

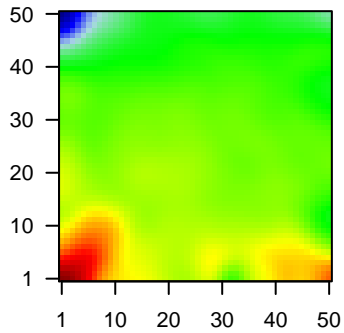
# GW\_057

## Global Summary

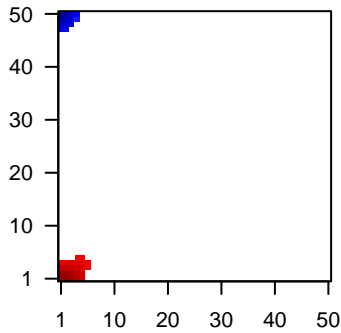
%DE = 0.12  
 # genes with fdr < 0.2 = 1431 ( 797 + / 634 - )  
 # genes with fdr < 0.1 = 1246 ( 700 + / 546 - )  
 # genes with fdr < 0.05 = 992 ( 562 + / 430 - )  
 # genes with fdr < 0.01 = 731 ( 404 + / 327 - )  
 # genes in genesets = 16332

<FC> = 0  
 <shrinkage-t> = -0.01  
 <p-value> = 0.12  
 <fdr> = 0.88

Profile



Regulated Spots



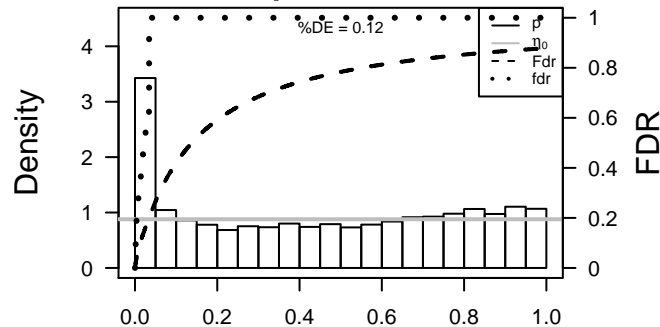
## Global Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	59	2.3	2e-16	3e-14	3 x 1 actin, alpha 2, smooth muscle, aorta [Source:HGNC Symbol;]
2	70	2.19	2e-16	3e-14	25 x 1 actin, alpha, cardiac muscle 1 [Source:HGNC Symbol;Acc:14
3	72	2.81	2e-16	3e-14	4 x 1 actin, gamma 2, smooth muscle, enteric [Source:HGNC Syml
4	131	-3.14	2e-16	3e-14	1 x 50 alcohol dehydrogenase 7 (class IV), mu or sigma polypeptide
5	57016	-3.72	2e-16	3e-14	1 x 50 aldo-keto reductase family 1, member B10 (aldose reductase
6	441282	-2.55	2e-16	3e-14	1 x 49 aldo-keto reductase family 1, member B15 [Source:HGNC S;
7	218	-3.43	2e-16	3e-14	1 x 50 aldehyde dehydrogenase 3 family, member A1 [Source:HGNC
8	366	2.36	2e-16	3e-14	1 x 1 aquaporin 9 [Source:HGNC Symbol;Acc:643]
9	387695	-2.81	2e-16	3e-14	1 x 49 chromosome 10 open reading frame 99 [Source:HGNC Syml
10	760	-2.26	2e-16	3e-14	1 x 44 carbonic anhydrase II [Source:HGNC Symbol;Acc:1373]
11	810	-2.89	2e-16	3e-14	1 x 50 calmodulin-like 3 [Source:HGNC Symbol;Acc:1452]
12	51806	-2.47	2e-16	3e-14	4 x 50 calmodulin-like 5 [Source:HGNC Symbol;Acc:18180]
13	84290	-2.16	2e-16	3e-14	1 x 50 calpain, small subunit 2 [Source:HGNC Symbol;Acc:16371]
14	6364	3.06	2e-16	3e-14	46 x 1 chemokine (C-C motif) ligand 20 [Source:HGNC Symbol;Acc
15	414062	2.85	2e-16	3e-14	1 x 1 chemokine (C-C motif) ligand 3-like 3 [Source:HGNC Symbc
16	4680	-3.19	2e-16	3e-14	1 x 50 carcinoembryonic antigen-related cell adhesion molecule 6 (i
17	22802	-3.05	2e-16	3e-14	1 x 50 chloride channel accessory 4 [Source:HGNC Symbol;Acc:20
18	84518	-3.22	2e-16	3e-14	1 x 50 cornifelin [Source:HGNC Symbol;Acc:30183]
19	1490	2.22	2e-16	3e-14	3 x 1 connective tissue growth factor [Source:HGNC Symbol;Acc:2
20	3627	-2.38	2e-16	3e-14	32 x 1 chemokine (C-X-C motif) ligand 10 [Source:HGNC Symbol;f

