

GW_118

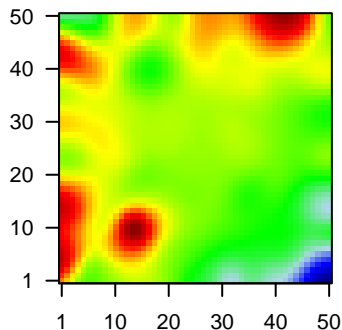
Global Summary

%DE = 0.15
 # genes with $fdr < 0.2$ = 1963 (1064 + / 899 -)
 # genes with $fdr < 0.1$ = 1658 (887 + / 771 -)
 # genes with $fdr < 0.05$ = 1271 (673 + / 598 -)
 # genes with $fdr < 0.01$ = 829 (436 + / 393 -)

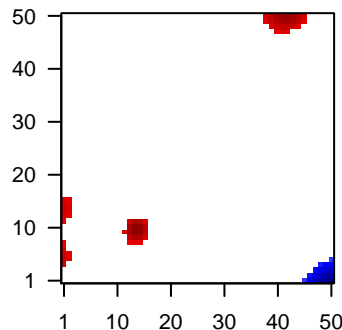
genes in genesets = 16332

<FC> = 0
 <shrinkage-t> = 0
 <p-value> = 0.1
 <fdr> = 0.85

Profile



Regulated Spots



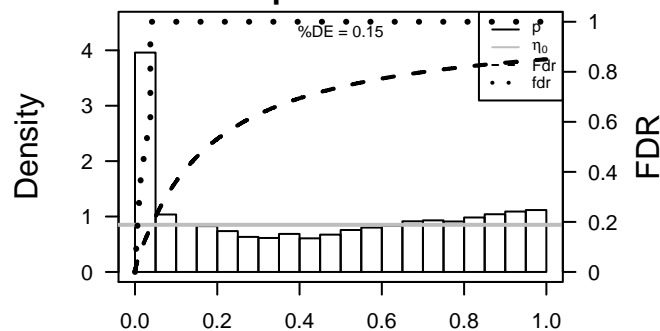
Global Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	218	-1.92	2e-16	5e-14	1 x 50 aldehyde dehydrogenase 3 family, member A1 [Source:HGNC]
2	222	1.93	2e-16	5e-14	1 x 49 aldehyde dehydrogenase 3 family, member B2 [Source:HGNC]
3	55107	1.82	2e-16	5e-14	1 x 5 anoctamin 1, calcium activated chloride channel [Source:HGNC]
4	10409	1.63	2e-16	5e-14	1 x 2 brain abundant, membrane attached signal protein 1 [Source:HGNC]
5	92747	2.45	2e-16	5e-14	50 x 10 BPI fold containing family B, member 1 [Source:HGNC Symbol]
6	375791	-1.61	2e-16	5e-14	1 x 50 chromosome 9 open reading frame 169 [Source:HGNC Symbol]
7	768	2.36	2e-16	5e-14	1 x 6 carbonic anhydrase IX [Source:HGNC Symbol;Acc:1383]
8	919	-1.5	2e-16	5e-14	50 x 1 CD247 molecule [Source:HGNC Symbol;Acc:1677]
9	22802	-1.85	2e-16	5e-14	1 x 50 chloride channel accessory 4 [Source:HGNC Symbol;Acc:2070]
10	49860	-1.91	2e-16	5e-14	1 x 50 cornulin [Source:HGNC Symbol;Acc:1230]
11	131566	1.67	2e-16	5e-14	1 x 4 discoidin, CUB and LCCL domain containing 2 [Source:HGNC]
12	1717	1.68	2e-16	5e-14	13 x 50 7-dehydrocholesterol reductase [Source:HGNC Symbol;Acc:100000]
13	10202	2.48	2e-16	5e-14	1 x 15 dehydrogenase/reductase (SDR family) member 2 [Source:HGNC]
14	2167	2.66	2e-16	5e-14	1 x 44 fatty acid binding protein 4, adipocyte [Source:HGNC Symbol]
15	2201	1.54	2e-16	5e-14	1 x 5 fibrillin 2 [Source:HGNC Symbol;Acc:3604]
16	2354	-1.74	2e-16	5e-14	22 x 50 FBJ murine osteosarcoma viral oncogene homolog B [Source:HGNC]
17	729428	3.05	2e-16	5e-14	14 x 11 G antigen 12C [Source:HGNC Symbol;Acc:28402]
18	729422	3.05	2e-16	5e-14	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
19	100132399	1.54	2e-16	5e-14	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
20	100008586	3.04	2e-16	5e-14	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]

Global Geneset Analysis

Rank	GSZ	p-value	#all	Geneset
<i>Overexpressed</i>				
1	11.34	NULL	142	Glio wilscher_GBM_Verhaak-CL_expression_C_up
2	11.34	NULL	142	Glio wilscher_GBM_Verhaak-PNmut_expression_C_down
3	9.94	NULL	957	Chr Chr 11
4	8.66	NULL	530	Cancer Lembecke_Normal vs Adenoma
5	8.25	NULL	370	BP mitotic cell cycle
6	7.43	NULL	519	Chr Chr 14
7	7.17	NULL	39	BP glycolysis
8	6.89	NULL	12	BP hemidesmosome assembly
9	6.61	NULL	20	TF MYC_Metabolism UP
10	6.55	NULL	63	TF MYC_Targets UP
11	5.97	NULL	13	GSEA C2REACTOME_GLYCOLYSIS
12	5.8	NULL	1233	TF KIM_MYC targets
13	5.8	NULL	34	Chr Chr Y
14	5.78	NULL	232	BP mitosis
15	5.74	NULL	15	GSEA C2REACTOME_FORMATION_OF_TUBULIN_FOLDING_INTERMED
16	5.73	NULL	16	GSEA C2GRAHAM_NORMAL QUIESCENT_VS_NORMAL_DIVIDING_DN
17	5.71	NULL	15	GSEA C2SMID_BREAST_CANCER_LUMINAL_A_DN
18	5.68	NULL	35	Glio Colman_survival_associated
19	5.67	NULL	16	GSEA C2FRASOR_RESPONSE_TO_SERM_OR_FULVESTRANT_DN
20	5.59	NULL	150	BP protein folding
<i>Underexpressed</i>				
1	-12.9	NULL	553	Cancer Lembecke_Colonc Inflammation
2	-12.77	NULL	312	BP immune response
3	-12.54	NULL	417	H.Tiss WIRTH_Immune system
4	-10.17	NULL	16	GSEA C2FARMER_BREAST_CANCER_CLUSTER_1
5	-9.7	NULL	274	Lymphoma SPANG_IL21 DN
6	-9.41	NULL	15	CC MHC class II protein complex
7	-9.14	NULL	633	Chr Chr 9
8	-8.9	NULL	16	GSEA C2MOSELERLE_IFNA_RESPONSE
9	-8.69	NULL	51	BP type I interferon signaling pathway
10	-8.45	NULL	316	Cancer SPANG_BCL6-index2
11	-8.19	NULL	16	GSEA C2UROSEVIC_RESPONSE_TO_IMIQUIMOD
12	-7.88	NULL	265	Glio wilscher_GBM_Verhaak-CL_expression_B_up
13	-7.88	NULL	265	Glio wilscher_GBM_Verhaak-MES_expression_B_up
14	-7.88	NULL	265	Glio wilscher_GBM_Verhaak-PNwt_expression_B_down
15	-7.88	NULL	265	Glio wilscher_GBM_Verhaak-PNmut_expression_B_down
16	-7.85	NULL	16	GSEA C2MAHADEVAN_RESPONSE_TO_MP470_UP
17	-7.31	NULL	9	GSEA C2GUTIERREZ_WALDENSTROEMS_MACROGLOBULINEMIA_1_D
18	-7.28	NULL	16	GSEA C2ZHANG_INTERFERON_RESPONSE
19	-7.17	NULL	10	GSEA C2GRANDVAUX_IFN_RESPONSE_NOT_VIA_IRF3
20	-6.95	NULL	530	BP innate immune response

