

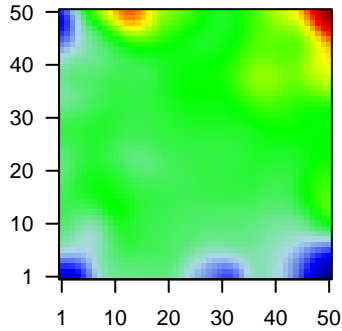
# GW\_083

## Global Summary

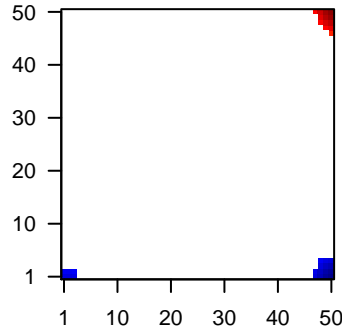
%DE = 0.15  
 # genes with  $fdr < 0.2$  = 2002 ( 1006 + / 996 - )  
 # genes with  $fdr < 0.1$  = 1471 ( 737 + / 734 - )  
 # genes with  $fdr < 0.05$  = 1291 ( 647 + / 644 - )  
 # genes with  $fdr < 0.01$  = 888 ( 458 + / 430 - )  
 # genes in genesets = 16332

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

Profile



Regulated Spots



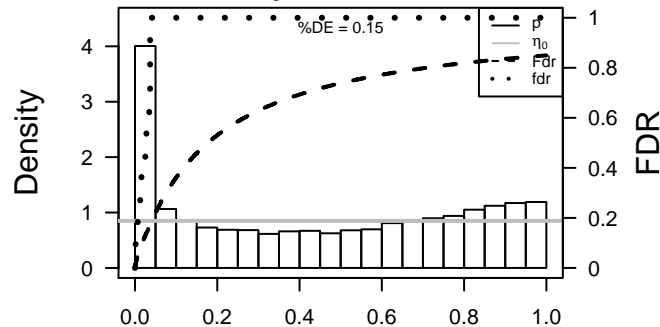
## Global Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	154664	2.2	2e-16	4e-14	50 x 50 ATP-binding cassette, sub-family A (ABC1), member 13 [Source:HGNC Symbol;Acc:328]
2	8745	2.11	2e-16	4e-14	50 x 50 ADAM metallopeptidase domain 23 [Source:HGNC Symbol;Acc:328]
3	124	2.67	2e-16	4e-14	50 x 11 alcohol dehydrogenase 1A (class I), alpha polypeptide [Source:HGNC Symbol;Acc:328]
4	126	2.6	2e-16	4e-14	50 x 12 alcohol dehydrogenase 1C (class I), gamma polypeptide [Source:HGNC Symbol;Acc:328]
5	10551	1.85	2e-16	4e-14	50 x 10 anterior gradient 2 [Source:HGNC Symbol;Acc:328]
6	57016	2.7	2e-16	4e-14	1 x 50 aldo-keto reductase family 1, member B10 (aldose reductase) [Source:HGNC Symbol;Acc:328]
7	441282	2.55	2e-16	4e-14	1 x 49 aldo-keto reductase family 1, member B15 [Source:HGNC Symbol;Acc:328]
8	1109	3.06	2e-16	4e-14	13 x 50 aldo-keto reductase family 1, member C4 [Source:HGNC Symbol;Acc:328]
9	216	2.82	2e-16	4e-14	50 x 50 aldehyde dehydrogenase 1 family, member A1 [Source:HGNC Symbol;Acc:328]
10	218	2.47	2e-16	4e-14	1 x 50 aldehyde dehydrogenase 3 family, member A1 [Source:HGNC Symbol;Acc:328]
11	501	-1.86	2e-16	4e-14	6 x 46 aldehyde dehydrogenase 7 family, member A1 [Source:HGNC Symbol;Acc:328]
12	445	2.18	2e-16	4e-14	50 x 47 argininosuccinate synthase 1 [Source:HGNC Symbol;Acc:328]
13	8702	1.84	2e-16	4e-14	50 x 50 UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide A [Source:HGNC Symbol;Acc:328]
14	10409	-2.01	2e-16	4e-14	1 x 2 brain abundant, membrane attached signal protein 1 [Source:HGNC Symbol;Acc:328]
15	633	-2.02	2e-16	4e-14	3 x 1 biglycan [Source:HGNC Symbol;Acc:1044]
16	684	-2.16	2e-16	4e-14	32 x 1 bone marrow stromal cell antigen 2 [Source:HGNC Symbol;Acc:328]
17	375791	-2.03	2e-16	4e-14	1 x 50 chromosome 9 open reading frame 169 [Source:HGNC Symbol;Acc:328]
18	760	-2.22	2e-16	4e-14	1 x 44 carbonic anhydrase II [Source:HGNC Symbol;Acc:1373]
19	26256	2.03	2e-16	4e-14	50 x 50 calcium binding tyrosine-(Y)-phosphorylation regulated [Source:HGNC Symbol;Acc:328]
20	51806	-2.4	2e-16	4e-14	4 x 50 calmodulin-like 5 [Source:HGNC Symbol;Acc:18180]

