365	1.3857762	0.05244123	0.02096426	0.995	5284	tags=38%, list=21%, signal=48%
GCCNNWTAAR_UNKNO	121	0.40049118	1.3820851	0.01650165	0.02184796	0.996	4652	tags=33%, list=18%, signal=40%
VSDP_Q1	210	0.37633705	1.3814049	0.00934579	0.021954			

VSAR_Q6	199	0.36071855	1.3158327	0.0275974	0.04093747	1	3589	tags=22%, list=14%, signal=25%
RYAAAKNNNNNTTGW_UNKNOWN	73	0.4140661	1.312719	0.06642729	0.042243	1	4636	tags=25%, list=18%, signal=30%
VSFREA3_01	201	0.35781586	1.3123251	0.02842809	0.04233563	1	4686	tags=29%, list=19%, signal=35%
VSAMEF2_Q6	214	0.35605097	1.3119632	0.01658375	0.04242189	1	5464	tags=29%, list=22%, signal=36%
YRCCAKNNGNCGC_UNKNOWN	56	0.4250664	1.3074657	0.08576642	0.04441057	1	6702	tags=52%, list=27%, signal=70%
TTCYNRGAA_VSSTATSB_01	268	0.3450896	1.3074465	0.0124805	0.044311	1	4872	tags=28%, list=19%, signal=34%
ACCYRWITTC_UNKNOWN	93	0.39165226	1.3072801	0.05244123	0.04428724	1	5434	tags=39%, list=22%, signal=49%
VSHNF4ALPHA_Q6	225	0.35547775	1.304016	0.014377	0.04580284	1	3956	tags=31%, list=16%, signal=36%
VSRROR1_01	206	0.35328615	1.3012671	0.02457757	0.04699724	1	4852	tags=29%, list=19%, signal=36%
VSMYB_Q5_01	206	0.35430756	1.3004733	0.03064516	0.04722836	1	3691	tags=23%, list=15%, signal=27%
VSNKXG1_01	190	0.35291773	1.2985561	0.03410853	0.04810653	1	4394	tags=26%, list=17%, signal=32%
VSCDP_02	93	0.3905215	1.2975351	0.07363014	0.04847104	1	3955	tags=20%, list=16%, signal=24%
VSPOU6F1_01	195	0.3576936	1.2973076	0.02601626	0.04845662	1	5685	tags=30%, list=23%, signal=38%
VSPAX_Q6	212	0.35127556	1.2967829	0.02917342	0.04862552	1	4962	tags=28%, list=20%, signal=34%
VSLBP1_Q6	172	0.36112624	1.2965438	0.03354633	0.04862787	1	4147	tags=24%, list=16%, signal=29%