

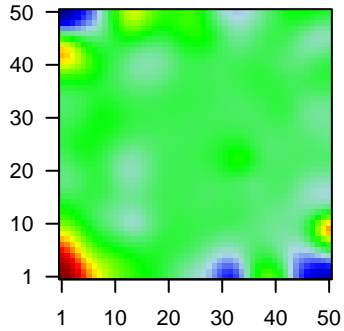
# GW\_149

## Global Summary

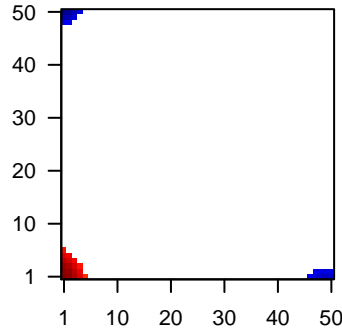
%DE = 0.14  
 # genes with fdr < 0.2 = 1640 ( 931 + / 709 - )  
 # genes with fdr < 0.1 = 1287 ( 738 + / 549 - )  
 # genes with fdr < 0.05 = 1169 ( 674 + / 495 - )  
 # genes with fdr < 0.01 = 821 ( 501 + / 320 - )  
 # genes in genesets = 16332

<FC> = 0  
 <shrinkage-t> = 0  
 <p-value> = 0.1  
 <fdr> = 0.86

Profile



Regulated Spots



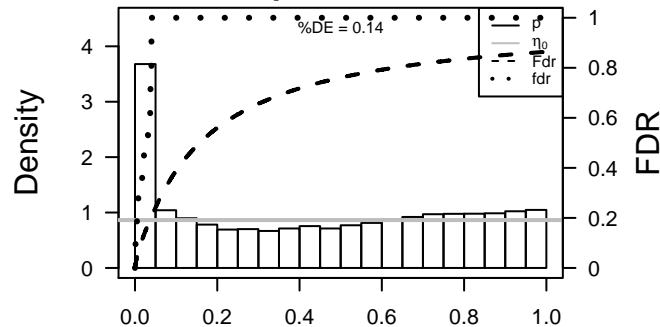
## Global Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	72	1.97	2e-16	3e-14	4 x 1 actin, gamma 2, smooth muscle, enteric [Source:HGNC Syml
2	131	1.53	2e-16	3e-14	1 x 50 alcohol dehydrogenase 7 (class IV), mu or sigma polypeptide
3	10551	2.99	2e-16	3e-14	50 x 10 anterior gradient 2 [Source:HGNC Symbol;Acc:328]
4	57016	1.41	2e-16	3e-14	1 x 50 aldo-keto reductase family 1, member B10 (aldose reductase
5	1109	1.51	2e-16	3e-14	13 x 50 aldo-keto reductase family 1, member C4 [Source:HGNC Syr
6	218	1.49	2e-16	3e-14	1 x 50 aldehyde dehydrogenase 3 family, member A1 [Source:HGNC
7	55107	2.12	2e-16	3e-14	1 x 5 anoctamin 1, calcium activated chloride channel [Source:HG
8	164284	1.61	2e-16	3e-14	1 x 3 adenomatosis polyposis coli down-regulated 1-like [Source:t
9	347	1.75	2e-16	3e-14	50 x 7 apolipoprotein D [Source:HGNC Symbol;Acc:612]
10	23120	-1.45	2e-16	3e-14	1 x 50 ATPase, class V, type 10B [Source:HGNC Symbol;Acc:13543
11	563	1.75	2e-16	3e-14	50 x 10 alpha-2-glycoprotein 1, zinc-binding [Source:HGNC Symbol
12	329	1.86	2e-16	3e-14	27 x 46 baculoviral IAP repeat containing 2 [Source:HGNC Symbol;A
13	80341	3.1	2e-16	3e-14	50 x 10 BPI fold containing family B, member 2 [Source:HGNC Symb
14	92747	3.5	2e-16	3e-14	50 x 10 BPI fold containing family B, member 1 [Source:HGNC Symb
15	375791	-1.35	2e-16	3e-14	1 x 50 chromosome 9 open reading frame 169 [Source:HGNC Syml
16	51806	-1.33	2e-16	3e-14	4 x 50 calmodulin-like 5 [Source:HGNC Symbol;Acc:18180]
17	595	1.7	2e-16	3e-14	1 x 6 cyclin D1 [Source:HGNC Symbol;Acc:1582]
18	1048	-1.51	2e-16	3e-14	2 x 50 carcinoembryonic antigen-related cell adhesion molecule 5 [
19	163732	1.41	2e-16	3e-14	1 x 43 Cbp/p300-interacting transactivator, with Glu/Asp-rich carbo
20	22802	-2.39	2e-16	3e-14	1 x 50 chloride channel accessory 4 [Source:HGNC Symbol;Acc:20