## Global Geneset Analysis

Rank	GSZ	p-value	#all	Geneset
<i>Overexpressed</i>				
1	14.45	NULL	553	Cancer Lembecke_Colonic Inflammation
2	13.44	NULL	265	Glio willscher_GBM_Verhaak-CL_expression_B_up
3	13.44	NULL	265	Glio willscher_GBM_Verhaak-MES_expression_B_up
4	13.44	NULL	265	Glio willscher_GBM_Verhaak-PNwt_expression_B_down
5	13.44	NULL	265	Glio willscher_GBM_Verhaak-PNmut_expression_B_down
6	10.35	NULL	250	LymphomaL1ENZ_Stromal signature 1
7	9.99	NULL	190	CC extracellular matrix
8	9.64	NULL	242	BP extracellular matrix organization
9	9.64	NULL	7	MMML C69CIEJ_MMML 13
10	9.47	NULL	10	BP cellular response to zinc ion
11	9.3	NULL	15	GSEA C2LEE_LIVER_CANCER_HEPATOBLAST
12	9.11	NULL	15	GSEA C2ONDER_CDH1_TARGETS_2_UP
13	9.06	NULL	11	Glio Phillips MES up vs Prolif & PN
14	8.85	NULL	16	MMML C69CIEJ_MMML 1
15	8.28	NULL	269	BP inflammatory response
16	8	NULL	683	CC extracellular space
17	7.76	NULL	69	BP extracellular matrix disassembly
18	7.69	NULL	43	MF chemokine activity
19	7.62	NULL	15	BP negative regulation of growth
20	7.57	NULL	16	GSEA C2FARMER_BREAST_CANCER_CLUSTER_5
<i>Underexpressed</i>				
1	-32.77	NULL	135	H.Tiss WIRTH_Mucosa
2	-20.13	NULL	572	Disease GUDJ_psooriasis up
3	-17.63	NULL	21	CC cornified envelope
4	-13.83	NULL	53	BP keratinocyte differentiation
5	-13.43	NULL	42	BP keratinization
6	-13.12	NULL	76	BP epidermis development
7	-9.22	NULL	16	GSEA C2MOSELERLE_IFNA_RESPONSE
8	-8.94	NULL	15	GSEA C2AIGNER_ZEB1_TARGETS
9	-8.73	NULL	19	BP peptide cross-linking
10	-7.92	NULL	21	CC desmosome
11	-7.87	NULL	8	GSEA C2LIU_CDX2_TARGETS_DN
12	-7.86	NULL	16	GSEA C2WANG_BARRETTES_ESOPHAGUS_DN
13	-7.68	NULL	12	BP cellular aldehyde metabolic process
14	-7.61	NULL	16	GSEA C2ROY_WOUND_BLOOD_VESSEL_DN
15	-7.59	NULL	8	GSEA C2ROETH_TERT_TARGETS_UP
16	-7.34	NULL	16	GSEA C2EINAV_INTERFERON_SIGNATURE_IN_CANCER
17	-7.12	NULL	15	GSEA C2HINATA_NFKB_TARGETS_KERATINOCYTE_DN
18	-7.01	NULL	13	H.Tiss WIRTH_Tonsil
19	-6.85	NULL	13	GSEA C2BOWIE_RESPONSE_TO_TAMOXIFEN
20	-6.79	NULL	15	GSEA C2RICKMAN_HEAD_AND_NECK_CANCER_E

p-values



# GW\_057

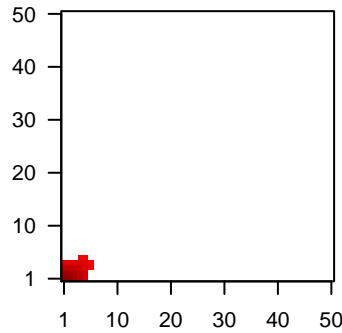
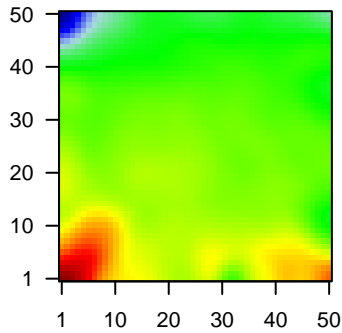
## Local Summary