p-values



GW_118

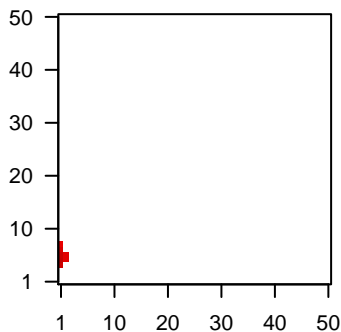
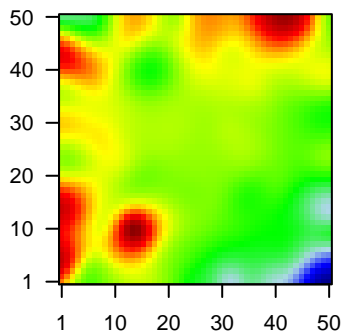
Local Summary

%DE = 0.71
 # metagenes = 7
 # genes = 172
 # genes in genesets = 170
 # genes with $fdr < 0.1$ = 94 (93 + / 1 -)
 # genes with $fdr < 0.05$ = 87 (86 + / 1 -)
 # genes with $fdr < 0.01$ = 73 (72 + / 1 -)

<r> metagenes = 0.98
 <r> genes = 0.33
 <FC> = 0.48
 <shrinkage-t> = 16.89
 <p-value> = 0
 <fdr> = 0.47

Profile

Spot



Local Genelist

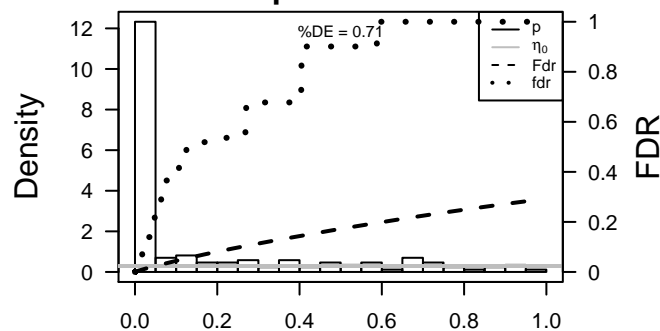
Rank	ID	log(FC)	fdr	p-value	Description
1	55107	1.82	2e-16	3e-15	1 x 5 anoctamin 1, calcium activated chloride channel [Source:HGNC]
2	768	2.36	2e-16	3e-15	1 x 6 carbonic anhydrase IX [Source:HGNC Symbol;Acc:1383]
3	131566	1.67	2e-16	3e-15	1 x 4 discoidin, CUB and LCCL domain containing 2 [Source:HGNC]
4	2201	1.54	2e-16	3e-15	1 x 5 fibrillin 2 [Source:HGNC Symbol;Acc:3604]
5	3909	1.46	1e-15	4e-13	1 x 5 laminin, alpha 3 [Source:HGNC Symbol;Acc:6483]
6	6591	1.41	1e-14	6e-13	1 x 4 snail family zinc finger 2 [Source:HGNC Symbol;Acc:11094]
7	5210	1.39	2e-14	3e-12	1 x 5 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase 4 [S
8	79783	1.36	9e-14	3e-12	1 x 5 succinyl-CoA:glutarate-CoA transferase [Source:HGNC Symb
9	10272	1.34	2e-13	3e-12	1 x 4 follistatin-like 3 (secreted glycoprotein) [Source:HGNC Symb
10	595	1.25	2e-13	3e-12	1 x 6 cyclin D1 [Source:HGNC Symbol;Acc:1582]
11	196527	1.34	2e-13	8e-10	1 x 5 anoctamin 6 [Source:HGNC Symbol;Acc:25240]
12	3667	1.22	2e-11	8e-10	1 x 5 insulin receptor substrate 1 [Source:HGNC Symbol;Acc:6125]
13	6624	1.11	3e-11	8e-09	1 x 6 fascin homolog 1, actin-bundling protein (Strongylocentrotus
14	51330	1.16	2e-10	8e-09	1 x 4 tumor necrosis factor receptor superfamily, member 12A [Sou
15	84058	1.14	4e-10	9e-09	1 x 7 WD repeat domain 54 [Source:HGNC Symbol;Acc:25770]
16	4651	1.13	5e-10	7e-08	1 x 6 myosin X [Source:HGNC Symbol;Acc:7593]
17	56034	1.1	2e-09	8e-08	1 x 4 platelet derived growth factor C [Source:HGNC Symbol;Acc:8
18	11014	1.07	4e-09	8e-08	1 x 6 KDEL (Lys-Asp-Glu-Leu) endoplasmic reticulum protein ret
19	8727	1.07	5e-09	2e-07	1 x 5 catenin (cadherin-associated protein), alpha-like 1 [Source:t
20	25914	1.05	9e-09	1e-06	1 x 8 rotatin [Source:HGNC Symbol;Acc:18654]