## Global Geneset Analysis

Rank	GSZ	p-value	#all	Geneset
<i>Overexpressed</i>				
1	17.7	NULL	190	CC extracellular matrix
2	17.43	NULL	242	BP extracellular matrix organization
3	16.79	NULL	250	LymphoINZ_Stromal signature 1
4	16.23	NULL	69	BP extracellular matrix disassembly
5	15.26	NULL	16	GSEA C2RICKMAN_HEAD_AND_NECK_CANCER_D
6	14.61	NULL	64	BP collagen catabolic process
7	14.51	NULL	15	GSEA C2CROMER_TUMORIGENESIS_UP
8	11.35	NULL	16	GSEA C2FARMER_BREAST_CANCER_CLUSTER_5
9	11.22	NULL	16	MMML C2CIEJ_MMML_1
10	11.1	NULL	183	CC proteinaceous extracellular matrix
11	10.88	NULL	11	MF platelet-derived growth factor binding
12	10.7	NULL	83	CC basement membrane
13	10.28	NULL	633	Chr Chr 9
14	10.18	NULL	403	BP cell adhesion
15	9.8	NULL	12	BP hemidesmosome assembly
16	9.65	NULL	519	Chr Chr 14
17	9.33	NULL	57	MF extracellular matrix structural constituent
18	9.01	NULL	15	GSEA C2SNIJERS_AMPLIFIED_IN_HEAD_AND_NECK_TUMORS
19	8.97	NULL	10	GSEA C2VERRECCHIA_RESPONSE_TO_TGFB1_C4
20	8.72	NULL	37	BP collagen fibril organization
<i>Underexpressed</i>				
1	-13.61	NULL	21	CC cornified envelope
2	-12.51	NULL	42	BP keratinization
3	-11.7	NULL	572	Disease GUDJ_psooriasis up
4	-11.7	NULL	135	H.Tiss WIRTH_Mucosa
5	-10.66	NULL	417	H.Tiss WIRTH_Immune system
6	-9.55	NULL	16	GSEA C2ZHANG_INTERFERON_RESPONSE
7	-9.24	NULL	16	GSEA C2JROSEVIC_RESPONSE_TO_IMIQUMOD
8	-9.11	NULL	16	GSEA C2FARMER_BREAST_CANCER_CLUSTER_1
9	-9.01	NULL	51	BP type I interferon signaling pathway
10	-8.38	NULL	16	GSEA C2MOSERLE_IFNA_RESPONSE
11	-8.2	NULL	1720	Chr Chr 1
12	-8	NULL	53	BP keratinocyte differentiation
13	-7.98	NULL	13	GSEA C2BOWIE_RESPONSE_TO_TAMOXIFEN
14	-7.44	NULL	10	GSEA C2BOWIE_RESPONSE_TO_EXTRACELLULAR_MATRIX
15	-7.41	NULL	31	BP negative regulation of viral genome replication
16	-7.37	NULL	123	BP defense response to virus
17	-6.92	NULL	8	GSEA C2ROETH_TERT_TARGETS_UP
18	-6.72	NULL	1135	Chr Chr 19
19	-6.71	NULL	10	GSEA C2GRANDVAUX_IFN_RESPONSE_NOT_VIA_IRF3
20	-6.66	NULL	16	GSEA C2MAHADEVAN_RESPONSE_TO_MP470_UP

p-values



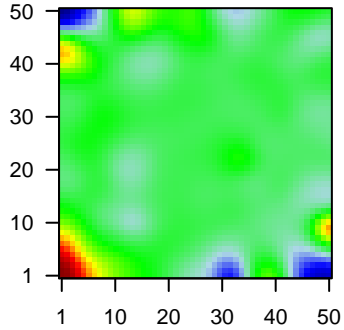
# GW\_149

## Local Summary

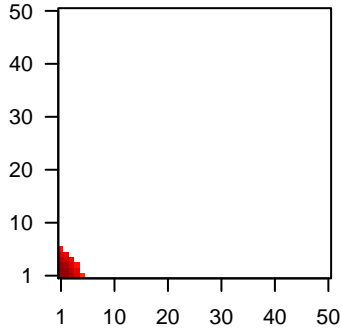
%DE = 0.84  
 # metagenes = 19  
 # genes = 326  
 # genes in genesets = 323  
 # genes with  $fdr < 0.1$  = 223 ( 209 + / 14 - )  
 # genes with  $fdr < 0.05$  = 216 ( 202 + / 14 - )  
 # genes with  $fdr < 0.01$  = 197 ( 185 + / 12 - )

