

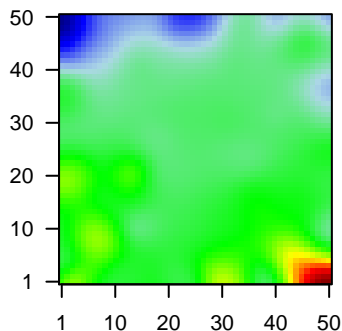
# GW\_015

## Global Summary

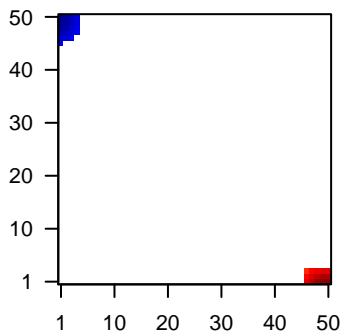
%DE = 0.15  
 # genes with fdr < 0.2 = 1962 ( 1123 + / 839 - )  
 # genes with fdr < 0.1 = 1506 ( 880 + / 626 - )  
 # genes with fdr < 0.05 = 1263 ( 747 + / 516 - )  
 # genes with fdr < 0.01 = 877 ( 527 + / 350 - )  
 # genes in genesets = 16332

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

Profile



Regulated Spots



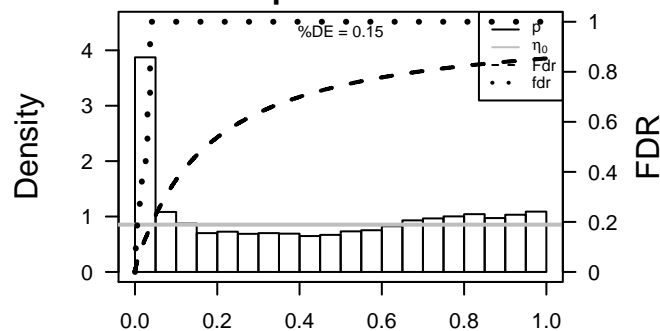
## Global Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	72	2.03	2e-16	3e-14	4 x 1 actin, gamma 2, smooth muscle, enteric [Source:HGNC Syml
2	165	1.94	2e-16	3e-14	3 x 1 AE binding protein 1 [Source:HGNC Symbol;Acc:303]
3	57016	-1.9	2e-16	3e-14	1 x 50 aldo-keto reductase family 1, member B10 (aldose reductase
4	441282	-1.51	2e-16	3e-14	1 x 49 aldo-keto reductase family 1, member B15 [Source:HGNC S
5	1109	-1.5	2e-16	3e-14	13 x 50 aldo-keto reductase family 1, member C4 [Source:HGNC Syr
6	220	-2.1	2e-16	3e-14	4 x 46 aldehyde dehydrogenase 1 family, member A3 [Source:HGNC
7	55107	-1.65	2e-16	3e-14	1 x 5 anoctamin 1, calcium activated chloride channel [Source:HG
8	341	1.62	2e-16	3e-14	50 x 1 apolipoprotein C-I [Source:HGNC Symbol;Acc:607]
9	445	-1.49	2e-16	3e-14	50 x 47 argininosuccinate synthase 1 [Source:HGNC Symbol;Acc:75
10	633	1.41	2e-16	3e-14	3 x 1 biglycan [Source:HGNC Symbol;Acc:1044]
11	713	1.67	2e-16	3e-14	50 x 1 complement component 1, q subcomponent, B chain [Source
12	771	-1.54	2e-16	3e-14	1 x 44 carbonic anhydrase XII [Source:HGNC Symbol;Acc:1371]
13	760	-1.61	2e-16	3e-14	1 x 44 carbonic anhydrase II [Source:HGNC Symbol;Acc:1373]
14	6363	2.15	2e-16	3e-14	50 x 1 chemokine (C-C motif) ligand 19 [Source:HGNC Symbol;Acc
15	1236	1.85	2e-16	3e-14	50 x 1 chemokine (C-C motif) receptor 7 [Source:HGNC Symbol;Ac
16	930	2.68	2e-16	3e-14	49 x 1 CD19 molecule [Source:HGNC Symbol;Acc:1633]
17	914	1.55	2e-16	3e-14	49 x 1 CD2 molecule [Source:HGNC Symbol;Acc:1639]
18	919	1.7	2e-16	3e-14	50 x 1 CD247 molecule [Source:HGNC Symbol;Acc:1677]
19	915	1.72	2e-16	3e-14	49 x 1 CD3d molecule, delta (CD3-TCR complex) [Source:HGNC S
20	962	1.9	2e-16	3e-14	50 x 1 CD48 molecule [Source:HGNC Symbol;Acc:1683]