## Global Geneset Analysis

Rank	GSZ	p-value	#all	Geneset
<i>Overexpressed</i>				
1	10.53	NULL	743	Chr Chr 7
2	9.16	NULL	633	Chr Chr 9
3	8.93	NULL	914	Chr Chr 3
4	7.48	NULL	232	Chr Chr 18
5	7.28	NULL	34	BP glutathione metabolic process
6	6.95	NULL	13	GSEA C2SINGH_NFE2L2_TARGETS
7	6.93	NULL	1033	Chr Chr 2
8	6.67	NULL	9	GSEA C2REACTOME_ETHANOL_OXIDATION
9	6.32	NULL	15	GSEA C2KEGG_Glutathione_Metabolism
10	6.29	NULL	1749	MF DNA binding
11	5.96	NULL	7	GSEA C2FREDERICK_PRKCI_TARGETS
12	5.71	NULL	368	miRNA target set miR-34a
13	5.5	NULL	24	TF Tissue/AQUERIZAS_Trachea
14	5.43	NULL	1581	BP regulation of transcription, DNA-dependent
15	5.24	NULL	311	miRNA target set miR-302c
16	5	NULL	39	Cancer ZHANG_MM up
17	4.99	NULL	1574	BP transcription, DNA-templated
18	4.93	NULL	4640	CC nucleus
19	4.92	NULL	438	miRNA target set miR-424
20	4.91	NULL	180	miRNA target set miR-374a
<i>Underexpressed</i>				
1	-16.12	NULL	553	Cancer Lembecke_Colonc Inflammation
2	-13.14	NULL	250	Lymphoma ENZ_Stromal signature 1
3	-12.72	NULL	312	BP immune response
4	-12.15	NULL	190	CC extracellular matrix
5	-12	NULL	265	Glio willscher_GBM_Verhaak-CL_expression_B_up
6	-12	NULL	265	Glio willscher_GBM_Verhaak-MES_expression_B_up
7	-12	NULL	265	Glio willscher_GBM_Verhaak-PNwt_expression_B_down
8	-12	NULL	265	Glio willscher_GBM_Verhaak-PNmut_expression_B_down
9	-11.92	NULL	572	Disease GUDJ_psooriasis up
10	-11.91	NULL	618	Chr Chr 4
11	-11.57	NULL	135	H.Tiss WIRTH_Mucosa
12	-10.85	NULL	1182	CC extracellular region
13	-10.76	NULL	602	Chr Chr 10
14	-10.55	NULL	717	Chr Chr 16
15	-9.69	NULL	16	GSEA C2FARMER_BREAST_CANCER_CLUSTER_5
16	-9.28	NULL	51	BP type I interferon signaling pathway
17	-8.86	NULL	683	CC extracellular space
18	-8.85	NULL	10	MF RAGE receptor binding
19	-8.85	NULL	866	Chr Chr 12
20	-8.59	NULL	13	GSEA C2BOWIE_RESPONSE_TO_TAMOXIFEN

p-values



# GW\_083

## Local Summary

%DE = 0.88  
 # metagenes = 13  
 # genes = 208  
 # genes in genesets = 206

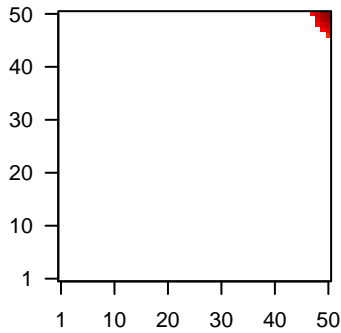
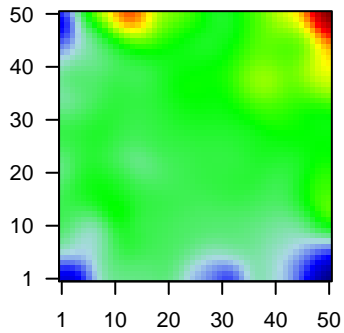
# genes with  $fdr < 0.1 = 182$  ( 175 + / 7 - )  
 # genes with  $fdr < 0.05 = 159$  ( 156 + / 3 - )  
 # genes with  $fdr < 0.01 = 144$  ( 142 + / 2 - )