$\langle r \rangle$  metagenes = 0.94  
 $\langle r \rangle$  genes = 0.35  
 $\langle FC \rangle$  = 0.6  
 $\langle \text{shrinkage-t} \rangle$  = 21.02  
 $\langle p\text{-value} \rangle$  = 0  
 $\langle fdr \rangle$  = 0.34

Profile



Spot



## Local Genelist

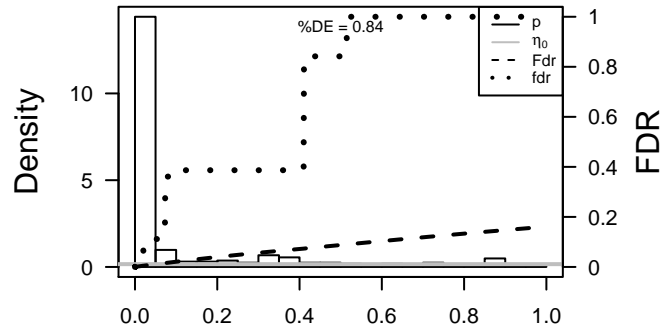
Rank	ID	log(FC)	fdr	p-value	Description
1	72	1.97	2e-16	4e-16	4 x 1 actin, gamma 2, smooth muscle, enteric [Source:HGNC Syml
2	55107	2.12	2e-16	4e-16	1 x 5 anoctamin 1, calcium activated chloride channel [Source:HG
3	164284	1.61	2e-16	4e-16	1 x 3 adenomatosis polyposis coli down-regulated 1-like [Source:†
4	595	1.7	2e-16	4e-16	1 x 6 cyclin D1 [Source:HGNC Symbol;Acc:1582]
5	1277	1.98	2e-16	4e-16	2 x 1 collagen, type I, alpha 1 [Source:HGNC Symbol;Acc:2197]
6	1278	1.8	2e-16	4e-16	2 x 1 collagen, type I, alpha 2 [Source:HGNC Symbol;Acc:2198]
7	1281	1.66	2e-16	4e-16	2 x 1 collagen, type III, alpha 1 [Source:HGNC Symbol;Acc:2201]
8	1289	1.82	2e-16	4e-16	2 x 1 collagen, type V, alpha 1 [Source:HGNC Symbol;Acc:2209]
9	1291	1.81	2e-16	4e-16	2 x 1 collagen, type VI, alpha 1 [Source:HGNC Symbol;Acc:2211]
10	1293	1.74	2e-16	4e-16	2 x 1 collagen, type VI, alpha 3 [Source:HGNC Symbol;Acc:2213]
11	1437	1.32	2e-16	4e-16	1 x 4 colony stimulating factor 2 (granulocyte-macrophage) [Souro
12	10272	1.37	2e-16	4e-16	1 x 4 follistatin-like 3 (secreted glycoprotein) [Source:HGNC Symb
13	3918	1.62	2e-16	4e-16	1 x 4 laminin, gamma 2 [Source:HGNC Symbol;Acc:6493]
14	4312	2.74	2e-16	4e-16	1 x 1 matrix metalloproteinase 1 (interstitial collagenase) [Source:Hi
15	4319	4.09	2e-16	4e-16	1 x 3 matrix metalloproteinase 10 (stromelysin 2) [Source:HGNC Sy
16	4322	3.31	2e-16	4e-16	1 x 2 matrix metalloproteinase 13 (collagenase 3) [Source:HGNC S
17	4316	2.29	2e-16	4e-16	2 x 1 matrix metalloproteinase 7 (matrilysin, uterine) [Source:HGNC
18	4502	1.66	2e-16	4e-16	1 x 3 metallothionein 2A [Source:HGNC Symbol;Acc:7406]
19	4628	1.31	2e-16	4e-16	1 x 5 myosin, heavy chain 10, non-muscle [Source:HGNC Symbol;
20	55714	1.53	2e-16	4e-16	1 x 1 teneurin transmembrane protein 3 [Source:HGNC Symbol;Ac