## Global Geneset Analysis

Rank	GSZ	p-value	#all	Geneset
<i>Overexpressed</i>				
1	20.41	NULL	417	H.Tiss WIRTH_Immune system
2	16.37	NULL	553	Cancer Lembecke_Colonc Inflammation
3	11.74	NULL	265	Glio wilscher_GBM_Verhaak-CL_expression_B_up
4	11.74	NULL	265	Glio wilscher_GBM_Verhaak-MES_expression_B_up
5	11.74	NULL	265	Glio wilscher_GBM_Verhaak-PNwt_expression_B_down
6	11.74	NULL	265	Glio wilscher_GBM_Verhaak-PNwt_expression_B_down
7	11.6	NULL	74	BP regulation of immune response
8	10.02	NULL	11	GSEA C2BIOCARTA_TCYTOTOXIC_PATHWAY
9	9.79	NULL	16	GSEA C2FARMER_BREAST_CANCER_CLUSTER_1
10	9.76	NULL	11	GSEA C2BIOCARTA_THELPER_PATHWAY
11	8.81	NULL	15	CC MHC class II protein complex
12	8.79	NULL	12	GSEA C2BIOCARTA_CTL_PATHWAY
13	8.77	NULL	312	BP immune response
14	8.67	NULL	60	BP T cell costimulation
15	8.62	NULL	28	BP B cell receptor signaling pathway
16	8.42	NULL	1135	Chr Chr 19
17	8.22	NULL	15	GSEA C2LINDGREN_BLADDRER_CANCER_HIGH_RECURRENCE
18	8.1	NULL	13	Cancer GENTLES_modul18
19	8.06	NULL	16	GSEA C2FARMER_BREAST_CANCER_CLUSTER_5
20	8	NULL	47	BP antigen processing and presentation
<i>Underexpressed</i>				
1	-18.65	NULL	135	H.Tiss WIRTH_Mucosa
2	-14.2	NULL	21	CC cornified envelope
3	-14.02	NULL	572	Disease GUDJ_psooriasis up
4	-13.69	NULL	53	BP keratinocyte differentiation
5	-11.61	NULL	42	BP keratinization
6	-10.87	NULL	16	GSEA C2ONDER_CDHI_TARGETS_3_DN
7	-9.41	NULL	76	BP epidermis development
8	-8.93	NULL	534	Chr Chr 8
9	-8.56	NULL	24	TF Tissue/AQUERIZAS_Trachea
10	-8.41	NULL	15	GSEA C2AMIT_EGF_RESPONSE_40_HELA
11	-8.14	NULL	15	GSEA C2HINATA_NFKB_TARGETS_KERATINOCYTE_DN
12	-7.93	NULL	21	CC desmosome
13	-7.92	NULL	232	Chr Chr 18
14	-7.65	NULL	494	miRNA target-starB187
15	-7.57	NULL	10	GSEA C2AUJLA_IL22_AND_IL17A_SIGNALING
16	-7.5	NULL	488	miRNA target-starB186
17	-7.43	NULL	495	miRNA target-starB185
18	-7.36	NULL	16	GSEA C2AMIT_SERUM_RESPONSE_40_MCF10A
19	-7.07	NULL	16	GSEA C2LJZONYI_RESPONSE_TO_LEUKOTRIENE_AND_THROMBIN
20	-6.84	NULL	225	miRNA target-starB184

p-values



# GW\_015

## Local Summary

%DE = 0.98  
 # metagenes = 15  
 # genes = 254  
 # genes in genesets = 252

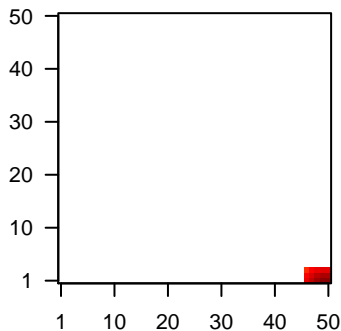
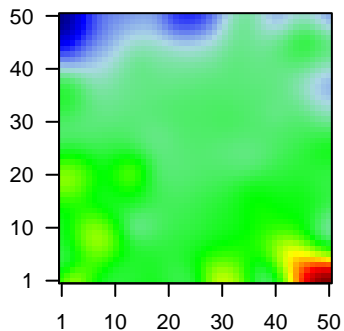
# genes with  $fdr < 0.1$  = 243 ( 242 + / 1 - )  
 # genes with  $fdr < 0.05$  = 235 ( 234 + / 1 - )  
 # genes with  $fdr < 0.01$  = 221 ( 220 + / 1 - )

