

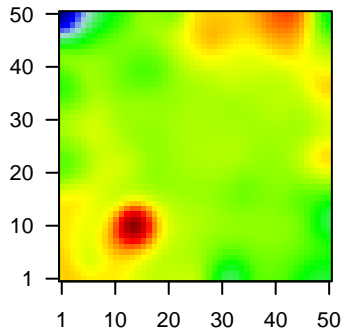
# GW\_247

## Global Summary

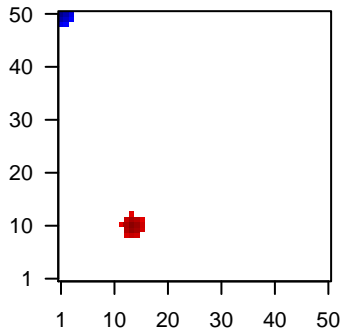
%DE = 0.15  
 # genes with fdr < 0.2 = 1922 ( 995 + / 927 - )  
 # genes with fdr < 0.1 = 1643 ( 846 + / 797 - )  
 # genes with fdr < 0.05 = 1311 ( 653 + / 658 - )  
 # genes with fdr < 0.01 = 894 ( 411 + / 483 - )  
 # genes in genesets = 16332

<FC> = 0  
 <shrinkage-t> = 0  
 <p-value> = 0.09  
 <fdr> = 0.85

Profile



Regulated Spots



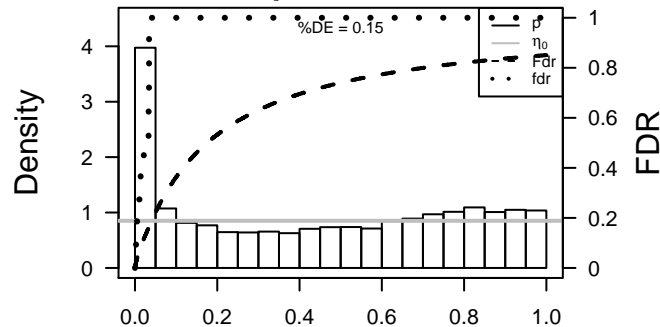
## Global Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	131	-2.22	2e-16	2e-14	1 x 50 alcohol dehydrogenase 7 (class IV), mu or sigma polypeptide
2	133	-2.12	2e-16	2e-14	1 x 42 adrenomedullin [Source:HGNC Symbol;Acc:259]
3	57016	-2.7	2e-16	2e-14	1 x 50 aldo-keto reductase family 1, member B10 (aldose reductase)
4	441282	-1.93	2e-16	2e-14	1 x 49 aldo-keto reductase family 1, member B15 [Source:HGNC S]
5	218	-2.57	2e-16	2e-14	1 x 50 aldehyde dehydrogenase 3 family, member A1 [Source:HGNC]
6	306	1.51	2e-16	2e-14	4 x 42 annexin A3 [Source:HGNC Symbol;Acc:541]
7	445	-1.83	2e-16	2e-14	50 x 47 argininosuccinate synthase 1 [Source:HGNC Symbol;Acc:75]
8	586	1.52	2e-16	2e-14	6 x 1 branched chain amino-acid transaminase 1, cytosolic [Source:HGNC Symbol;Acc:100]
9	655	-1.79	2e-16	2e-14	50 x 50 bone morphogenetic protein 7 [Source:HGNC Symbol;Acc:10]
10	387695	-2.03	2e-16	2e-14	1 x 49 chromosome 10 open reading frame 99 [Source:HGNC Symt
11	64207	-1.58	2e-16	2e-14	50 x 40 interferon regulatory factor 2 binding protein-like [Source:HGNC Symbol;Acc:100]
12	339512	1.69	2e-16	2e-14	50 x 50 chromosome 1 open reading frame 110 [Source:HGNC Symt
13	375791	-2.24	2e-16	2e-14	1 x 50 chromosome 9 open reading frame 169 [Source:HGNC Symt
14	810	-1.96	2e-16	2e-14	1 x 50 calmodulin-like 3 [Source:HGNC Symbol;Acc:1452]
15	51806	-1.6	2e-16	2e-14	4 x 50 calmodulin-like 5 [Source:HGNC Symbol;Acc:18180]
16	57172	-1.51	2e-16	2e-14	49 x 1 calcium/calmodulin-dependent protein kinase IG [Source:HGNC Symbol;Acc:16371]
17	84290	-1.62	2e-16	2e-14	1 x 50 calpain, small subunit 2 [Source:HGNC Symbol;Acc:16371]
18	6364	-1.44	2e-16	2e-14	46 x 1 chemokine (C-C motif) ligand 20 [Source:HGNC Symbol;Acc:16371]
19	4680	-3.02	2e-16	2e-14	1 x 50 carcinoembryonic antigen-related cell adhesion molecule 6 (
20	1152	-1.55	2e-16	2e-14	1 x 17 creatine kinase, brain [Source:HGNC Symbol;Acc:1991]