## Local Geneset Analysis

Overexpression

Rank	GSZ	p-value	#in/all	Geneset
1	40.99	NULL	64 / 190	CC extracellular matrix
2	36.81	NULL	32 / 69	BP extracellular matrix disassembly
3	36.65	NULL	75 / 242	BP extracellular matrix organization
4	36.61	NULL	29 / 64	BP collagen catabolic process
5	34.85	NULL	12 / 15	GSEA C2CROMER_TUMORIGENESIS_UP
6	32.35	NULL	15 / 16	MMML C2C2CIEJ_MMML 1
7	30.7	NULL	76 / 250	LymphomC2ENZ_Stromal signature 1
8	30.17	NULL	8 / 11	MF platelet-derived growth factor binding
9	28.98	NULL	12 / 16	GSEA C2FARMER_BREAST_CANCER_CLUSTER_5
10	24.47	NULL	8 / 12	miRNA target-29c
11	24.37	NULL	6 / 10	GSEA C2VERRECCHIA_RESPONSE_TO_TGFB1_C4
12	22.83	NULL	6 / 10	GSEA C2JEON_SMAD6_TARGETS_UP
13	22.54	NULL	39 / 183	CC proteinaceous extracellular matrix
14	22.32	NULL	10 / 15	GSEA C2ONDER_CDH1_TARGETS_2_UP
15	22.28	NULL	15 / 37	BP collagen fibril organization
16	21.84	NULL	5 / 10	GSEA C2KEGG_ECM_RECEPTOR_INTERACTION
17	21.79	NULL	21 / 57	MF extracellular matrix structural constituent
18	21.11	NULL	9 / 15	GSEA C2ONDER_CDH1_SIGNALING_VIA_CTNNB1
19	20.63	NULL	13 / 35	Glio Colman_survival_associated
20	19.18	NULL	8 / 16	GSEA C2ROZANOV_MMP14_TARGETS_SUBSET
21	18.93	NULL	7 / 14	GSEA C2VERRECCHIA_EARLY_RESPONSE_TO_TGFB1
22	18.34	NULL	25 / 83	CC basement membrane
23	18.24	NULL	7 / 16	GSEA C2TURASHVILI_BREAST_LOBULAR_CARCINOMA_VS_DUCTAL_L
24	18.12	NULL	59 / 403	BP cell adhesion
25	18.02	NULL	3 / 5	GSEA C2VERNELL_RETINOBLASTOMA_PATHWAY_DN
26	17.92	NULL	12 / 19	MF extracellular matrix binding
27	17.68	NULL	4 / 10	BP protein heterotrimerization
28	17.66	NULL	6 / 13	GSEA C2FRIDMAN_SENESCENCE_UP
29	17.66	NULL	81 / 683	CC extracellular space
30	17.6	NULL	6 / 16	GSEA C2ZHU_CMV_24_HR_DN
31	17.6	NULL	6 / 16	GSEA C2ZHU_CMV_ALL_DN
32	17.29	NULL	5 / 15	GSEA C2CHANG_POU5F1_TARGETS_UP
33	17.19	NULL	18 / 68	CC collagen
34	16.94	NULL	6 / 13	GSEA C2TURASHVILI_BREAST_LOBULAR_CARCINOMA_VS_LOBULAR
35	16.8	NULL	5 / 16	GSEA C2REACTOME_SIGNALING_BY_PDGF
36	16.78	NULL	4 / 14	GSEA C2COWLING_MYCN_TARGETS
37	16.68	NULL	115 / 1182	CC extracellular region
38	16.61	NULL	5 / 16	GSEA C2BEGUM_TARGETS_OF_PAX3_FOXO1_FUSION_DN
39	16.6	NULL	7 / 16	GSEA C2CROONQUIST_STROMAL_STIMULATION_UP
40	16.48	NULL	12 / 40	BP cellular response to amino acid stimulus