Local Geneset Analysis

Overexpression

Rank	GSZ	p-value	#in/all	Geneset
1	18.11	NULL	2 / 4	miRNA target-195
2	17.79	NULL	3 / 10	GSEA C2TSUNODA_CISPLATIN_RESISTANCE_DN
3	17.71	NULL	1 / 2	miRNA target-16-1
4	16.93	NULL	1 / 3	Glio willscher_GBM_Verhaak-PNwt_expression_N_down
5	16.93	NULL	1 / 3	Glio willscher_GBM_Verhaak-PNwt_expression_N_up
6	15.85	NULL	4 / 12	BP hemidesmosome assembly
7	14.86	NULL	4 / 13	GSEA C2MAHADEVAN_GIST_MORPHOLOGICAL_SWITCH
8	14.28	NULL	3 / 15	GSEA C2SNIJDERS_AMPLIFIED_IN_HEAD_AND_NECK_TUMORS
9	14.2	NULL	2 / 6	miRNA target-7b
10	13.75	NULL	3 / 14	GSEA C2SIMBULAN_UV_RESPONSE_IMMORTALIZED_DN
11	13.58	NULL	1 / 3	GSEA C2MYLLYKANGAS_AMPLIFICATION_HOT_SPOT_11
12	12.64	NULL	3 / 11	MF actin-dependent ATPase activity
13	12.61	NULL	2 / 9	GSEA C2WANG_RESPONSE_TO_PACLITAXEL_VIA_MAPK8_UP
14	12.43	NULL	2 / 10	GSEA C2DORN_ADENOVIRUS_INFECTION_12HR_DN
15	12.36	NULL	2 / 5	miRNA target-213
16	12.33	NULL	3 / 13	GSEA C2CHIN_BREAST_CANCER_COPY_NUMBER_UP
17	12.15	NULL	5 / 16	MF fibronectin binding
18	11.69	NULL	7 / 27	CC integrin complex
19	11.34	NULL	1 / 4	miRNA target-20a
20	11.22	NULL	4 / 14	GSEA C2LOPEZ_MESOTHELIOMA_SURVIVAL_OVERALL_DN
21	10.89	NULL	28 / 403	BP cell adhesion
22	10.66	NULL	3 / 15	BP negative regulation of anoikis
23	10.34	NULL	1 / 2	miRNA target-124a
24	10.34	NULL	4 / 15	GSEA C2KANG_FLUOROURACIL_RESISTANCE_DN
25	10.33	NULL	3 / 16	GSEA C2DORN_ADENOVIRUS_INFECTION_32HR_DN
26	10.33	NULL	3 / 16	GSEA C2DORN_ADENOVIRUS_INFECTION_48HR_DN
27	10.17	NULL	4 / 16	GSEA C2SWEET_KRAS_TARGETS_UP
28	10.15	NULL	2 / 14	BP positive regulation of cell-cell adhesion
29	9.98	NULL	4 / 16	GSEA C2ABRAHAM_ALPC_VS_MULTIPLE_MYELOMA_UP
30	9.97	NULL	2 / 11	miRNA target-16
31	9.9	NULL	1 / 5	GSEA C2BUSA_SAM68_TARGETS_UP
32	9.9	NULL	1 / 5	GSEA C2VERNELL_RETINOBLASTOMA_PATHWAY_DN
33	9.9	NULL	1 / 5	miRNA target-15a
34	9.87	NULL	2 / 16	Glio VERHAAK_MES subtype
35	9.49	NULL	2 / 12	MF actin binding
36	9.44	NULL	2 / 9	GSEA C2REACTOME_SIGNALING_BY_VEGF
37	9.39	NULL	4 / 12	BP heparan sulfate proteoglycan biosynthetic process
38	9.37	NULL	1 / 6	GSEA C2SAI_DNAJB4_TARGETS_DN
39	9.26	NULL	1 / 2	TF MYC_ECM cell adhesion DOWN
40	9.2	NULL	2 / 17	BP morphogenesis of an epithelium

p-values



GW_118

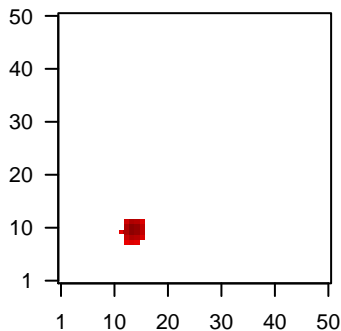
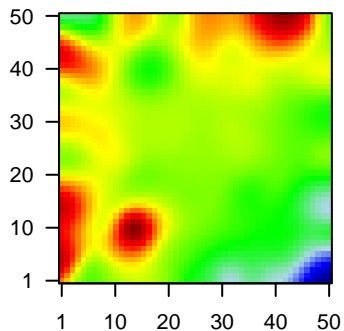
Local Summary

%DE = 0.96
 # metagenes = 20
 # genes = 98
 # genes in genesets = 74
 # genes with fdr < 0.1 = 83 (75 + / 8 -)
 # genes with fdr < 0.05 = 65 (65 + / 0 -)
 # genes with fdr < 0.01 = 58 (58 + / 0 -)

<r> metagenes = 0.97
 <r> genes = 0.29
 <FC> = 0.87
 <shrinkage-t> = 30.61
 <p-value> = 0
 <fdr> = 0.39

Profile

Spot



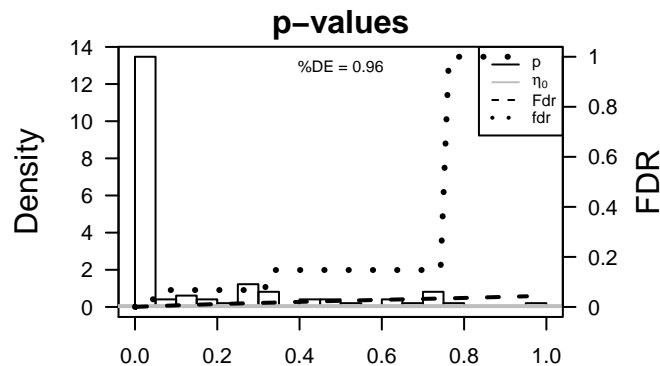
Local Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	729428	3.05	2e-16	5e-17	14 x 11 G antigen 12C [Source:HGNC Symbol;Acc:28402]
2	729422	3.05	2e-16	5e-17	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
3	100132399	1.54	2e-16	5e-17	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
4	100008586	3.04	2e-16	5e-17	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
5	645073	3.11	2e-16	5e-17	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
6	729442	3.06	2e-16	5e-17	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
7	26748	2.77	2e-16	5e-17	14 x 11 G antigen 12I [Source:HGNC Symbol;Acc:4105]
8	729396	2.62	2e-16	5e-17	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
9	729447	2.57	2e-16	5e-17	14 x 11 G antigen 2A [Source:HGNC Symbol;Acc:4099]
10	645037	3.45	2e-16	5e-17	14 x 11 G antigen 2C [Source:HGNC Symbol;Acc:31958]
11	26749	2.53	2e-16	5e-17	14 x 11 G antigen 2E [Source:HGNC Symbol;Acc:31960]
12	2576	3.28	2e-16	5e-17	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
13	2577	3.04	2e-16	5e-17	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
14	2578	1.64	2e-16	5e-17	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
15	2579	1.51	2e-16	5e-17	14 x 11 G antigen 12I [Source:HGNC Symbol;Acc:4105]
16	100101629	2.12	2e-16	5e-17	14 x 11 G antigen 2E [Source:HGNC Symbol;Acc:31960]
17	121355	2.38	2e-16	5e-17	14 x 11 gametocyte specific factor 1 [Source:HGNC Symbol;Acc:2656]
18	4100	2.2	2e-16	5e-17	14 x 11 melanoma antigen family A, 1 (directs expression of antigen 1)
19	4109	2.35	2e-16	5e-17	14 x 11 melanoma antigen family A, 10 [Source:HGNC Symbol;Acc:6]
20	64591	1.98	2e-16	5e-17	15 x 11 testis specific protein, Y-linked 2 [Source:HGNC Symbol;Acc:17778]