## Global Geneset Analysis

Rank	GSZ	p-value	#all	Geneset
<i>Overexpressed</i>				
1	7.22	NULL	142	Glio wilscher_GBM_Verhaak-CL_expression_C_up
2	7.22	NULL	142	Glio wilscher_GBM_Verhaak-PNmut_expression_C_down
3	7.06	NULL	649	BP gene expression
4	6.94	NULL	109	BP SRP-dependent cotranslational protein targeting to membrane
5	6.88	NULL	87	BP translational termination
6	6.66	NULL	81	BP viral transcription
7	6.59	NULL	630	Chr X
8	6.42	NULL	92	BP viral life cycle
9	6.25	NULL	253	BP translation
10	6.23	NULL	232	BP mitosis
11	6.2	NULL	92	BP translational elongation
12	6.15	NULL	115	BP nuclear-transcribed mRNA catabolic process, nonsense-mediated decay
13	6.13	NULL	128	BP translational initiation
14	6.11	NULL	15	GSEA C2CROMER_TUMORIGENESIS_UP
15	6.07	NULL	242	BP RNA metabolic process
16	6.03	NULL	1233	TF KIM_MYC targets
17	6.02	NULL	482	BP cellular protein metabolic process
18	5.9	NULL	16	GSEA C2FINETTI_BREAST_CANCER_BASAL_VS_LUMINAL
19	5.87	NULL	866	Chr Chr 12
20	5.84	NULL	153	MF structural constituent of ribosome
<i>Underexpressed</i>				
1	-21.06	NULL	135	H.Tiss WIRTH_Mucosa
2	-18	NULL	21	CC cornified envelope
3	-16.83	NULL	42	BP keratinization
4	-16.45	NULL	572	Disease GUDJ_psooriasis_up
5	-14.66	NULL	53	BP keratinocyte differentiation
6	-12.21	NULL	76	BP epidermis development
7	-11.69	NULL	16	GSEA C2UROSEVIC_RESPONSE_TO_IMIQUIMOD
8	-10.89	NULL	19	BP peptide cross-linking
9	-10.79	NULL	13	GSEA C2BOWIE_RESPONSE_TO_TAMOXIFEN
10	-10.49	NULL	10	GSEA C2BOWIE_RESPONSE_TO_EXTRACELLULAR_MATRIX
11	-10.34	NULL	16	GSEA C2ZHANG_INTERFERON_RESPONSE
12	-10.32	NULL	51	BP type I interferon signaling pathway
13	-9.12	NULL	10	MF RAGE receptor binding
14	-9.09	NULL	8	GSEA C2ROETH_TERT_TARGETS_UP
15	-8.84	NULL	9	GSEA C2GUTIERREZ_WALDENSTROEMS_MACROGLOBULINEMIA_1_D
16	-8.57	NULL	10	GSEA C2GRANDVAUX_IFN_RESPONSE_NOT_VIA_IRF3
17	-8.52	NULL	16	GSEA C2MAHADEVAN_RESPONSE_TO_MP470_UP
18	-8.46	NULL	274	Lymphocyte SPANG_IL21 DN
19	-8.4	NULL	16	GSEA C2EINAV_INTERFERON_SIGNATURE_IN_CANCER
20	-8.17	NULL	11	GSEA C2MURAKAMI_UV_RESPONSE_6HR_DN