<r> metagenes = 0.97  
 <r> genes = 0.28

<FC> = 0.93  
 <shrinkage-t> = 32.46  
 <p-value> = 0  
 <fdr> = 0.26

Profile

Spot



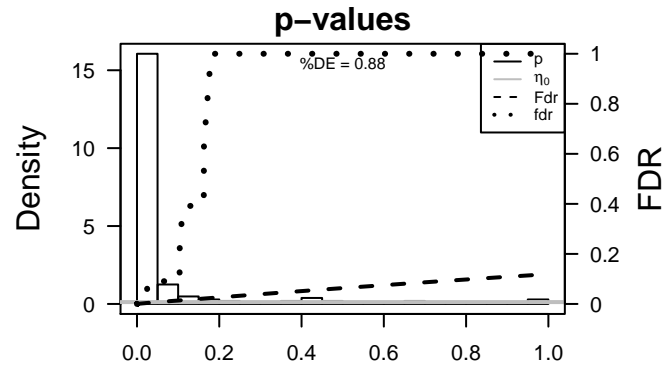
## Local Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	154664	2.2	2e-16	2e-16	50 x 50 ATP-binding cassette, sub-family A (ABC1), member 13 [Sou
2	8745	2.11	2e-16	2e-16	50 x 50 ADAM metallopeptidase domain 23 [Source:HGNC Symbol;A
3	216	2.82	2e-16	2e-16	50 x 50 aldehyde dehydrogenase 1 family, member A1 [Source:HGNC
4	445	2.18	2e-16	2e-16	50 x 47 argininosuccinate synthase 1 [Source:HGNC Symbol;Acc:75f
5	8702	1.84	2e-16	2e-16	50 x 50 UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polyp-
6	26256	2.03	2e-16	2e-16	50 x 50 calcium binding tyrosine-(Y)-phosphorylation regulated [Sou
7	4072	2.23	2e-16	2e-16	50 x 50 epithelial cell adhesion molecule [Source:HGNC Symbol;Acc:
8	83888	2.44	2e-16	2e-16	50 x 50 fibroblast growth factor binding protein 2 [Source:HGNC Syml
9	94234	2.17	2e-16	2e-16	50 x 50 forkhead box Q1 [Source:HGNC Symbol;Acc:20951]
10	2719	1.87	2e-16	2e-16	50 x 50 glypican 3 [Source:HGNC Symbol;Acc:4451]
11	2938	2.71	2e-16	2e-16	50 x 50 glutathione S-transferase alpha 2 [Source:HGNC Symbol;Ao
12	2944	2.58	2e-16	2e-16	50 x 50 glutathione S-transferase mu 1 [Source:HGNC Symbol;Acc:4
13	2946	1.94	2e-16	2e-16	50 x 50 glutathione S-transferase mu 2 (muscle) [Source:HGNC Syrr
14	10643	1.96	2e-16	2e-16	48 x 50 insulin-like growth factor 2 mRNA binding protein 3 [Source:t
15	3880	2.71	2e-16	2e-16	50 x 49 keratin 19 [Source:HGNC Symbol;Acc:6436]
16	4915	2.4	2e-16	2e-16	50 x 50 neurotrophic tyrosine kinase, receptor, type 2 [Source:HGNC
17	4922	2.09	2e-16	2e-16	50 x 50 neurotensin [Source:HGNC Symbol;Acc:8038]
18	6657	1.9	2e-16	2e-16	50 x 50 SRY (sex determining region Y)-box 2 [Source:HGNC Symbx
19	7345	2.98	2e-16	2e-16	50 x 46 ubiquitin carboxyl-terminal esterase L1 (ubiquitin thiolesteras
20	54578	1.99	2e-16	2e-16	50 x 50 UDP glucuronosyltransferase 1 family, polypeptide A6 [Source