Local Geneset Analysis

Overexpression

Rank	GSZ	p-value	#in/all	Geneset
1	14.73	NULL	31 / 630	Chr Chr X
2	11.88	NULL	1 / 11	GSEA C2SU_PLACENTA
3	10.62	NULL	1 / 10	GSEA C2CONRAD_GERMLINE_STEM_CELL
4	10.22	NULL	1 / 14	GSEA C2NIELSEN_GIST
5	10.22	NULL	1 / 12	GSEA C2RAY_TARGETS_OF_P210_BCR_ABL_FUSION_UP
6	9.8	NULL	1 / 15	GSEA C2BROWNE_HCMV_INFECTION_8HR_DN
7	9.66	NULL	3 / 15	GSEA C2MATTIOLI_MULTIPLE_MYELOMA_SUBGROUPS
8	9.46	NULL	1 / 12	GSEA C2ACEVEDO_LIVER_CANCER_WITH_H3K27ME3_DN
9	9.25	NULL	1 / 2	miRNA target-107
10	9.16	NULL	3 / 23	BP calcium-dependent cell-cell adhesion
11	8.84	NULL	2 / 34	Chr Chr Y
12	8.12	NULL	9 / 120	H.Tiss WIRTH_Testis
13	7.94	NULL	1 / 7	GSEA C2KONDO_PROSTATE_CANCER_WITH_H3K27ME3
14	7.78	NULL	1 / 5	GSEA C2CHOI_ATL_ACUTE_STAGE
15	7.56	NULL	2 / 8	GSEA C2WEBER_METHYLATED_ICP_IN_FIBROBLAST
16	7.47	NULL	1 / 21	BP negative regulation of Notch signaling pathway
17	7.03	NULL	1 / 4	GSEA C2WEBER_METHYLATED_ICP_IN_SPERM_DN
18	6.91	NULL	3 / 37	BP synapse assembly
19	6.67	NULL	1 / 11	Glio willscher_GBM_Verhaak-CL_expression_M_down
20	6.67	NULL	1 / 11	Glio willscher_GBM_Verhaak-MES_expression_M_down
21	6.67	NULL	1 / 11	Glio willscher_GBM_Verhaak-PNmut_expression_M_up
22	6.26	NULL	1 / 10	GSEA C2BOYERINAS_ONCOFETAL_TARGETS_OF_LET7A1
23	6.26	NULL	1 / 10	GSEA C2CONRAD_STEM_CELL
24	5.89	NULL	1 / 11	GSEA C2DODONNELL_TFRC_TARGETS_DN
25	5.67	NULL	2 / 22	BP male meiosis
26	5.26	NULL	1 / 4	GSEA C2WEBER_METHYLATED_ICP_IN_SPERM_UP
27	5.19	NULL	1 / 6	GSEA C2NIELSEN_GIST_VS_SYNOVIAL_SARCOMA_UP
28	5.13	NULL	1 / 10	GSEA C2WEBER_METHYLATED_HCP_IN_SPERM_DN
29	5.09	NULL	2 / 86	BP nucleosome assembly
30	4.83	NULL	1 / 15	GSEA C2DODONNELL_TARGETS_OF_MYC_AND_TFRC_DN
31	4.83	NULL	1 / 15	miRNA target-379
32	4.82	NULL	1 / 10	GSEA C2TSUNODA_CISPLATIN_RESISTANCE_DN
33	4.82	NULL	1 / 11	GSEA C2WEBER_METHYLATED_HCP_IN_FIBROBLAST_DN
34	4.66	NULL	1 / 7	GSEA C2NIELSEN_SYNOVIAL_SARCOMA_UP
35	4.35	NULL	1 / 12	GSEA C2KEGG_LYSINE_DEGRADATION
36	4.32	NULL	1 / 13	GSEA C2SU_TESTIS
37	4.09	NULL	9 / 481	BP biological_process
38	4.08	NULL	3 / 99	BP homophilic cell adhesion
39	4.05	NULL	1 / 16	GSEA C2SMID_BREAST_CANCER_RELAPSE_IN_PLEURA_DN
40	4.02	NULL	1 / 5	miRNA target-181a



GW_118

Local Summary

%DE = 0.63
 # metagenes = 9
 # genes = 136
 # genes in genesets = 136

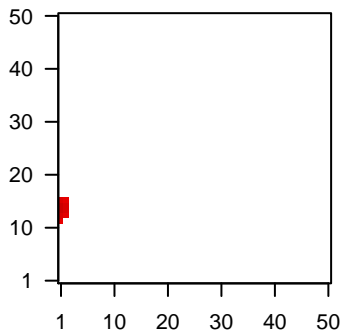
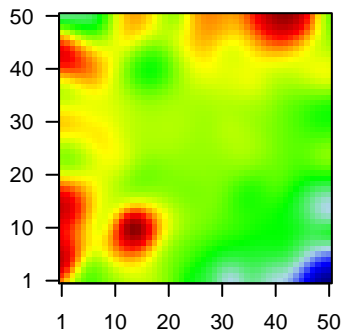
genes with $fdr < 0.1 = 60$ (60 + / 0 -)
 # genes with $fdr < 0.05 = 60$ (60 + / 0 -)
 # genes with $fdr < 0.01 = 39$ (39 + / 0 -)