p-values



# GW\_247

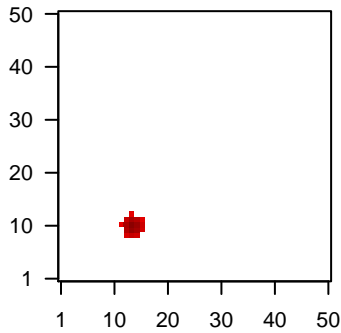
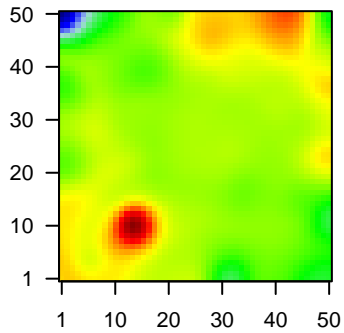
## Local Summary

%DE = 0.69  
 # metagenes = 17  
 # genes = 87  
 # genes in genesets = 63  
 # genes with  $fdr < 0.1$  = 56 ( 54 + / 2 - )  
 # genes with  $fdr < 0.05$  = 53 ( 52 + / 1 - )  
 # genes with  $fdr < 0.01$  = 52 ( 51 + / 1 - )

<r> metagenes = 0.98  
 <r> genes = 0.32  
 <FC> = 1.18  
 <shrinkage-t> = 41.43  
 <p-value> = 0  
 <fdr> = 0.34

Profile

Spot



## Local Genelist

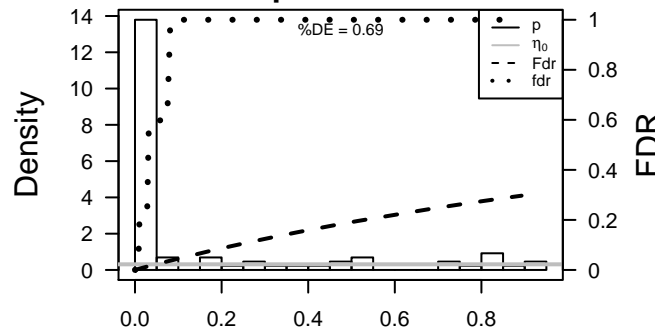
Rank	ID	log(FC)	fdr	p-value	Description
1	441520	2.13	2e-16	2e-16	14 x 11 cancer/testis antigen family 45, member A2 [Source:HGNC S
2	729428	3.95	2e-16	2e-16	14 x 11 G antigen 12C [Source:HGNC Symbol;Acc:28402]
3	729422	4.14	2e-16	2e-16	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
4	100132399	2.09	2e-16	2e-16	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
5	729431	1.79	2e-16	2e-16	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
6	100008586	3.68	2e-16	2e-16	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
7	645073	3.86	2e-16	2e-16	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
8	729442	4.02	2e-16	2e-16	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
9	26748	3.68	2e-16	2e-16	14 x 11 G antigen 12I [Source:HGNC Symbol;Acc:4105]
10	729396	3.16	2e-16	2e-16	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
11	729447	3.3	2e-16	2e-16	14 x 11 G antigen 2A [Source:HGNC Symbol;Acc:4099]
12	645037	4.19	2e-16	2e-16	14 x 11 G antigen 2C [Source:HGNC Symbol;Acc:31958]
13	26749	3.35	2e-16	2e-16	14 x 11 G antigen 2E [Source:HGNC Symbol;Acc:31960]
14	2576	3.97	2e-16	2e-16	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
15	2577	3.85	2e-16	2e-16	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
16	2578	2.21	2e-16	2e-16	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
17	2579	2.69	2e-16	2e-16	14 x 11 G antigen 12I [Source:HGNC Symbol;Acc:4105]
18	100101629	2.78	2e-16	2e-16	14 x 11 G antigen 2E [Source:HGNC Symbol;Acc:31960]
19	121355	2.28	2e-16	2e-16	14 x 11 gametocyte specific factor 1 [Source:HGNC Symbol;Acc:265
20	4100	1.76	2e-16	2e-16	14 x 11 melanoma antigen family A, 1 (directs expression of antigen I