## Local Geneset Analysis

Overexpression

Rank	GSZ	p-value	#in/all	Geneset
1	18.03	NULL	8 / 34	BP glutathione metabolic process
2	17.68	NULL	6 / 25	BP glutathione derivative biosynthetic process
3	16.23	NULL	4 / 13	GSEA C2KEGG_METABOLISM_OF_XENOBIOTICS_BY_CYTOCHROME_P
4	15.67	NULL	5 / 15	GSEA C2KEGG_Glutathione_METABOLISM
5	15.52	NULL	5 / 20	MF glutathione transferase activity
6	14.7	NULL	3 / 11	MF glutathione binding
7	14.7	NULL	3 / 11	GSEA C2KEGG_DRUG_METABOLISM_CYTOCHROME_P450
8	14.52	NULL	4 / 15	GSEA C2REACTOME_Glutathione_CONJUGATION
9	14.18	NULL	4 / 13	BP regulation of blood vessel size
10	13.89	NULL	4 / 15	GSEA C2RICKMAN_HEAD_AND_NECK_CANCER_E
11	13.88	NULL	3 / 11	GSEA C2TO_PTTG1_TARGETS_UP
12	13.32	NULL	2 / 7	GSEA C2FREDERICK_PRKCI_TARGETS
13	13.3	NULL	2 / 7	GSEA C2MCCOLLUM_GELDANAMYCIN_RESISTANCE_DN
14	12.88	NULL	2 / 6	GSEA C2GAUSSMANN_MLL_AF4_FUSION_TARGETS_D_DN
15	12.76	NULL	3 / 8	GSEA C2IU_CDX2_TARGETS_DN
16	12.5	NULL	11 / 119	BP xenobiotic metabolic process
17	12.22	NULL	2 / 12	GSEA C2MOROSSETTI_FACIOSCAPULOHUMERAL_MUSCULAR_DISTRO
18	11.47	NULL	3 / 6	GSEA C2MYLLYKANGAS_AMPLIFICATION_HOT_SPOT_7
19	11.14	NULL	3 / 16	GSEA C2BOYVAULT_LIVER_CANCER_SUBCLASS_G1_DN
20	10.55	NULL	3 / 9	GSEA C2BROWNE_HCMV_INFECTION_8HR_UP
21	10.41	NULL	50 / 914	Chr Chr 3
22	10.23	NULL	1 / 6	GSEA C2KAPOSI_LIVER_CANCER_POOR_SURVIVAL_DN
23	9.64	NULL	2 / 15	GSEA C2LEE_LIVER_CANCER_MYC_UP
24	9.64	NULL	2 / 15	GSEA C2LEE_LIVER_CANCER_E2F1_UP
25	9.48	NULL	3 / 12	GSEA C2BROCKE_APOPTOSIS_REVERSED_BY_IL6
26	9.13	NULL	2 / 12	BP cellular aldehyde metabolic process
27	9.09	NULL	1 / 8	GSEA C2MUNSHI_MULTIPLE_MYELOMA_DN
28	8.78	NULL	1 / 5	GSEA C2NIELSEN_SCHWANNOMA_DN
29	8.63	NULL	1 / 4	GSEA C2MYLLYKANGAS_AMPLIFICATION_HOT_SPOT_13
30	8.55	NULL	2 / 15	GSEA C2REACTOME_PHASE_II_CONJUGATION
31	8.53	NULL	1 / 2	miRNA target-127
32	8.36	NULL	2 / 13	Lymphom BENTINK_mBL UP
33	8.34	NULL	3 / 15	BP lipid glycosylation
34	8.01	NULL	1 / 9	GSEA C2ABDULRAHMAN_KIDNEY_CANCER_VHL_DN
35	8.01	NULL	1 / 9	GSEA C2REACTOME_ETHANOL_OXIDATION
36	7.95	NULL	1 / 10	MF omega peptidase activity
37	7.93	NULL	2 / 10	GSEA C2ONRAD_STEM_CELL
38	7.57	NULL	2 / 12	BP glutamate metabolic process
39	7.52	NULL	1 / 10	GSEA C2MAINA_VHL_TARGETS_UP
40	7.52	NULL	1 / 10	GSEA C2FRIDMAN_SENESCENCE_DN



# GW\_083

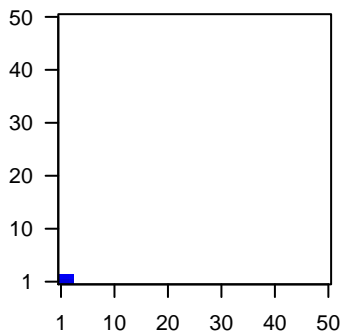
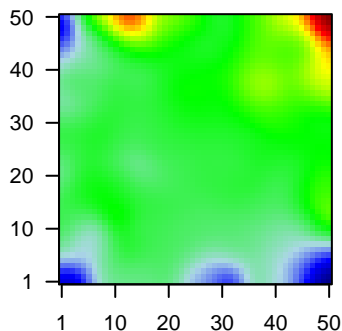
## Local Summary