p-values



# GW\_149

## Local Summary

%DE = 0.94  
 # metagenes = 9  
 # genes = 198  
 # genes in genesets = 196

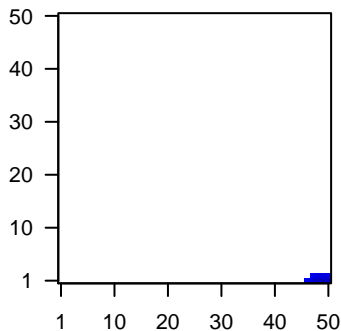
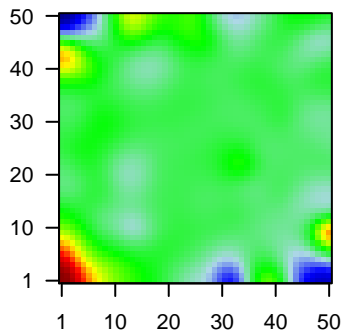
# genes with  $fdr < 0.1$  = 184 ( 10 + / 174 - )  
 # genes with  $fdr < 0.05$  = 159 ( 6 + / 153 - )  
 # genes with  $fdr < 0.01$  = 142 ( 6 + / 136 - )

<r> metagenes = 1  
 <r> genes = 0.64

<FC> = -0.45  
 <shrinkage-t> = -15.71  
 <p-value> = 0  
 <fdr> = 0.33

Profile

Spot



## Local Genelist

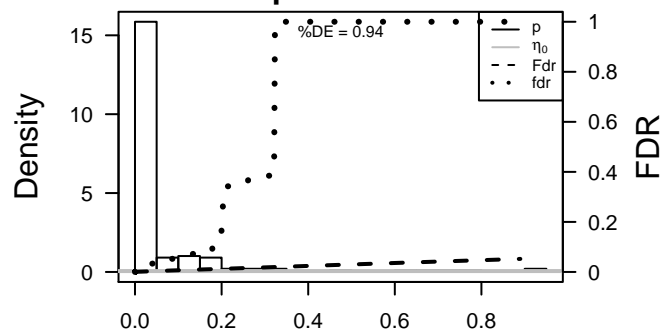
Rank	ID	log(FC)	fdr	p-value	Description
1	330	1.3	4e-16	9e-14	47 x 1 baculoviral IAP repeat containing 3 [Source:HGNC Symbol;Acc:10000]
2	3669	-1.24	9e-15	5e-13	48 x 1 interferon stimulated exonuclease gene 20kDa [Source:HGNC Symbol;Acc:10000]
3	115361	-1.19	1e-13	5e-13	48 x 1 guanylate binding protein 4 [Source:HGNC Symbol;Acc:2048]
4	915	-1.19	1e-13	6e-12	49 x 1 CD3d molecule, delta (CD3-TCR complex) [Source:HGNC Symbol;Acc:10000]
5	3002	-1.15	7e-13	1e-11	49 x 1 granzyme B (granzyme 2, cytotoxic T-lymphocyte-associated protein 10) [Source:HGNC Symbol;Acc:10000]
6	260436	1.13	2e-12	4e-10	50 x 1 follicular dendritic cell secreted protein [Source:HGNC Symbol;Acc:10000]
7	6352	-1.05	6e-11	4e-10	48 x 1 chemokine (C-C motif) ligand 5 [Source:HGNC Symbol;Acc:10000]
8	3108	-1.04	8e-11	1e-09	50 x 1 major histocompatibility complex, class II, DM alpha [Source:HGNC Symbol;Acc:10000]
9	3001	-1.02	2e-10	4e-09	48 x 1 granzyme A (granzyme 1, cytotoxic T-lymphocyte-associated protein 10) [Source:HGNC Symbol;Acc:10000]
10	57172	-0.99	6e-10	8e-09	49 x 1 calcium/calmodulin-dependent protein kinase I gamma [Source:HGNC Symbol;Acc:10000]
11	23231	0.97	1e-09	2e-08	48 x 2 sel-1 suppressor of lin-12-like 3 (C. elegans) [Source:HGNC Symbol;Acc:10000]
12	3128	-0.94	4e-09	2e-08	50 x 1 major histocompatibility complex, class II, DR beta 6 (pseudogene) [Source:HGNC Symbol;Acc:10000]
13	5341	-0.94	5e-09	2e-08	50 x 1 pleckstrin [Source:HGNC Symbol;Acc:9070]
14	962	-0.93	6e-09	6e-08	50 x 1 CD48 molecule [Source:HGNC Symbol;Acc:1683]
15	341	-0.91	1e-08	6e-08	50 x 1 apolipoprotein C-I [Source:HGNC Symbol;Acc:607]
16	9806	-0.9	2e-08	6e-08	50 x 1 sparco/osteonectin, cwcv and kazal-like domains proteoglycan 1 [Source:HGNC Symbol;Acc:10000]
17	914	-0.89	3e-08	6e-08	49 x 1 CD2 molecule [Source:HGNC Symbol;Acc:1639]
18	8635	-0.88	4e-08	6e-08	46 x 1 ribonuclease T2 [Source:HGNC Symbol;Acc:21686]
19	919	-0.88	4e-08	6e-08	50 x 1 CD247 molecule [Source:HGNC Symbol;Acc:1677]
20	2634	-0.88	4e-08	6e-08	47 x 1 guanylate binding protein 2, interferon-inducible [Source:HGNC Symbol;Acc:10000]