## Local Geneset Analysis

Overexpression

Rank	GSZ	p-value	#in/all	Geneset
1	16.4	NULL	30 / 630	Chr Chr X
2	13.08	NULL	1 / 12	GSEA C2RAY_TARGETS_OF_P210_BCR_ABL_FUSION_UP
3	11.35	NULL	3 / 15	GSEA C2MATTIOLI_MULTIPLE_MYELOMA_SUBGROUPS
4	11.06	NULL	1 / 2	miRNA target-107
5	10.63	NULL	1 / 11	GSEA C2SU_PLACENTA
6	10.47	NULL	1 / 6	GSEA C2NIELSEN_LEIOMYOSARCOMA_UP
7	10.1	NULL	1 / 4	GSEA C2WEBER_METHYLATED_ICP_IN_SPERM_DN
8	9.1	NULL	1 / 14	GSEA C2NIELSEN_GIST
9	8.72	NULL	1 / 15	GSEA C2BROWNE_HCMV_INFECTION_8HR_DN
10	8.24	NULL	1 / 5	GSEA C2CHOI_ATL_ACUTE_STAGE
11	7.66	NULL	1 / 14	GSEA C2RICKMAN_HEAD_AND_NECK_CANCER_B
12	7.3	NULL	1 / 6	GSEA C2NIELSEN_GIST_VS_SYNOVIAL_SARCOMA_UP
13	7.07	NULL	1 / 10	GSEA C2XU_RESPONSE_TO_TRETINOIN_DN
14	6.52	NULL	1 / 7	GSEA C2NIELSEN_SYNOVIAL_SARCOMA_UP
15	6.34	NULL	1 / 7	GSEA C2KONDO_PROSTATE_CANCER_WITH_H3K27ME3
16	6.14	NULL	1 / 17	BP positive regulation of interleukin-1 beta secretion
17	5.98	NULL	9 / 120	H.Tiss WIRTH_Testis
18	5.93	NULL	1 / 8	GSEA C2WEBER_METHYLATED_ICP_IN_FIBROBLAST
19	5.92	NULL	6 / 419	CC cellular_component
20	5.91	NULL	8 / 481	BP biological_process
21	5.8	NULL	1 / 10	BP piRNA metabolic process
22	5.8	NULL	1 / 10	CC XY body
23	5.45	NULL	1 / 13	CC axonemal dynein complex
24	5.45	NULL	1 / 11	BP regulation of organ growth
25	5.43	NULL	9 / 549	MF molecular_function
26	5.41	NULL	1 / 13	CC mitochondrial respiratory chain
27	5.06	NULL	1 / 12	GSEA C2HO_LIVER_CANCER_VASCULAR_INVASION
28	5.01	NULL	1 / 21	BP negative regulation of Notch signaling pathway
29	4.99	NULL	1 / 10	GSEA C2TSUNODA_CISPLATIN_RESISTANCE_DN
30	4.94	NULL	1 / 10	GSEA C2BOYERINAS_ONCOFETAL_TARGETS_OF_LET7A1
31	4.94	NULL	1 / 10	GSEA C2CONRAD_STEM_CELL
32	4.88	NULL	1 / 13	BP synapsis
33	4.76	NULL	1 / 16	BP ciliary or bacterial-type flagellar motility
34	4.66	NULL	2 / 23	BP calcium-dependent cell-cell adhesion
35	4.65	NULL	1 / 14	BP DNA methylation involved in gamete generation
36	4.63	NULL	1 / 11	GSEA C2ODONNELL_TFRC_TARGETS_DN
37	4.26	NULL	1 / 13	GSEA C2HATADA_METHYLATED_IN_LUNG_CANCER_DN
38	4.26	NULL	1 / 13	GSEA C2SMID_BREAST_CANCER_RELAPSE_IN_BRAIN_UP
39	4.13	NULL	1 / 20	CC dynein complex
40	4.1	NULL	1 / 5	miRNA target-181a