%DE = 0.9  
 # metagenes = 6  
 # genes = 110  
 # genes in genesets = 110  
 # genes with  $fdr < 0.1$  = 97 ( 6 + / 91 - )  
 # genes with  $fdr < 0.05$  = 84 ( 5 + / 79 - )  
 # genes with  $fdr < 0.01$  = 78 ( 5 + / 73 - )

<r> metagenes = 0.99  
 <r> genes = 0.48  
 <FC> = -0.77  
 <shrinkage-t> = -27.01  
 <p-value> = 0  
 <fdr> = 0.26

Profile

Spot



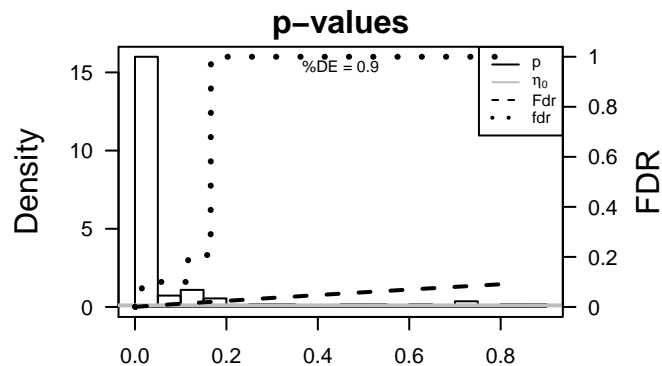
## Local Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	10409	-2.01	2e-16	8e-16	1 x 2 brain abundant, membrane attached signal protein 1 [Source:HGNC Symbol;Acc:10444]
2	633	-2.02	2e-16	8e-16	3 x 1 biglycan [Source:HGNC Symbol;Acc:10444]
3	6696	3.17	2e-16	8e-16	2 x 1 secreted phosphoprotein 1 [Source:HGNC Symbol;Acc:1125]
4	3956	-1.81	4e-16	5e-15	1 x 1 lectin, galactoside-binding, soluble, 1 [Source:HGNC Symbol;Acc:1125]
5	25878	-1.81	4e-16	5e-15	3 x 1 matrix-remodelling associated 5 [Source:HGNC Symbol;Acc:1125]
6	12	-1.79	9e-16	6e-14	1 x 1
7	1293	-1.74	7e-15	7e-14	2 x 1 collagen, type VI, alpha 3 [Source:HGNC Symbol;Acc:2213]
8	1289	-1.72	1e-14	3e-12	2 x 1 collagen, type V, alpha 1 [Source:HGNC Symbol;Acc:2209]
9	1462	-1.63	3e-13	2e-11	3 x 1 versican [Source:HGNC Symbol;Acc:2464]
10	6423	-1.56	3e-12	2e-11	3 x 1 secreted frizzled-related protein 2 [Source:HGNC Symbol;Acc:2464]
11	3569	1.55	4e-12	8e-11	1 x 1 interleukin 6 (interferon, beta 2) [Source:HGNC Symbol;Acc:2464]
12	1290	-1.52	1e-11	2e-10	2 x 1 collagen, type V, alpha 2 [Source:HGNC Symbol;Acc:2210]
13	4318	-1.48	4e-11	2e-10	1 x 1 matrix metalloproteinase 9 (gelatinase B, 92kDa gelatinase, 9; [Source:HGNC Symbol;Acc:6724]
14	4060	-1.47	5e-11	4e-10	2 x 1 lumican [Source:HGNC Symbol;Acc:6724]
15	1291	-1.45	9e-11	7e-10	2 x 1 collagen, type VI, alpha 1 [Source:HGNC Symbol;Acc:2211]
16	112464	-1.43	2e-10	7e-10	1 x 1 protein kinase C, delta binding protein [Source:HGNC Symbol;Acc:11786]
17	7058	-1.41	3e-10	7e-10	2 x 1 thrombospondin 2 [Source:HGNC Symbol;Acc:11786]
18	4312	-1.4	3e-10	7e-10	1 x 1 matrix metalloproteinase 1 (interstitial collagenase) [Source:HGNC Symbol;Acc:11786]
19	55714	-1.4	4e-10	7e-10	1 x 1 teneurin transmembrane protein 3 [Source:HGNC Symbol;Acc:11786]
20	9315	-1.4	4e-10	7e-10	3 x 1 neuronal regeneration related protein [Source:HGNC Symbol;Acc:11786]