<r> metagenes = 0.97
 <r> genes = 0.29

<FC> = 0.42
 <shrinkage-t> = 14.62
 <p-value> = 0
 <fdr> = 0.57

Profile

Spot



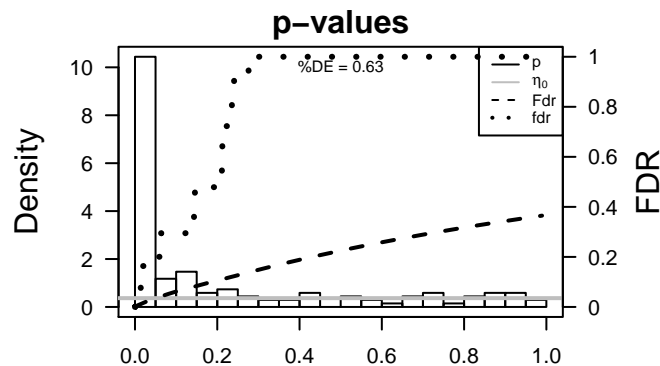
Local Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	10202	2.48	2e-16	6e-15	1 x 15 dehydrogenase/reductase (SDR family) member 2 [Source:HGNC Symbol;Acc:41111]
2	51083	2.11	2e-16	6e-15	1 x 15 galanin/GMAP prepropeptide [Source:HGNC Symbol;Acc:41111]
3	8772	1.47	7e-16	5e-13	1 x 14 Fas (TNFRSF6)-associated via death domain [Source:HGNC Symbol;Acc:41111]
4	131076	1.41	1e-14	2e-09	1 x 16 coiled-coil domain containing 58 [Source:HGNC Symbol;Acc:41111]
5	81037	1.21	3e-11	2e-07	1 x 14 CLPTM1-like [Source:HGNC Symbol;Acc:24308]
6	64979	1.07	5e-09	4e-07	1 x 16 mitochondrial ribosomal protein L36 [Source:HGNC Symbol;Acc:41111]
7	51373	1.04	1e-08	4e-07	1 x 16 28S ribosomal protein S17, mitochondrial; HCG1984214, isof
8	5214	1.02	2e-08	1e-06	1 x 13 phosphofructokinase, platelet [Source:HGNC Symbol;Acc:88111]
9	10963	1	4e-08	2e-06	1 x 16 stress-induced-phosphoprotein 1 [Source:HGNC Symbol;Acc:41111]
10	219927	0.98	8e-08	3e-06	1 x 15 mitochondrial ribosomal protein L21 [Source:HGNC Symbol;Acc:41111]
11	79080	0.96	2e-07	3e-06	1 x 14 coiled-coil domain containing 86 [Source:HGNC Symbol;Acc:41111]
12	27294	0.94	2e-07	3e-06	1 x 16 dihydrodiol dehydrogenase (dimeric) [Source:HGNC Symbol;Acc:41111]
13	991	0.94	2e-07	4e-06	1 x 16 cell division cycle 20 [Source:HGNC Symbol;Acc:1723]
14	220064	0.93	3e-07	6e-05	1 x 14 oral cancer overexpressed 1 [Source:HGNC Symbol;Acc:175111]
15	116447	0.88	1e-06	6e-05	1 x 15 topoisomerase (DNA) I, mitochondrial [Source:HGNC Symbol;Acc:41111]
16	25902	0.86	3e-06	1e-04	1 x 13 methylenetetrahydrofolate dehydrogenase (NADP+ depend
17	7965	0.84	5e-06	2e-04	1 x 15 aminoacyl tRNA synthetase complex-interacting multifunctor
18	3217	0.81	8e-06	3e-04	1 x 15 homeobox B7 [Source:HGNC Symbol;Acc:5118]
19	6389	0.79	1e-05	3e-04	1 x 12 succinate dehydrogenase complex, subunit A, flavoprotein (F
20	10598	0.78	2e-05	9e-04	1 x 14 AHA1, activator of heat shock 90kDa protein ATPase homolo

Local Geneset Analysis

Overexpression

Rank	GSZ	p-value	#in/all	Geneset
1	20.22	NULL	2 / 10	GSEA C2ZHU_CMV_24_HR_UP
2	20.22	NULL	2 / 10	GSEA C2ZHU_CMV_ALL_UP
3	18.34	NULL	1 / 6	GSEA C2REACTOME_CLASS_A1_RHODOPSIN_LIKE_RECEPTORS
4	18.34	NULL	1 / 6	GSEA C2REACTOME_GPCR_LIGAND_BINDING
5	16.77	NULL	1 / 7	GSEA C2CAFFAREL_RESPONSE_TO_THC_24HR_5_UP
6	16.77	NULL	1 / 7	GSEA C2REACTOME_PEPTIDE_LIGAND_BINDING_RECEPTORS
7	16.75	NULL	2 / 8	GSEA C2NIKOLSKY_BREAST_CANCER_5P15_AMPLICON
8	15.52	NULL	1 / 8	GSEA C2SAMOLS_TARGETS_OF_KHSV_MIRNAS_UP
9	15.52	NULL	1 / 8	GSEA C2REACTOME_G_ALPHA_I_SIGNALLING_EVENTS
10	13.66	NULL	1 / 10	GSEA C2VELCSH_BRCA1_TARGETS_1_DN
11	13.66	NULL	1 / 10	GSEA C2TAKAO_RESPONSE_TO_UVB_RADIATION_UP
12	13.32	NULL	2 / 13	GSEA C2RICKMAN_HEAD_AND_NECK_CANCER_C
13	12.93	NULL	1 / 11	GSEA C2SCIBETTA_KDM5B_TARGETS_DN
14	12.93	NULL	1 / 11	GSEA C2SMID_BREAST_CANCER_RELAPSE_IN_BONE_DN
15	12.93	NULL	1 / 11	GSEA C2PARK_APL_PATHOGENESIS_DN
16	12.9	NULL	2 / 18	BP smooth muscle contraction
17	12.76	NULL	1 / 15	BP myeloid dendritic cell differentiation
18	12.76	NULL	1 / 15	GSEA C2FARMER_BREAST_CANCER_CLUSTER_7
19	12.7	NULL	1 / 6	GSEA C2GALL_TP53_TARGETS_APOPTOTIC_DN
20	12.31	NULL	1 / 12	GSEA C2BHATTACHARYA_EMBRYONIC_STEM_CELL
21	12.3	NULL	1 / 16	GSEA C2TING_SILENCED_BY_DICER
22	12.21	NULL	2 / 13	GSEA C2NADERI_BREAST_CANCER_PROGNOSIS_UP
23	11.76	NULL	1 / 13	GSEA C2KORKOLA_EMBRYONIC_CARCINOMA_VS_SEMINOMA_UP
24	11.28	NULL	1 / 14	GSEA C2FARMER_BREAST_CANCER_BASAL_VS_LUTEMINAL
25	11.28	NULL	1 / 14	GSEA C2JEN_BREAST_CARCINOMA_METAPLASTIC_VS_DUCTAL_UP
26	11.28	NULL	1 / 14	GSEA C2KRASNOSELSKAYA_ILF3_TARGETS_DN
27	10.84	NULL	1 / 15	MF neuropeptide hormone activity
28	10.84	NULL	1 / 15	GSEA C2NAGASHIMA_NRG1_SIGNALING_UP
29	10.84	NULL	1 / 15	GSEA C2FERNANDEZ_BOUND_BY_MYC
30	10.45	NULL	1 / 16	GSEA C2DOANE_BREAST_CANCER_ESR1_DN
31	10.45	NULL	1 / 16	GSEA C2TAVOR_CEBPA_TARGETS_DN
32	10.45	NULL	1 / 16	GSEA C2FRASOR_RESPONSE_TO_SERM_OR_FULVESTRANT_DN
33	10.45	NULL	1 / 16	GSEA C2BROWNE_HCMV_INFECTION_24HR_UP
34	10.1	NULL	1 / 17	Disease BCHETNIA_EBM_up
35	10.02	NULL	1 / 9	GSEA C2BIOCARTA_RELA_PATHWAY
36	10.02	NULL	1 / 9	GSEA C2BIOCARTA_NFKB_PATHWAY
37	10.02	NULL	1 / 9	GSEA C2BIOCARTA_SODD_PATHWAY
38	10.02	NULL	1 / 9	GSEA C2REACTOME_DEATH_RECEPTOR_SIGNALLING
39	9.65	NULL	3 / 14	BP regulation of protein catabolic process
40	9.56	NULL	1 / 25	BP cellular response to oxidative stress