p-values



# GW\_247

## Local Summary

%DE = 0.91  
 # metagenes = 8  
 # genes = 137  
 # genes in genesets = 134

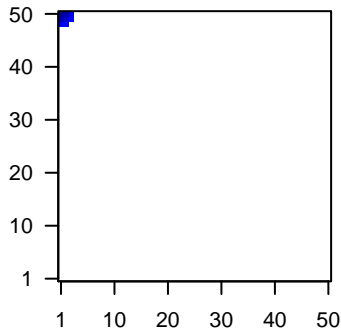
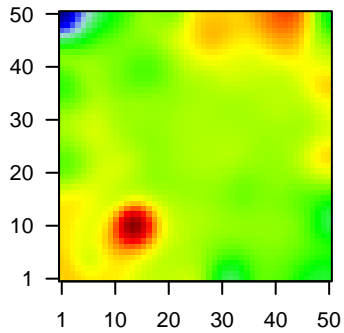
# genes with  $fdr < 0.1$  = 121 ( 10 + / 111 - )  
 # genes with  $fdr < 0.05$  = 113 ( 8 + / 105 - )  
 # genes with  $fdr < 0.01$  = 110 ( 7 + / 103 - )

$\langle r \rangle$  metagenes = 0.99  
 $\langle r \rangle$  genes = 0.52

$\langle FC \rangle = -1.15$   
 $\langle \text{shrinkage-t} \rangle = -40.82$   
 $\langle p\text{-value} \rangle = 0$   
 $\langle fdr \rangle = 0.17$

Profile

Spot



## Local Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	131	-2.22	2e-16	5e-17	1 x 50 alcohol dehydrogenase 7 (class IV), mu or sigma polypeptide
2	57016	-2.7	2e-16	5e-17	1 x 50 aldo-keto reductase family 1, member B10 (aldose reductase
3	441282	-1.93	2e-16	5e-17	1 x 49 aldo-keto reductase family 1, member B15 [Source:HGNC S
4	218	-2.57	2e-16	5e-17	1 x 50 aldehyde dehydrogenase 3 family, member A1 [Source:HGNC
5	387695	-2.03	2e-16	5e-17	1 x 49 chromosome 10 open reading frame 99 [Source:HGNC Synt
6	375791	-2.24	2e-16	5e-17	1 x 50 chromosome 9 open reading frame 169 [Source:HGNC Synt
7	810	-1.96	2e-16	5e-17	1 x 50 calmodulin-like 3 [Source:HGNC Symbol;Acc:1452]
8	84290	-1.62	2e-16	5e-17	1 x 50 calpain, small subunit 2 [Source:HGNC Symbol;Acc:16371]
9	4680	-3.02	2e-16	5e-17	1 x 50 carcinoembryonic antigen-related cell adhesion molecule 6 (i
10	9022	-1.68	2e-16	5e-17	1 x 50 chloride intracellular channel 3 [Source:HGNC Symbol;Acc:2
11	84518	-3.12	2e-16	5e-17	1 x 50 cornifelin [Source:HGNC Symbol;Acc:30183]
12	49860	-2.14	2e-16	5e-17	1 x 50 cornulin [Source:HGNC Symbol;Acc:1230]
13	1476	-1.45	2e-16	5e-17	1 x 50 cystatin B (stefin B) [Source:HGNC Symbol;Acc:2482]
14	92196	-1.51	2e-16	5e-17	3 x 50 death associated protein-like 1 [Source:HGNC Symbol;Acc:2
15	1672	-1.83	2e-16	5e-17	1 x 50 defensin, beta 1 [Source:HGNC Symbol;Acc:2766]
16	414325	-2.18	2e-16	5e-17	1 x 48 defensin, beta 103B [Source:HGNC Symbol;Acc:31702]
17	1673	-2.41	2e-16	5e-17	1 x 49 defensin, beta 4B [Source:HGNC Symbol;Acc:30193]
18	26525	-1.55	2e-16	5e-17	1 x 49 interleukin 36 receptor antagonist [Source:HGNC Symbol;Acc
19	5653	-2.19	2e-16	5e-17	1 x 50 kallikrein-related peptidase 6 [Source:HGNC Symbol;Acc:63
20	5650	-1.93	2e-16	5e-17	1 x 49 kallikrein-related peptidase 7 [Source:HGNC Symbol;Acc:63