%DE = 0.87  
 # metagenes = 24  
 # genes = 326  
 # genes in genesets = 321  
 # genes with  $fdr < 0.1$  = 255 ( 241 + / 14 - )  
 # genes with  $fdr < 0.05$  = 242 ( 230 + / 12 - )  
 # genes with  $fdr < 0.01$  = 213 ( 203 + / 10 - )

$\langle r \rangle$  metagenes = 0.96  
 $\langle r \rangle$  genes = 0.37  
 $\langle FC \rangle$  = 0.97  
 $\langle \text{shrinkage-t} \rangle$  = 34  
 $\langle p\text{-value} \rangle$  = 0  
 $\langle fdr \rangle$  = 0.28

Profile

Spot



## Local Genelist

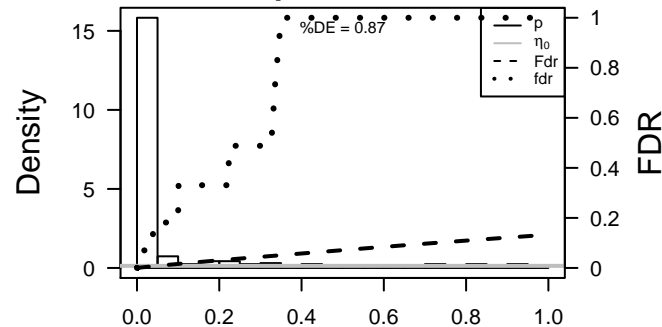
Rank	ID	log(FC)	fdr	p-value	Description
1	59	2.3	2e-16	3e-16	3 x 1 actin, alpha 2, smooth muscle, aorta [Source:HGNC Symbol;]
2	72	2.81	2e-16	3e-16	4 x 1 actin, gamma 2, smooth muscle, enteric [Source:HGNC Syml]
3	366	2.36	2e-16	3e-16	1 x 1 aquaporin 9 [Source:HGNC Symbol;Acc:643]
4	414062	2.85	2e-16	3e-16	1 x 1 chemokine (C-C motif) ligand 3-like 3 [Source:HGNC Symbc]
5	1490	2.22	2e-16	3e-16	3 x 1 connective tissue growth factor [Source:HGNC Symbol;Acc:2]
6	2920	2.17	2e-16	3e-16	1 x 1 chemokine (C-X-C motif) ligand 2 [Source:HGNC Symbol;Ac]
7	6374	2.94	2e-16	3e-16	1 x 1 chemokine (C-X-C motif) ligand 5 [Source:HGNC Symbol;Ac]
8	6372	3.07	2e-16	3e-16	1 x 1 chemokine (C-X-C motif) ligand 6 [Source:HGNC Symbol;Ac]
9	3491	2.22	2e-16	3e-16	2 x 1 cysteine-rich, angiogenic inducer, 61 [Source:HGNC Symbol]
10	3039	2.23	2e-16	3e-16	5 x 1 hemoglobin, alpha 2 [Source:HGNC Symbol;Acc:4824]
11	3040	2.73	2e-16	3e-16	4 x 1 hemoglobin, alpha 2 [Source:HGNC Symbol;Acc:4824]
12	3043	2.57	2e-16	3e-16	5 x 1 hemoglobin, beta [Source:HGNC Symbol;Acc:4827]
13	3553	3.11	2e-16	3e-16	1 x 1 interleukin 1, beta [Source:HGNC Symbol;Acc:5992]
14	11009	2.29	2e-16	3e-16	1 x 3 interleukin 24 [Source:HGNC Symbol;Acc:11346]
15	3569	3.28	2e-16	3e-16	1 x 1 interleukin 6 (interferon, beta 2) [Source:HGNC Symbol;Acc:f]
16	3576	2.96	2e-16	3e-16	1 x 1 interleukin 8 [Source:HGNC Symbol;Acc:6025]
17	3678	2.28	2e-16	3e-16	1 x 1 integrin, alpha 5 (fibronectin receptor, alpha polypeptide) [Sou]
18	4312	2.22	2e-16	3e-16	1 x 1 matrix metalloproteinase 1 (interstitial collagenase) [Source:Hi]
19	4314	3.31	2e-16	3e-16	1 x 1 matrix metalloproteinase 3 (stromelysin 1, progelatinase) [Sou]
20	4489	1.93	2e-16	3e-16	1 x 4 metallothionein 1A [Source:HGNC Symbol;Acc:7393]