## Local Geneset Analysis

Underexpression

Rank	GSZ	p-value	#in/all	Geneset
1	-41.78	NULL	13 / 16	MMML C27CIEJ_MMML_1
2	-38.55	NULL	9 / 16	GSEA C27FARMER_BREAST_CANCER_CLUSTER_5
3	-36.07	NULL	7 / 11	MF platelet-derived growth factor binding
4	-33.22	NULL	39 / 190	CC extracellular matrix
5	-31.7	NULL	42 / 250	Lymphocyte Stromal signature 1
6	-30.67	NULL	21 / 64	BP collagen catabolic process
7	-29.76	NULL	22 / 69	BP extracellular matrix disassembly
8	-28.87	NULL	4 / 5	GSEA C2COLLER_MYC_TARGETS_DN
9	-25.96	NULL	9 / 15	GSEA C2CROMER_TUMORIGENESIS_UP
10	-25.16	NULL	5 / 10	GSEA C2KEGG_ECM_RECEPTOR_INTERACTION
11	-24.16	NULL	7 / 12	miRNA target-29c
12	-24.09	NULL	7 / 15	GSEA C2ONDER_CDH1_TARGETS_2_UP
13	-23.71	NULL	7 / 16	GSEA C2ROZANOV_MMP14_TARGETS_SUBSET
14	-22.9	NULL	14 / 57	MF extracellular matrix structural constituent
15	-22.69	NULL	12 / 37	BP collagen fibril organization
16	-22.25	NULL	5 / 13	GSEA C2TURASHVIL_BREAST_LOBULAR_CARCINOMA_VS_LOBULAR_CARCINOMA
17	-21.9	NULL	5 / 16	GSEA C2URS_ADIPOCYTE_DIFFERENTIATION_DN
18	-21.52	NULL	38 / 242	BP extracellular matrix organization
19	-21.41	NULL	5 / 16	GSEA C2TURASHVIL_BREAST_LOBULAR_CARCINOMA_VS_DUCTAL_CARCINOMA
20	-20.38	NULL	4 / 10	BP protein heterotrimerization
21	-20.34	NULL	5 / 10	GSEA C2VERRECCHIA_RESPONSE_TO_TGFB1_C4
22	-19.43	NULL	6 / 16	GSEA C2CROONQUIST_STROMAL_STIMULATION_UP
23	-19.13	NULL	5 / 16	GSEA C2REACTOME_SIGNALING_BY_PDGF
24	-18.92	NULL	18 / 119	Lymphocyte Stromal signature 1
25	-18.88	NULL	5 / 16	GSEA C2GU_PDEF_TARGETS_UP
26	-18.87	NULL	3 / 8	GSEA C2HAEGERSTRAND_RESPONSE_TO_IMATINIB
27	-18.65	NULL	5 / 16	GSEA C2LIEN_BREAST_CARCINOMA_METAPLASTIC
28	-18.25	NULL	4 / 13	GSEA C2PICCALUGA_ANGIOIMMUNOBLASTIC_LYMPHOMA_UP
29	-17.92	NULL	7 / 15	GSEA C2ONDER_CDH1_SIGNALING_VIA_CTNNB1
30	-17.6	NULL	2 / 5	GSEA C2DASU_IL6_SIGNALING_UP
31	-17.58	NULL	8 / 40	BP cellular response to amino acid stimulus
32	-17.42	NULL	9 / 35	Glio Colman_survival_associated
33	-17.27	NULL	22 / 183	CC proteinaceous extracellular matrix
34	-17.22	NULL	5 / 13	GSEA C2FRIDMAN_SENESCENCE_UP
35	-17.21	NULL	4 / 15	GSEA C2REACTOME_NCAM1_INTERACTIONS
36	-17	NULL	6 / 13	GSEA C2TSAI_RESPONSE_TO_RADIATION_THERAPY
37	-16.86	NULL	1 / 2	miRNA target-18
38	-16.58	NULL	4 / 16	GSEA C2REACTOME_AXON_GUIDANCE
39	-16.58	NULL	4 / 16	GSEA C2REACTOME_NCAM_SIGNALING_FOR_NEURITE_OUT_GROWTH
40	-16.36	NULL	5 / 15	GSEA C2JINDGREN_BLADDER_CANCER_HIGH_RECURRENCE