## Local Geneset Analysis

Underexpression

Rank	GSZ	p-value	#in/all	Geneset
1	-45.96	NULL	63 / 135	H.Tiss WIRTH_Mucosa
2	-43.07	NULL	14 / 21	CC cornified envelope
3	-38.61	NULL	16 / 42	BP keratinization
4	-34.03	NULL	19 / 53	BP keratinocyte differentiation
5	-28.53	NULL	8 / 19	BP peptide cross-linking
6	-23.75	NULL	16 / 76	BP epidermis development
7	-20.55	NULL	6 / 15	GSEA C2HINATA_NFKB_TARGETS_KERATINOCYTE_DN
8	-19.94	NULL	65 / 572	Disease GUDJ_psooriasis_up
9	-19.76	NULL	4 / 10	MF RAGE receptor binding
10	-17.63	NULL	5 / 16	GSEA C2ONDER_CDH1_TARGETS_3_DN
11	-16.25	NULL	6 / 16	GSEA C2CROMER_TUMORIGENESIS_DN
12	-15.87	NULL	5 / 16	GSEA C2WANG_BARRETTES_ESOPHAGUS_DN
13	-15.12	NULL	1 / 6	GSEA C2SARRIO_EPITHELIAL_MESENCHYMAL_TRANSITION_DN
14	-14.5	NULL	3 / 16	GSEA C2CHEOK_RESPONSE_TO_MERCAPTOPYRINE_AND_LD_MTX_
15	-13.9	NULL	3 / 15	GSEA C2CHANG_IMMORTALIZED_BY_HPV31_DN
16	-13.72	NULL	2 / 10	GSEA C2MURAKAMI_UV_RESPONSE_1HR_UP
17	-13.71	NULL	4 / 15	GSEA C2LEE_LIVER_CANCER_MYC_E2F1_UP
18	-13.47	NULL	13 / 186	MF structural molecule activity
19	-12.94	NULL	2 / 11	GSEA C2MURAKAMI_UV_RESPONSE_6HR_DN
20	-12.62	NULL	4 / 27	BP response to bacterium
21	-12.58	NULL	3 / 16	GSEA C2AMIT_SERUM_RESPONSE_480_MCF10A
22	-12.39	NULL	3 / 15	GSEA C2PYEON_CANCER_HEAD_AND_NECK_VS_CERVICAL_DN
23	-12.29	NULL	2 / 10	GSEA C2AUJLA_IL22_AND_IL17A_SIGNALING
24	-12.12	NULL	1 / 8	GSEA C2LIU_CDX2_TARGETS_DN
25	-11.37	NULL	3 / 12	BP cellular aldehyde metabolic process
26	-10.11	NULL	4 / 44	CC keratin filament
27	-10.04	NULL	2 / 13	GSEA C2WONG_ENDMETTRIUM_CANCER_UP
28	-9.82	NULL	6 / 15	GSEA C2WANG_BARRETTES_ESOPHAGUS_AND_ESOPHAGUS_CANCE
29	-9.46	NULL	3 / 15	GSEA C2LEE_LIVER_CANCER_MYC_UP
30	-9.09	NULL	6 / 82	CC intermediate filament
31	-8.94	NULL	2 / 16	GSEA C2KOBAYASHI_EGFR_SIGNALING_24HR_UP
32	-8.84	NULL	2 / 10	GSEA C2KEGG_LINOLEIC_ACID_METABOLISM
33	-8.76	NULL	3 / 14	GSEA C2CHARAFE_BREAST_CANCER_BASAL_VS_MESENCHYMAL_U
34	-8.39	NULL	1 / 8	GSEA C2MILIC_FAMILIAL_ADENOMATOUS_POLYPOSIIS_UP
35	-8.18	NULL	5 / 21	CC desmosome
36	-8.15	NULL	2 / 15	GSEA C2J_AMPLIFIED_IN_LUNG_CANCER
37	-8.1	NULL	6 / 73	BP defense response to bacterium
38	-7.8	NULL	1 / 9	GSEA C2GOUYER_TATI_TARGETS_UP
39	-7.68	NULL	2 / 12	GSEA C2ZHAN_MULTIPLE_MYELOMA_DN
40	-7.61	NULL	3 / 16	GSEA C2LEE_LIVER_CANCER_ACOX1_UP