GW_118

Local Summary

%DE = 0.77
 # metagenes = 25
 # genes = 381
 # genes in genesets = 378

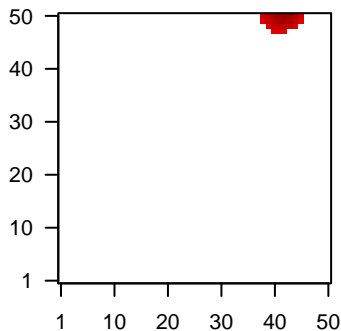
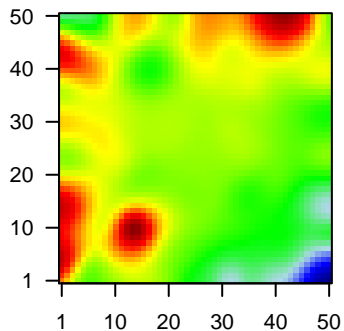
genes with $fdr < 0.1 = 235$ (235 + / 0 -)
 # genes with $fdr < 0.05 = 180$ (180 + / 0 -)
 # genes with $fdr < 0.01 = 127$ (127 + / 0 -)

<r> metagenes = 0.95
 <r> genes = 0.35

<FC> = 0.43
 <shrinkage-t> = 15.07
 <p-value> = 0.01
 <fdr> = 0.53

Profile

Spot



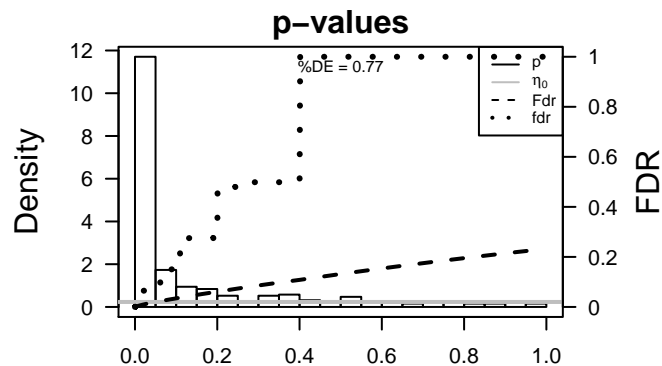
Local Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	8500	1.65	2e-16	7e-15	42 x 50 protein tyrosine phosphatase, receptor type, f polypeptide (P1)
2	23480	1.66	2e-16	7e-15	39 x 50 Sec61 gamma subunit [Source:HGNC Symbol;Acc:18277]
3	9319	1.58	2e-16	7e-15	43 x 50 thyroid hormone receptor interactor 13 [Source:HGNC Symbc
4	55915	1.39	3e-14	3e-10	38 x 50 LanC lantibiotic synthetase component C-like 2 (bacterial) [S
5	6611	1.27	3e-12	6e-10	42 x 50 spermine synthase [Source:HGNC Symbol;Acc:11123]
6	79657	1.24	1e-11	2e-08	41 x 49 RNA polymerase II associated protein 3 [Source:HGNC Syml
7	220042	1.13	6e-10	2e-08	42 x 50 chromosome 11 open reading frame 82 [Source:HGNC Symt
8	113130	1.13	6e-10	2e-08	44 x 49 cell division cycle associated 5 [Source:HGNC Symbol;Acc:1-
9	7153	1.12	8e-10	8e-08	45 x 49 topoisomerase (DNA) II alpha 170kDa [Source:HGNC Symbc
10	136	1.1	2e-09	2e-07	41 x 50 adenosine A2b receptor [Source:HGNC Symbol;Acc:264]
11	3992	1.07	4e-09	4e-07	45 x 50 fatty acid desaturase 1 [Source:HGNC Symbol;Acc:3574]
12	134147	1.05	9e-09	2e-06	40 x 48 carboxymethylenebutenolidase homolog (Pseudomonas) [So
13	29028	1.01	3e-08	2e-06	44 x 50 ATPase family, AAA domain containing 2 [Source:HGNC Symr
14	51504	0.99	5e-08	9e-06	38 x 50 tRNA methyltransferase 11-2 homolog (S. cerevisiae) [Sourc
15	10606	0.96	2e-07	9e-06	43 x 50 phosphoribosylaminoimidazole carboxylase, phosphoribosyla
16	3945	0.93	3e-07	9e-06	40 x 50 lactate dehydrogenase B [Source:HGNC Symbol;Acc:6541]
17	55353	0.92	4e-07	9e-06	42 x 50 lysosomal protein transmembrane 4 beta [Source:HGNC Syrr
18	137392	0.92	5e-07	9e-06	40 x 50 family with sequence similarity 92, member A1 [Source:HGNC
19	10576	0.91	6e-07	9e-06	41 x 50 chaperonin containing TCP1, subunit 2 (beta) [Source:HGNC
20	4173	0.91	6e-07	2e-05	44 x 50 minichromosome maintenance complex component 4 [Source