## Local Geneset Analysis

Underexpression

Rank	GSZ	p-value	#in/all	Geneset
1	-31.66	NULL	81 / 417	H.Tiss WIRTH_Immune system
2	-25.84	NULL	9 / 16	GSEA C2FARMER_BREAST_CANCER_CLUSTER_1
3	-23.36	NULL	6 / 11	GSEA C2BIOCARTA_TCYTOTOXIC_PATHWAY
4	-21.73	NULL	7 / 15	GSEA C2FINAK_BREAST_CANCER_SDPP_SIGNATURE
5	-21.49	NULL	74 / 553	Cancer Lembecke_Colonic Inflammation
6	-20.65	NULL	4 / 7	Glio Donson-cytotoxic effectors-associated with LTS in HGA
7	-20.48	NULL	5 / 12	GSEA C2BIOCARTA_CTL_PATHWAY
8	-20.12	NULL	5 / 11	GSEA C2BIOCARTA_THELPER_PATHWAY
9	-17.29	NULL	2 / 3	GSEA C2KEGG_VIRAL_MYOCARDITIS
10	-16.86	NULL	3 / 6	GSEA C2SANA_RESPONSE_TO_IFNG_UP
11	-16.83	NULL	4 / 13	GSEA C2BIOCARTA_IL17_PATHWAY
12	-16.81	NULL	5 / 13	Cancer GENTLES_modul18
13	-16.71	NULL	4 / 8	Glio Donson-migration tethering and rolling-associated with LTS in HGA
14	-15.94	NULL	46 / 312	BP immune response
15	-15.89	NULL	12 / 15	CC MHC class II protein complex
16	-15.4	NULL	4 / 10	GSEA C2LEE_DIFFERENTIATING_T_LYMPHOCYTE
17	-15.34	NULL	4 / 10	GSEA C2FLECHNER_BIOPSY_KIDNEY_TRANSPLANT_REJECTED_VS_SURVIVING
18	-14.89	NULL	3 / 7	GSEA C2GRAHAM_CML_DIVIDING_VS_NORMAL_DIVIDING_DN
19	-14.86	NULL	3 / 5	GSEA C2WONG_ENDOMETRIAL_CANCER_LATE
20	-14.7	NULL	16 / 74	BP regulation of immune response
21	-14.55	NULL	2 / 4	GSEA C2KEGG_LEISHMANIA_INFECTION
22	-14.49	NULL	1 / 2	GSEA C2KEGG_INTESTINAL_IMMUNE_NETWORK_FOR_IGA_PRODUCTION
23	-14.49	NULL	1 / 2	GSEA C2KEGG_AUTOIMMUNE_THYROID_DISEASE
24	-14.49	NULL	1 / 2	GSEA C2KEGG_SYSTEMIC_LUPUS_ERYTHEMATOSUS
25	-14.37	NULL	30 / 265	Glio willscher_GBM_Verhaak-CL_expression_B_up
26	-14.37	NULL	30 / 265	Glio willscher_GBM_Verhaak-MES_expression_B_up
27	-14.37	NULL	30 / 265	Glio willscher_GBM_Verhaak-PNwt_expression_B_down
28	-14.37	NULL	30 / 265	Glio willscher_GBM_Verhaak-PNmut_expression_B_down
29	-13.79	NULL	2 / 4	MMML C6SCIEJ_MMML 2
30	-13.42	NULL	5 / 12	BP immunoglobulin mediated immune response
31	-13.37	NULL	3 / 8	GSEA C2REACTOME_IMMUNOREGULATORY_INTERACTIONS_BETWEEN_T_AND_NK_CELL_TYPES
32	-13.31	NULL	3 / 14	GSEA C2BIOCARTA_NO2IL12_PATHWAY
33	-13.31	NULL	3 / 14	GSEA C2BIOCARTA_STATHMIN_PATHWAY
34	-13.14	NULL	3 / 12	CC T cell receptor complex
35	-13.02	NULL	3 / 15	GSEA C2HAHTOLA_SEZARY_SYNDROM_DN
36	-12.85	NULL	8 / 45	BP T cell activation
37	-12.78	NULL	5 / 16	GSEA C2FERRANDO_TAL1_NEIGHBORS
38	-12.76	NULL	3 / 8	GSEA C2GRAHAM_CML_QUIESCENT_VS_NORMAL_DIVIDING_DN
39	-12.69	NULL	2 / 8	GSEA C2BIOCARTA_TCAPOPTOSIS_PATHWAY
40	-12.69	NULL	2 / 8	GSEA C2BIOCARTA_TCRA_PATHWAY