# GW\_083

## Local Summary

%DE = 0.98  
 # metagenes = 14  
 # genes = 253  
 # genes in genesets = 251  
 # genes with  $fdr < 0.1$  = 235 ( 7 + / 228 - )  
 # genes with  $fdr < 0.05$  = 235 ( 7 + / 228 - )  
 # genes with  $fdr < 0.01$  = 203 ( 6 + / 197 - )

<r> metagenes = 0.99

<r> genes = 0.59

<FC> = -0.7

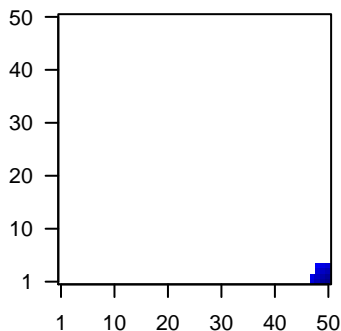
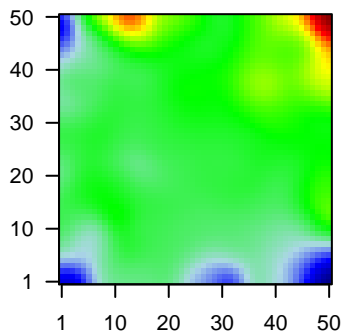
<shrinkage-t> = -24.59

<p-value> = 0

<fdr> = 0.31

Profile

Spot



## Local Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	3122	-1.88	2e-16	1e-15	50 x 1 major histocompatibility complex, class II, DR alpha [Source:Ensembl]
2	3108	-1.8	9e-16	9e-15	50 x 1 major histocompatibility complex, class II, DM alpha [Source:Ensembl]
3	3512	-1.77	3e-15	9e-15	50 x 1 immunoglobulin J polypeptide, linker protein for immunoglobulin
4	23180	-1.75	4e-15	7e-13	50 x 1 raftlin, lipid raft linker 1 [Source:HGNC Symbol;Acc:30278]
5	54855	-1.66	1e-13	3e-12	49 x 1 family with sequence similarity 46, member C [Source:HGNC Symbol;Acc:100000]
6	3936	-1.6	9e-13	3e-12	50 x 1 lymphocyte cytosolic protein 1 (L-plastin) [Source:HGNC Symbol;Acc:100000]
7	3109	-1.59	1e-12	4e-12	50 x 1 major histocompatibility complex, class II, DM beta [Source:Ensembl]
8	3113	-1.57	2e-12	4e-12	50 x 1 major histocompatibility complex, class II, DP alpha 1 [Source:Ensembl]
9	3128	-1.56	3e-12	6e-11	50 x 1 major histocompatibility complex, class II, DR beta 6 (pseudogene)
10	972	-1.51	1e-11	4e-10	50 x 1 CD74 molecule, major histocompatibility complex, class II invariant chain
11	23643	-1.44	1e-10	4e-10	50 x 3 lymphocyte antigen 96 [Source:HGNC Symbol;Acc:17156]
12	10537	-1.43	1e-10	5e-10	50 x 1 ubiquitin D [Source:HGNC Symbol;Acc:18795]
13	3669	-1.42	2e-10	8e-10	48 x 1 interferon stimulated exonuclease gene 20kDa [Source:HGNC Symbol;Acc:100000]
14	260436	-1.4	4e-10	8e-10	50 x 1 follicular dendritic cell secreted protein [Source:HGNC Symbol;Acc:100000]
15	51303	-1.39	5e-10	3e-09	49 x 3 FK506 binding protein 11, 19 kDa [Source:HGNC Symbol;Acc:100000]
16	152007	-1.37	1e-09	1e-08	50 x 3 GLI pathogenesis-related 2 [Source:HGNC Symbol;Acc:180000]
17	3002	-1.32	3e-09	1e-08	49 x 1 granzyme B (granzyme 2, cytotoxic T-lymphocyte-associated protein 10)
18	9404	-1.29	7e-09	1e-08	50 x 1 leupaxin [Source:HGNC Symbol;Acc:14061]
19	57172	-1.29	8e-09	2e-08	49 x 1 calcium/calmodulin-dependent protein kinase I gamma [Source:HGNC Symbol;Acc:100000]
20	6352	-1.27	1e-08	2e-08	48 x 1 chemokine (C-C motif) ligand 5 [Source:HGNC Symbol;Acc:100000]