Local Geneset Analysis

Overexpression

Rank	GSZ	p-value	#in/all	Geneset
1	33.2	NULL	67 / 142	Glio willscher_GBM_Verhaak-CL_expression_C_up
2	33.2	NULL	67 / 142	Glio willscher_GBM_Verhaak-PNmut_expression_C_down
3	20.81	NULL	11 / 14	MMML C6CIEJ_MMML 4
4	19.43	NULL	10 / 13	GSEA C2CROONQUIST_IL6_DEPRIVATION_DN
5	18.27	NULL	72 / 370	BP mitotic cell cycle
6	17.14	NULL	13 / 16	GSEA C2FINETTI_BREAST_CANCER_BASAL_VS_LUMINAL
7	16.77	NULL	9 / 15	GSEA C2SMID_BREAST_CANCER_LUMINAL_A_DN
8	16.22	NULL	12 / 15	GSEA C2FINETTI_BREAST_CANCER_KINOME_RED
9	16.01	NULL	72 / 530	Cancer Lembcke_Normal vs Adenoma
10	15.57	NULL	19 / 57	Glio developing astrocytes
11	15.47	NULL	9 / 15	GSEA C2FOURNIER_ACINAR_DEVELOPMENT_LATE_DN
12	14.79	NULL	11 / 18	BP spindle organization
13	14.45	NULL	8 / 13	GSEA C2WINNENPENNINCKX_MELANOMA_METASTASIS_UP
14	14.07	NULL	12 / 16	GSEA C2FARMER_BREAST_CANCER_CLUSTER_2
15	13.75	NULL	41 / 232	BP mitosis
16	13.41	NULL	7 / 16	GSEA C2CROONQUIST_NRAS_SIGNALING_DN
17	13.15	NULL	8 / 14	GSEA C2ROSTY_CERVICAL_CANCER_PROLIFERATION_CLUSTER
18	12.92	NULL	8 / 10	GSEA C2MONTERO_THYROID_CANCER_POOR_SURVIVAL_UP
19	12.87	NULL	9 / 16	GSEA C2KANG_DOXORUBICIN_RESISTANCE_UP
20	12.79	NULL	5 / 15	GSEA C2FERRANDO_HOX11_NEIGHBORS
21	12.73	NULL	5 / 9	GSEA C2BIOCARTA_RANMS_PATHWAY
22	12.65	NULL	18 / 56	CC chromosome, centromeric region
23	12.46	NULL	6 / 14	GSEA C2MISSIAGLIA_REGULATED_BY_METHYLATION_DN
24	12.18	NULL	8 / 15	Cancer SOTIRIOU_BREAST_CANCER_GRADE_1_VS_3_UP
25	11.92	NULL	62 / 572	Disease GUDJ_psooriasis up
26	11.89	NULL	27 / 148	BP G1/S transition of mitotic cell cycle
27	11.7	NULL	8 / 15	Cancer SOTIRIOU_BREAST_CANCER_GRADE_1_VS_3_UP
28	11.66	NULL	8 / 15	GSEA C2LEE_EARLY_T_LYMPHOCYTE_UP
29	11.52	NULL	6 / 16	GSEA C2GRAHAM_NORMAL QUIESCENT_VS_NORMAL_DIVIDING_DN
30	11.35	NULL	9 / 14	GSEA C2ZHAN_MULTIPLE_MYELOMA_PR_UP
31	11.3	NULL	4 / 11	GSEA C2REACTOME_PURINE_RIBONUCLEOSIDE_MONOPHOSPHATE
32	11.1	NULL	6 / 16	Cancer WOLFER_overlap genes
33	11.1	NULL	3 / 4	MMML C6CIEJ_MMML 41
34	11.08	NULL	4 / 9	GSEA C2REACTOME_CELL_CYCLE_CHECKPOINTS
35	10.9	NULL	5 / 14	GSEA C2LOPEZ_MESOTELIOMA_SURVIVAL_TIME_UP
36	10.9	NULL	7 / 15	GSEA C2GRAHAM_CML_DIVIDING_VS_NORMAL QUIESCENT_UP
37	10.84	NULL	8 / 16	GSEA C2EGUCHI_CELL_CYCLE_RB1_TARGETS
38	10.77	NULL	6 / 15	GSEA C2REACTOME_FORMATION_OF_TUBULIN_FOLDING_INTERMED
39	10.77	NULL	3 / 8	GSEA C2GRAHAM_CML QUIESCENT_VS_CML_DIVIDING_DN
40	10.48	NULL	6 / 16	GSEA C2CHIANG_LIVER_CANCER_SUBCLASS_PROLIFERATION_UP



GW_118

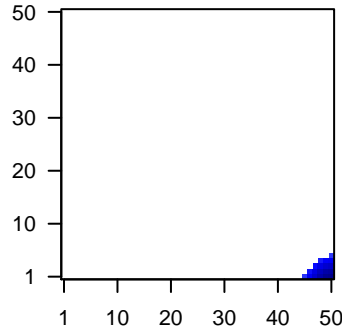
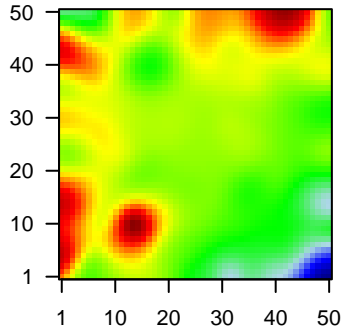
Local Summary

%DE = 0.92
 # metagenes = 19
 # genes = 308
 # genes in genesets = 305
 # genes with $fdr < 0.1 = 257$ (6 + / 251 -)
 # genes with $fdr < 0.05 = 257$ (6 + / 251 -)
 # genes with $fdr < 0.01 = 221$ (5 + / 216 -)

$\langle r \rangle$ metagenes = 0.98
 $\langle r \rangle$ genes = 0.55
 $\langle FC \rangle = -0.63$
 $\langle \text{shrinkage-t} \rangle = -22.06$
 $\langle p\text{-value} \rangle = 0$
 $\langle fdr \rangle = 0.24$