## Local Geneset Analysis

Overexpression

Rank	GSZ	p-value	#in/all	Geneset
1	25.87	NULL	15 / 16	MMML C6SCIEJ_MMML 1
2	24.78	NULL	63 / 190	CC extracellular matrix
3	24.69	NULL	10 / 15	GSEA C2ZONDER_CDH1_TARGETS_2_UP
4	24.08	NULL	68 / 242	BP extracellular matrix organization
5	23.91	NULL	76 / 250	LymphoRNENZ_Stromal signature 1
6	21.79	NULL	7 / 15	GSEA C2LEE_LIVER_CANCER_HEPATOBLAST
7	20.86	NULL	32 / 69	BP extracellular matrix disassembly
8	20.76	NULL	11 / 15	GSEA C2CROMER_TUMORIGENESIS_UP
9	20.24	NULL	116 / 118	ZCC extracellular region
10	20.2	NULL	13 / 16	GSEA C2FARMER_BREAST_CANCER_CLUSTER_5
11	19.62	NULL	6 / 13	GSEA C2TSAI_RESPONSE_TO_RADIATION_THERAPY
12	19.44	NULL	4 / 9	GSEA C2ZERBINI_RESPONSE_TO_SULINDAC_UP
13	19.25	NULL	6 / 10	GSEA C2VERRECCHIA_RESPONSE_TO_TGFB1_C4
14	18.98	NULL	9 / 11	MF platelet-derived growth factor binding
15	18.82	NULL	74 / 553	Cancer Lembcke_Colonc Inflammation
16	18.55	NULL	88 / 683	CC extracellular space
17	18.54	NULL	28 / 64	BP collagen catabolic process
18	18.41	NULL	11 / 19	MF extracellular matrix binding
19	18.16	NULL	8 / 15	GSEA C2DASU_IL6_SIGNALING_SCAR_DN
20	17.3	NULL	7 / 16	GSEA C2CROONQUIST_STROMAL_STIMULATION_UP
21	17.05	NULL	7 / 11	Glio Phillips MES vs Prolif & PN
22	16.97	NULL	8 / 12	miRNA target-29c
23	16.92	NULL	48 / 265	Glio willscher_GBM_Verhaak-CL_expression_B_up
24	16.92	NULL	48 / 265	Glio willscher_GBM_Verhaak-MES_expression_B_up
25	16.92	NULL	48 / 265	Glio willscher_GBM_Verhaak-PNwt_expression_B_down
26	16.92	NULL	48 / 265	Glio willscher_GBM_Verhaak-PNmut_expression_B_down
27	16.7	NULL	2 / 3	GSEA C2ONDO_HYPOXIA
28	16.67	NULL	8 / 15	GSEA C2ZONDER_CDH1_SIGNALING_VIA_CTNNB1
29	16.62	NULL	8 / 15	GSEA C2MASRI_RESISTANCE_TO_TAMOXIFEN_AND_AROMATASE_INH
30	16.2	NULL	2 / 6	GSEA C2BIOCARTA_IL5_PATHWAY
31	16.2	NULL	2 / 4	MMML C6SCIEJ_MMML 23
32	15.81	NULL	8 / 43	MF chemokine activity
33	15.59	NULL	4 / 6	GSEA C2AGARWAL_AKT_PATHWAY_TARGETS
34	15.54	NULL	22 / 83	CC basement membrane
35	15.39	NULL	2 / 6	GSEA C2SEIKE_LUNG_CANCER_POOR_SURVIVAL
36	15.39	NULL	20 / 57	MF extracellular matrix structural constituent
37	15.31	NULL	6 / 16	GSEA C2BEGUM_TARGETS_OF_PAX3_FOXO1_FUSION_DN
38	15.22	NULL	29 / 269	BP inflammatory response
39	14.7	NULL	15 / 111	BP chemotaxis
40	14.68	NULL	4 / 13	GSEA C2SATO_SILENCED_BY_DEACETYLATION_IN_PANCREATIC_CAN