## Local Geneset Analysis

Underexpression

Rank	GSZ	p-value	#in/all	Geneset
1	-37.18	NULL	12 / 15	CC MHC class II protein complex
2	-25.87	NULL	87 / 417	H.Tiss WIRTH_Immune system
3	-23.97	NULL	88 / 553	Cancer Lembcke_Colonc Inflammation
4	-22.32	NULL	3 / 5	GSEA C2WONG_ENDOMETRIAL_CANCER_LATE
5	-21.69	NULL	15 / 47	BP antigen processing and presentation
6	-21.48	NULL	47 / 312	BP immune response
7	-19.88	NULL	2 / 3	GSEA C2KEGG_VIRAL_MYOCARDITIS
8	-18.88	NULL	6 / 8	Glio Donson-migration tethering and rolling-associated with LTS in HGA
9	-18.74	NULL	7 / 21	CC clathrin-coated endocytic vesicle membrane
10	-17.94	NULL	40 / 265	Glio willscher_GBM_Verhaak-CL_expression_B_up
11	-17.94	NULL	40 / 265	Glio willscher_GBM_Verhaak-MES_expression_B_up
12	-17.94	NULL	40 / 265	Glio willscher_GBM_Verhaak-PNwt_expression_B_down
13	-17.94	NULL	40 / 265	Glio willscher_GBM_Verhaak-PNwt_expression_B_down
14	-17.85	NULL	9 / 16	GSEA C2FARMER_BREAST_CANCER_CLUSTER_1
15	-17.82	NULL	7 / 23	CC integral to luminal side of endoplasmic reticulum membrane
16	-17.3	NULL	14 / 60	BP T cell costimulation
17	-16.93	NULL	4 / 8	GSEA C2GRAHAM_CML_QUIESCENT_VS_NORMAL_DIVIDING_DN
18	-16.75	NULL	2 / 4	GSEA C2KEGG_LEISHMANIA_INFECTION
19	-15.97	NULL	7 / 28	CC transport vesicle membrane
20	-15.89	NULL	3 / 7	GSEA C2GRAHAM_CML_DIVIDING_VS_NORMAL_DIVIDING_DN
21	-15.82	NULL	3 / 6	GSEA C2SANA_RESPONSE_TO_IFNG_UP
22	-15.66	NULL	6 / 15	GSEA C2FINAK_BREAST_CANCER_SDPP_SIGNATURE
23	-15.63	NULL	6 / 11	GSEA C2BIOCARTA_TCYTOTOXIC_PATHWAY
24	-15.24	NULL	5 / 12	BP immunoglobulin mediated immune response
25	-15.07	NULL	5 / 12	GSEA C2BIOCARTA_CTL_PATHWAY
26	-15	NULL	1 / 2	GSEA C2KEGG_INTESTINAL_IMMUNE_NETWORK_FOR_IIGA_PRODUC
27	-15	NULL	1 / 2	GSEA C2KEGG_AUTOIMMUNE_THYROID_DISEASE
28	-15	NULL	1 / 2	GSEA C2KEGG_SYSTEMIC_LUPUS_ERYTHEMATOSUS
29	-14.81	NULL	7 / 32	CC ER to Golgi transport vesicle membrane
30	-14.66	NULL	5 / 11	GSEA C2BIOCARTA_THELPER_PATHWAY
31	-14.65	NULL	8 / 35	CC trans-Golgi network membrane
32	-14.62	NULL	17 / 74	BP regulation of immune response
33	-14.51	NULL	5 / 15	Glio Donson-chemokines/cytokines-associated with LTS in HGA
34	-14.37	NULL	3 / 8	GSEA C2LINDSTEDT_DENDRITIC_CELL_MATURATION_D
35	-13.97	NULL	12 / 87	BP antigen processing and presentation of exogenous peptide antigen
36	-13.94	NULL	5 / 12	GSEA C2ZHAN_MULTIPLE_MYELOMA_DN
37	-13.63	NULL	5 / 12	BP dendritic cell chemotaxis
38	-13.6	NULL	5 / 13	GSEA C2HAHTOLA_CTCL_PATHOGENESIS
39	-13.47	NULL	8 / 52	Chr Chr HSCR6_MHC_QBL
40	-13.41	NULL	2 / 6	GSEA C2LUI_THYROID_CANCER_CLUSTER_4

p-values