<r> metagenes = 0.99  
 <r> genes = 0.62

<FC> = 0.98  
 <shrinkage-t> = 34.15  
 <p-value> = 0  
 <fdr> = 0.13

Profile

Spot



## Local Genelist

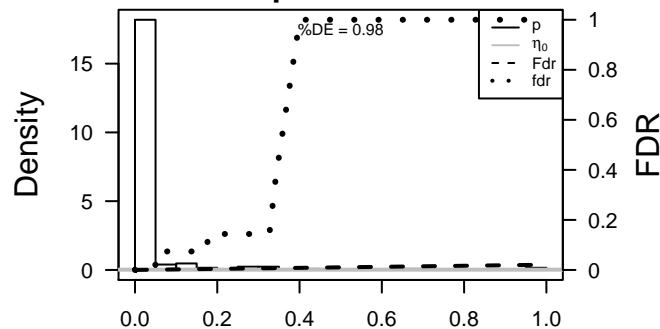
Rank	ID	log(FC)	fdr	p-value	Description
1	341	1.62	2e-16	3e-17	50 x 1 apolipoprotein C-I [Source:HGNC Symbol;Acc:607]
2	713	1.67	2e-16	3e-17	50 x 1 complement component 1, q subcomponent, B chain [Source:HGNC Symbol;Acc:1639]
3	6363	2.15	2e-16	3e-17	50 x 1 chemokine (C-C motif) ligand 19 [Source:HGNC Symbol;Acc:1639]
4	1236	1.85	2e-16	3e-17	50 x 1 chemokine (C-C motif) receptor 7 [Source:HGNC Symbol;Acc:1639]
5	930	2.68	2e-16	3e-17	49 x 1 CD19 molecule [Source:HGNC Symbol;Acc:1633]
6	914	1.55	2e-16	3e-17	49 x 1 CD2 molecule [Source:HGNC Symbol;Acc:1639]
7	919	1.7	2e-16	3e-17	50 x 1 CD247 molecule [Source:HGNC Symbol;Acc:1677]
8	915	1.72	2e-16	3e-17	49 x 1 CD3d molecule, delta (CD3-TCR complex) [Source:HGNC Symbol;Acc:1683]
9	962	1.9	2e-16	3e-17	50 x 1 CD48 molecule [Source:HGNC Symbol;Acc:1683]
10	1043	1.93	2e-16	3e-17	50 x 1 CD52 molecule [Source:HGNC Symbol;Acc:1804]
11	963	1.53	2e-16	3e-17	50 x 1 CD53 molecule [Source:HGNC Symbol;Acc:1686]
12	974	1.53	2e-16	3e-17	48 x 1 CD79b molecule, immunoglobulin-associated beta [Source:HGNC Symbol;Acc:1686]
13	11151	1.67	2e-16	3e-17	50 x 1 coronin, actin binding protein, 1A [Source:HGNC Symbol;Acc:1686]
14	9214	1.74	2e-16	3e-17	49 x 1 Fas apoptotic inhibitory molecule 3 [Source:HGNC Symbol;Acc:1686]
15	84824	2.06	2e-16	3e-17	49 x 1 Fc receptor-like A [Source:HGNC Symbol;Acc:18504]
16	55303	1.54	2e-16	3e-17	50 x 1 GTPase, IMAP family member 4 [Source:HGNC Symbol;Acc:18504]
17	10750	1.5	2e-16	3e-17	47 x 2 GRB2-related adaptor protein [Source:HGNC Symbol;Acc:48504]
18	3002	1.53	2e-16	3e-17	49 x 1 granzyme B (granzyme 2, cytotoxic T-lymphocyte-associated protein 10) [Source:HGNC Symbol;Acc:1686]
19	3059	2.11	2e-16	3e-17	50 x 1 hematopoietic cell-specific Lyn substrate 1 [Source:HGNC Symbol;Acc:1686]
20	3119	1.57	2e-16	3e-17	49 x 1 major histocompatibility complex, class II, DQ beta 1 [Source:HGNC Symbol;Acc:1686]