p-values



# GW\_057

## Local Summary

%DE = 0.93  
 # metagenes = 13  
 # genes = 192  
 # genes in genesets = 187

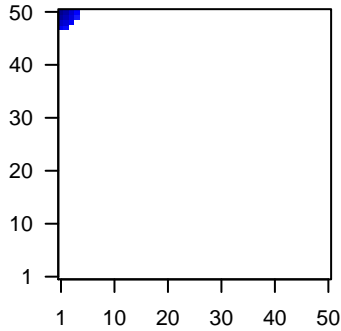
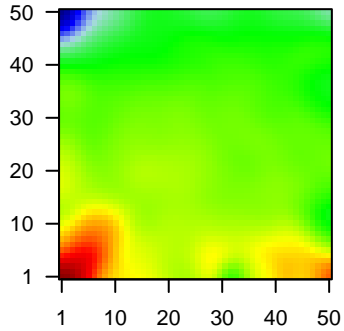
# genes with  $fdr < 0.1$  = 170 ( 2 + / 168 - )  
 # genes with  $fdr < 0.05$  = 164 ( 2 + / 162 - )  
 # genes with  $fdr < 0.01$  = 156 ( 2 + / 154 - )

$\langle r \rangle$  metagenes = 0.98  
 $\langle r \rangle$  genes = 0.48

$\langle FC \rangle = -1.45$   
 $\langle \text{shrinkage-t} \rangle = -51.2$   
 $\langle p\text{-value} \rangle = 0$   
 $\langle fdr \rangle = 0.16$

Profile

Spot



## Local Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	131	-3.14	2e-16	6e-17	1 x 50 alcohol dehydrogenase 7 (class IV), mu or sigma polypeptide
2	57016	-3.72	2e-16	6e-17	1 x 50 aldo-keto reductase family 1, member B10 (aldose reductase
3	441282	-2.55	2e-16	6e-17	1 x 49 aldo-keto reductase family 1, member B15 [Source:HGNC S]
4	218	-3.43	2e-16	6e-17	1 x 50 aldehyde dehydrogenase 3 family, member A1 [Source:HGNC
5	387695	-2.81	2e-16	6e-17	1 x 49 chromosome 10 open reading frame 99 [Source:HGNC Symt
6	810	-2.89	2e-16	6e-17	1 x 50 calmodulin-like 3 [Source:HGNC Symbol;Acc:1452]
7	51806	-2.47	2e-16	6e-17	4 x 50 calmodulin-like 5 [Source:HGNC Symbol;Acc:18180]
8	84290	-2.16	2e-16	6e-17	1 x 50 calpain, small subunit 2 [Source:HGNC Symbol;Acc:16371]
9	4680	-3.19	2e-16	6e-17	1 x 50 carcinoembryonic antigen-related cell adhesion molecule 6 (i
10	22802	-3.05	2e-16	6e-17	1 x 50 chloride channel accessory 4 [Source:HGNC Symbol;Acc:20
11	84518	-3.22	2e-16	6e-17	1 x 50 cornifelin [Source:HGNC Symbol;Acc:30183]
12	1673	-2.5	2e-16	6e-17	1 x 49 defensin, beta 4B [Source:HGNC Symbol;Acc:30193]
13	1824	-2.34	2e-16	6e-17	1 x 48 desmocollin 2 [Source:HGNC Symbol;Acc:3036]
14	1830	-2.11	2e-16	6e-17	1 x 48 desmoglein 3 [Source:HGNC Symbol;Acc:3050]
15	26298	-2.22	2e-16	6e-17	4 x 50 ets homologous factor [Source:HGNC Symbol;Acc:3246]
16	163351	-2.61	2e-16	6e-17	1 x 50 guanylate binding protein family, member 6 [Source:HGNC S]
17	2706	-2.23	2e-16	6e-17	1 x 47 gap junction protein, beta 2, 26kDa [Source:HGNC Symbol;A
18	10804	-3.5	2e-16	6e-17	1 x 47 gap junction protein, beta 6, 30kDa [Source:HGNC Symbol;A
19	2877	-2.42	2e-16	6e-17	1 x 50 glutathione peroxidase 2 (gastrointestinal) [Source:HGNC Sy
20	56300	-2.22	2e-16	6e-17	1 x 47 interleukin 36, gamma [Source:HGNC Symbol;Acc:15741]