Profile

Spot



Local Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	919	-1.5	2e-16	1e-15	50 x 1 CD247 molecule [Source:HGNC Symbol;Acc:1677]
2	3113	-1.51	2e-16	1e-15	50 x 1 major histocompatibility complex, class II, DP alpha 1 [Source:HGNC Symbol;Acc:1677]
3	3122	-1.49	2e-16	1e-15	50 x 1 major histocompatibility complex, class II, DR alpha [Source:HGNC Symbol;Acc:1677]
4	3543	-1.62	2e-16	1e-15	49 x 1 immunoglobulin lambda-like polypeptide 1 [Source:HGNC Symbol;Acc:1677]
5	9806	-1.54	2e-16	1e-15	50 x 1 sparco/osteonectin, cwcv and kazal-like domains proteoglycan 1 [Source:HGNC Symbol;Acc:1677]
6	3128	-1.49	4e-16	1e-14	50 x 1 major histocompatibility complex, class II, DR beta 6 (pseudogene) [Source:HGNC Symbol;Acc:1677]
7	3108	-1.46	1e-15	1e-14	50 x 1 major histocompatibility complex, class II, DM alpha [Source:HGNC Symbol;Acc:1677]
8	54855	-1.45	2e-15	1e-14	49 x 1 family with sequence similarity 46, member C [Source:HGNC Symbol;Acc:1677]
9	3109	-1.45	2e-15	2e-14	50 x 1 major histocompatibility complex, class II, DM beta [Source:HGNC Symbol;Acc:1677]
10	57172	-1.44	4e-15	2e-14	49 x 1 calcium/calmodulin-dependent protein kinase I gamma [Source:HGNC Symbol;Acc:1677]
11	2634	-1.43	4e-15	1e-13	47 x 1 guanylate binding protein 2, interferon-inducible [Source:HGNC Symbol;Acc:1677]
12	10628	-1.39	8e-15	2e-13	48 x 1 thioredoxin interacting protein [Source:HGNC Symbol;Acc:1677]
13	241	-1.39	2e-14	2e-13	50 x 1 arachidonate 5-lipoxygenase-activating protein [Source:HGNC Symbol;Acc:1677]
14	3669	-1.39	2e-14	3e-13	48 x 1 interferon stimulated exonuclease gene 20kDa [Source:HGNC Symbol;Acc:1677]
15	10365	-1.38	3e-14	9e-12	50 x 3 Kruppel-like factor 2 [Source:HGNC Symbol;Acc:6347]
16	3059	1.31	7e-13	9e-12	50 x 1 hematopoietic cell-specific Lyn substrate 1 [Source:HGNC Symbol;Acc:1677]
17	7454	-1.31	7e-13	5e-11	50 x 1 Wiskott-Aldrich syndrome [Source:HGNC Symbol;Acc:12731]
18	3120	-1.26	4e-12	5e-11	47 x 1 major histocompatibility complex, class II, DQ beta 2 [Source:HGNC Symbol;Acc:1677]
19	972	-1.26	4e-12	5e-11	50 x 1 CD74 molecule, major histocompatibility complex, class II invariant chain [Source:HGNC Symbol;Acc:1677]
20	4067	-1.25	6e-12	1e-10	46 x 2 v-yes-1 Yamaguchi sarcoma viral related oncogene homolog c [Source:HGNC Symbol;Acc:1677]

Local Geneset Analysis

Underexpression

Rank	GSZ	p-value	#in/all	Geneset
1	-31.96	NULL	13 / 15	CC MHC class II protein complex
2	-26.82	NULL	93 / 417	H.Tiss WIRTH_Immune system
3	-22.43	NULL	55 / 312	BP immune response
4	-21.94	NULL	97 / 553	Cancer Lembcke_Colonc Inflammation
5	-20.5	NULL	7 / 11	GSEA C2BIOCARTA_TCYTOTOXIC_PATHWAY
6	-20.32	NULL	9 / 16	GSEA C2FARMER_BREAST_CANCER_CLUSTER_1
7	-18.74	NULL	18 / 60	BP T cell costimulation
8	-18.73	NULL	6 / 12	GSEA C2BIOCARTA_CTL_PATHWAY
9	-18.69	NULL	6 / 11	GSEA C2BIOCARTA_THELPER_PATHWAY
10	-17.87	NULL	16 / 47	BP antigen processing and presentation
11	-17.46	NULL	3 / 6	GSEA C2SANA_RESPONSE_TO_IFNG_UP
12	-17.25	NULL	44 / 265	Glio wilscher_GBM_Verhaak-CL_expression_B_up
13	-17.25	NULL	44 / 265	Glio wilscher_GBM_Verhaak-MES_expression_B_up
14	-17.25	NULL	44 / 265	Glio wilscher_GBM_Verhaak-PNwt_expression_B_down
15	-17.25	NULL	44 / 265	Glio wilscher_GBM_Verhaak-PNmut_expression_B_down
16	-16.63	NULL	2 / 3	GSEA C2KEGG_VIRAL_MYOCARDITIS
17	-15.75	NULL	8 / 21	CC clathrin-coated endocytic vesicle membrane
18	-15.27	NULL	18 / 84	BP T cell receptor signaling pathway
19	-15.15	NULL	18 / 74	BP regulation of immune response
20	-14.97	NULL	8 / 23	CC integral to luminal side of endoplasmic reticulum membrane
21	-14.96	NULL	6 / 15	Glio Donson-chemokines/cytokines-associated with LTS in HGA
22	-14.76	NULL	5 / 10	GSEA C2FLECHNER_BIOPSY_KIDNEY_TRANSPLANT_REJECTED_VS_ACCEPTED
23	-14.67	NULL	7 / 13	Cancer GENTLES_modul18
24	-14.49	NULL	5 / 12	BP immunoglobulin mediated immune response
25	-14.33	NULL	6 / 8	BP Donson-migration tethering and rolling-associated with LTS in HGA
26	-14.02	NULL	3 / 5	GSEA C2WONG_ENDOMETRIAL_CANCER_LATE
27	-14	NULL	2 / 4	GSEA C2KEGG_LEISHMANIA_INFECTION
28	-13.51	NULL	5 / 10	GSEA C2LEE_DIFFERENTIATING_T_LYMPHOCYTE
29	-13.39	NULL	8 / 28	CC transport vesicle membrane
30	-13.36	NULL	4 / 7	Glio Donson-cytotoxic effectors-associated with LTS in HGA
31	-13.3	NULL	4 / 8	GSEA C2GRAHAM_CML_QUIESCENT_VS_NORMAL_DIVIDING_DN
32	-13.24	NULL	6 / 12	GSEA C2ZHAN_MULTIPLE_MYELOMA_DN
33	-13.09	NULL	5 / 13	GSEA C2BIOCARTA_IL17_PATHWAY
34	-12.83	NULL	6 / 16	GSEA C2FERRANDO_TAL1_NEIGHBORS
35	-12.68	NULL	3 / 7	GSEA C2GRAHAM_CML_DIVIDING_VS_NORMAL_DIVIDING_DN
36	-12.58	NULL	10 / 35	CC trans-Golgi network membrane
37	-12.48	NULL	25 / 162	CC external side of plasma membrane
38	-12.43	NULL	2 / 5	GSEA C2WEST_ADRENOCORICAL_CARCINOMA_VS_ADENOMA_DN
39	-12.4	NULL	8 / 32	CC ER to Golgi transport vesicle membrane
40	-12.37	NULL	4 / 8	GSEA C2BIOCARTA_TCRA_PATHWAY

p-values