## Local Geneset Analysis

Overexpression

Rank	GSZ	p-value	#in/all	Geneset
1	36.85	NULL	93 / 417	H.Tiss WIRTH_Immune system
2	28.9	NULL	91 / 553	Cancer Lemboke_Colonc Inflammation
3	27.51	NULL	12 / 15	CC MHC class II protein complex
4	23.04	NULL	9 / 16	GSEA C2FARMER_BREAST_CANCER_CLUSTER_1
5	22.35	NULL	7 / 11	GSEA C2BIOCARTA_TCYTOTOXIC_PATHWAY
6	21.63	NULL	7 / 11	GSEA C2BIOCARTA_THELPER_PATHWAY
7	19.98	NULL	52 / 312	BP immune response
8	19.53	NULL	8 / 13	Cancer GENTLES_modul18
9	19.39	NULL	7 / 15	GSEA C2FINAK_BREAST_CANCER_SDPP_SIGNATURE
10	19.06	NULL	6 / 12	GSEA C2BIOCARTA_CTL_PATHWAY
11	17.21	NULL	4 / 8	Glio Donson-migration tethering and rolling-associated with LTS in HGA
12	16.9	NULL	17 / 74	BP regulation of immune response
13	16.71	NULL	5 / 13	GSEA C2HAHTOLA_CTCL_PATHOGENESIS
14	16.55	NULL	14 / 47	BP antigen processing and presentation
15	16.27	NULL	6 / 13	GSEA C2BIOCARTA_IL17_PATHWAY
16	16.08	NULL	17 / 60	BP T cell costimulation
17	15.96	NULL	40 / 265	Glio willscher_GBM_Verhaak-CL_expression_B_up
18	15.96	NULL	40 / 265	Glio willscher_GBM_Verhaak-MES_expression_B_up
19	15.96	NULL	40 / 265	Glio willscher_GBM_Verhaak-PNwt_expression_B_down
20	15.96	NULL	40 / 265	Glio willscher_GBM_Verhaak-PNmut_expression_B_down
21	15.9	NULL	27 / 162	CC external side of plasma membrane
22	15.42	NULL	6 / 14	GSEA C2BIOCARTA_NO2IL12_PATHWAY
23	15.05	NULL	5 / 12	BP dendritic cell chemotaxis
24	14.74	NULL	4 / 7	Glio Donson-cytotoxic effectors-associated with LTS in HGA
25	14.66	NULL	8 / 16	GSEA C2SU_THYMUS
26	14.48	NULL	9 / 28	BP B cell receptor signaling pathway
27	14.22	NULL	4 / 8	GSEA C2BIOCARTA_TCAPOPTOSIS_PATHWAY
28	14.22	NULL	4 / 8	GSEA C2BIOCARTA_TCRA_PATHWAY
29	14.04	NULL	4 / 10	GSEA C2LEE_DIFFERENTIATING_T_LYMPHOCYTE
30	13.81	NULL	5 / 17	BP positive regulation of neutrophil chemotaxis
31	13.46	NULL	5 / 15	Glio Donson-chemokines/cytokines-associated with LTS in HGA
32	13.42	NULL	4 / 10	GSEA C2FLECHNER_BIOPSY_KIDNEY_TRANSPLANT_REJECTED_VS_SURVIVORS_PATHWAY
33	13.4	NULL	4 / 8	GSEA C2REACTOME_IMMUNOREGULATORY_INTERACTIONS_BETWEEN_T_AND_B_CELLS
34	13.37	NULL	5 / 12	CC T cell receptor complex
35	13.1	NULL	10 / 45	BP T cell activation
36	12.84	NULL	6 / 24	CC immunological synapse
37	12.77	NULL	16 / 84	BP T cell receptor signaling pathway
38	12.76	NULL	24 / 204	BP cell surface receptor signaling pathway
39	12.74	NULL	2 / 4	MMML C2SCIEJ_MMML_2
40	12.58	NULL	5 / 11	BP positive regulation of B cell differentiation