## Local Geneset Analysis

Underexpression

Rank	GSZ	p-value	#in/all	Geneset
1	-63.46	NULL	77 / 135	H.Tiss WIRTH_Mucosa
2	-41.5	NULL	16 / 21	CC cornified envelope
3	-32.51	NULL	19 / 42	BP keratinization
4	-29.31	NULL	21 / 53	BP keratinocyte differentiation
5	-27.21	NULL	82 / 572	Disease GUDJ_psooriasis up
6	-24.62	NULL	9 / 19	BP peptide cross-linking
7	-23.97	NULL	20 / 76	BP epidermis development
8	-21.08	NULL	6 / 15	GSEA C2HINATA_NFKB_TARGETS_KERATINOCYTE_DN
9	-15.85	NULL	6 / 16	GSEA C2CROMER_TUMORIGENESIS_DN
10	-15.53	NULL	3 / 12	BP cellular aldehyde metabolic process
11	-14.72	NULL	6 / 16	GSEA C2WANG_BARRETTES_ESOPHAGUS_DN
12	-14.6	NULL	6 / 13	BP negative regulation of peptidase activity
13	-14.3	NULL	4 / 10	GSEA C2SMID_BREAST_CANCER_ERBB2_UP
14	-13.48	NULL	3 / 11	GSEA C2MURAKAMI_UV_RESPONSE_6HR_DN
15	-13.26	NULL	3 / 10	GSEA C2MURAKAMI_UV_RESPONSE_1HR_UP
16	-12.67	NULL	3 / 16	GSEA C2AMIT_SERUM_RESPONSE_480_MCF10A
17	-12.38	NULL	6 / 16	GSEA C2ONDER_CDH1_TARGETS_3_DN
18	-11.81	NULL	5 / 21	CC desmosome
19	-11.49	NULL	18 / 186	MF structural molecule activity
20	-11.39	NULL	4 / 15	GSEA C2LEE_LIVER_CANCER_MYC_E2F1_UP
21	-11.29	NULL	3 / 15	GSEA C2CHANG_IMMORTALIZED_BY_HPV31_DN
22	-10.98	NULL	8 / 44	CC keratin filament
23	-10.95	NULL	6 / 16	GSEA C2SENGUPTA_NASOPHARYNGEAL_CARCINOMA_DN
24	-10.78	NULL	3 / 14	GSEA C2CHARAFE_BREAST_CANCER_BASAL_VS_MESENCHYMAL_UP
25	-10.64	NULL	7 / 15	GSEA C2WANG_BARRETTES_ESOPHAGUS_AND_ESOPHAGUS_CANCE
26	-10.59	NULL	3 / 15	GSEA C2PYEON_CANCER_HEAD_AND_NECK_VS_CERVICAL_DN
27	-10.1	NULL	4 / 16	GSEA C2LEE_LIVER_CANCER_MYC_TGFA_UP
28	-10.02	NULL	1 / 6	GSEA C2SARRIO_EPITHELIAL_MESENCHYMAL_TRANSITION_DN
29	-9.92	NULL	2 / 12	GSEA C2REACTOME_GAP_JUNCTION_ASSEMBLY
30	-9.91	NULL	3 / 16	GSEA C2SMID_BREAST_CANCER_RELAPSE_IN_LUNG_UP
31	-9.87	NULL	3 / 10	GSEA C2KEGG_LINOLEIC_ACID_METABOLISM
32	-9.73	NULL	3 / 15	GSEA C2AIGNER_ZEB1_TARGETS
33	-9.56	NULL	50 / 1182	CC extracellular region
34	-9.46	NULL	2 / 13	GSEA C2REACTOME_GAP_JUNCTION_TRAFFICKING
35	-9.42	NULL	12 / 122	MF serine-type endopeptidase activity
36	-9.36	NULL	3 / 15	GSEA C2RICKMAN_HEAD_AND_NECK_CANCER_E
37	-8.72	NULL	10 / 79	MF serine-type endopeptidase inhibitor activity
38	-8.68	NULL	2 / 15	CC connexon complex
39	-8.66	NULL	10 / 82	CC intermediate filament
40	-8.66	NULL	8 / 52	BP negative regulation of endopeptidase activity

p-values