p-values



# GW\_015

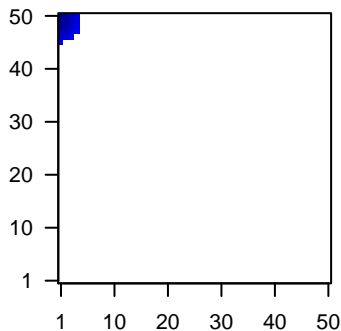
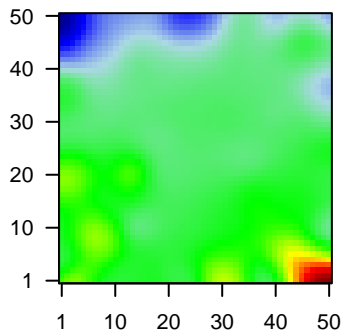
## Local Summary

%DE = 0.88  
 # metagenes = 20  
 # genes = 267  
 # genes in genesets = 260  
 # genes with  $fdr < 0.1$  = 213 ( 13 + / 200 - )  
 # genes with  $fdr < 0.05$  = 204 ( 12 + / 192 - )  
 # genes with  $fdr < 0.01$  = 167 ( 9 + / 158 - )

$\langle r \rangle$  metagenes = 0.95  
 $\langle r \rangle$  genes = 0.44  
 $\langle FC \rangle = -0.71$   
 $\langle \text{shrinkage-t} \rangle = -24.9$   
 $\langle p\text{-value} \rangle = 0$   
 $\langle fdr \rangle = 0.29$

Profile

Spot



## Local Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	57016	-1.9	2e-16	2e-16	1 x 50 aldo-keto reductase family 1, member B10 (aldose reductase
2	441282	-1.51	2e-16	2e-16	1 x 49 aldo-keto reductase family 1, member B15 [Source:HGNC Sy
3	4680	-1.75	2e-16	2e-16	1 x 50 carcinoembryonic antigen-related cell adhesion molecule 6 (i
4	548596	-1.64	2e-16	2e-16	4 x 50 creatine kinase, mitochondrial 1B [Source:HGNC Symbol;Acc
5	1474	1.73	2e-16	2e-16	1 x 47 cystatin E/M [Source:HGNC Symbol;Acc:2478]
6	414325	-1.95	2e-16	2e-16	1 x 48 defensin, beta 103B [Source:HGNC Symbol;Acc:31702]
7	1673	-2.84	2e-16	2e-16	1 x 49 defensin, beta 4B [Source:HGNC Symbol;Acc:30193]
8	1824	-1.6	2e-16	2e-16	1 x 48 desmocollin 2 [Source:HGNC Symbol;Acc:3036]
9	1825	-1.51	2e-16	2e-16	1 x 45 desmocollin 3 [Source:HGNC Symbol;Acc:3037]
10	1828	-1.59	2e-16	2e-16	1 x 48 desmoglein 1 [Source:HGNC Symbol;Acc:3048]
11	26298	-1.56	2e-16	2e-16	4 x 50 ets homologous factor [Source:HGNC Symbol;Acc:3246]
12	2877	-1.78	2e-16	2e-16	1 x 50 glutathione peroxidase 2 (gastrointestinal) [Source:HGNC Sy
13	1839	-1.54	2e-16	2e-16	1 x 45 heparin-binding EGF-like growth factor [Source:HGNC Synt
14	56300	-1.68	2e-16	2e-16	1 x 47 interleukin 36, gamma [Source:HGNC Symbol;Acc:15741]
15	5653	-1.54	2e-16	2e-16	1 x 50 kallikrein-related peptidase 6 [Source:HGNC Symbol;Acc:63i
16	5650	-1.73	2e-16	2e-16	1 x 49 kallikrein-related peptidase 7 [Source:HGNC Symbol;Acc:63i
17	388533	-2.43	2e-16	2e-16	1 x 49 keratinocyte differentiation-associated protein [Source:HGNC
18	8581	-1.6	2e-16	2e-16	1 x 48 lymphocyte antigen 6 complex, locus D [Source:HGNC Symb
19	5307	-1.41	2e-16	2e-16	3 x 50 paired-like homeodomain 1 [Source:HGNC Symbol;Acc:9004
20	6278	-3.01	2e-16	2e-16	1 x 49 S100 calcium binding protein A7 [Source:HGNC Symbol;Acc:

## Local Geneset Analysis

Underexpression

Rank	GSZ	p-value	#in/all	Geneset
1	-47.33	NULL	93 / 135	H.Tiss WIRTH_Mucosa
2	-41.46	NULL	19 / 21	CC cornified envelope
3	-34.51	NULL	26 / 53	BP keratinocyte differentiation
4	-31.63	NULL	19 / 42	BP keratinization
5	-29.1	NULL	102 / 572	Disease GUDJ_psooriasis up
6	-23.96	NULL	27 / 76	BP epidermis development
7	-23.29	NULL	8 / 16	GSEA C2ONDER_CDH1_TARGETS_3_DN
8	-20.7	NULL	7 / 15	GSEA C2HINATA_NFKB_TARGETS_KERATINOCYTE_DN
9	-20.28	NULL	12 / 21	CC desmosome
10	-17.5	NULL	3 / 10	GSEA C2AJULA_IL22_AND_IL17A_SIGNALING
11	-15.98	NULL	5 / 10	MF RAGE receptor binding
12	-15.17	NULL	3 / 15	GSEA C2PYEON_CANCER_HEAD_AND_NECK_VS_CERVICAL_DN
13	-13.53	NULL	5 / 15	GSEA C2CHANG_IMMORTALIZED_BY_HPV31_DN
14	-13.39	NULL	12 / 19	BP peptide cross-linking
15	-12.54	NULL	8 / 15	GSEA C2WANG_BARRETTES_ESOPHAGUS_AND_ESOPHAGUS_CANCE
16	-12.24	NULL	6 / 16	GSEA C2XROMER_TUMORIGENESIS_DN
17	-12.08	NULL	7 / 29	BP regulation of proteolysis
18	-11.57	NULL	10 / 52	BP negative regulation of endopeptidase activity
19	-11.42	NULL	7 / 16	GSEA C2WANG_BARRETTES_ESOPHAGUS_DN
20	-11.04	NULL	4 / 13	H.Tiss WIRTH_Tonsil
21	-10.65	NULL	4 / 10	GSEA C2SMID_BREAST_CANCER_ERBB2_UP
22	-10.48	NULL	4 / 10	GSEA C2REACTOME_APOPTOTIC_CLEAVAGE_OF_CELL_ADHESION_P
23	-10.33	NULL	7 / 16	GSEA C2HUPER_BREAST_BASAL_VS_LUMINAL_UP
24	-10.16	NULL	3 / 16	GSEA C2AMIT_SERUM_RESPONSE_480_MCF10A
25	-10.06	NULL	6 / 16	GSEA C2SENGUPTA_NASOPHARYNGEAL_CARCINOMA_DN
26	-10.05	NULL	4 / 15	GSEA C2LEE_LIVER_CANCER_MYC_E2F1_UP
27	-9.94	NULL	4 / 16	GSEA C2LEE_LIVER_CANCER_MYC_TGFA_UP
28	-9.86	NULL	6 / 13	BP negative regulation of peptidase activity
29	-9.81	NULL	3 / 16	GSEA C2SMID_BREAST_CANCER_RELAPSE_IN_PLEURA_DN
30	-9.38	NULL	3 / 12	BP cellular aldehyde metabolic process
31	-8.99	NULL	5 / 15	GSEA C2AIGNER_ZEB1_TARGETS
32	-8.79	NULL	3 / 12	H.Tiss WIRTH_Prim. lymphoid organs
33	-8.78	NULL	4 / 10	GSEA C2FOURNIER_ACINAR_DEVELOPMENT_LATE_UP
34	-8.78	NULL	9 / 73	BP defense response to bacterium
35	-8.76	NULL	62 / 1182	CC extracellular region
36	-8.34	NULL	2 / 8	TF Tissue/AQUERIZAS_Tongue
37	-8.27	NULL	3 / 16	GSEA C2CHEOK_RESPONSE_TO_MERCAPTOPYRINE_AND_LD_MTX_I
38	-8.26	NULL	5 / 14	GSEA C2CHARAFE_BREAST_CANCER_BASAL_VS_MESENCHYMAL_U
39	-8.13	NULL	4 / 16	GSEA C2HAHTOLA_MYCOSIS_FUNGOIDES_SKIN_DN
40	-7.97	NULL	2 / 11	MF gamma-catenin binding