p-values



# GW\_149

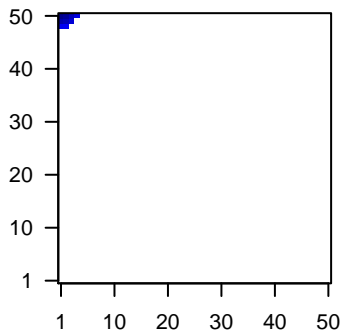
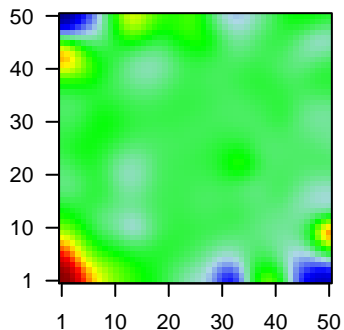
## Local Summary

%DE = 0.9  
 # metagenes = 9  
 # genes = 159  
 # genes in genesets = 156  
 # genes with  $fdr < 0.1$  = 132 ( 14 + / 118 - )  
 # genes with  $fdr < 0.05$  = 122 ( 11 + / 111 - )  
 # genes with  $fdr < 0.01$  = 115 ( 11 + / 104 - )

$\langle r \rangle$  metagenes = 0.99  
 $\langle r \rangle$  genes = 0.5  
 $\langle FC \rangle = -0.67$   
 $\langle \text{shrinkage-t} \rangle = -23.78$   
 $\langle p\text{-value} \rangle = 0$   
 $\langle fdr \rangle = 0.22$

Profile

Spot



## Local Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	131	1.53	2e-16	1e-16	1 x 50 alcohol dehydrogenase 7 (class IV), mu or sigma polypeptide
2	57016	1.41	2e-16	1e-16	1 x 50 aldo-keto reductase family 1, member B10 (aldose reductase
3	218	1.49	2e-16	1e-16	1 x 50 aldehyde dehydrogenase 3 family, member A1 [Source:HGNC
4	23120	-1.45	2e-16	1e-16	1 x 50 ATPase, class V, type 10B [Source:HGNC Symbol;Acc:13543
5	375791	-1.35	2e-16	1e-16	1 x 50 chromosome 9 open reading frame 169 [Source:HGNC Symt
6	51806	-1.33	2e-16	1e-16	4 x 50 calmodulin-like 5 [Source:HGNC Symbol;Acc:18180]
7	1048	-1.51	2e-16	1e-16	2 x 50 carcinoembryonic antigen-related cell adhesion molecule 5 [
8	22802	-2.39	2e-16	1e-16	1 x 50 chloride channel accessory 4 [Source:HGNC Symbol;Acc:20
9	84518	-2.22	2e-16	1e-16	1 x 50 cornifelin [Source:HGNC Symbol;Acc:30183]
10	49860	-2.32	2e-16	1e-16	1 x 50 cornulin [Source:HGNC Symbol;Acc:1230]
11	1476	-1.44	2e-16	1e-16	1 x 50 cystatin B (stefin B) [Source:HGNC Symbol;Acc:2482]
12	414325	-1.52	2e-16	1e-16	1 x 48 defensin, beta 103B [Source:HGNC Symbol;Acc:31702]
13	1673	-2.42	2e-16	1e-16	1 x 49 defensin, beta 4B [Source:HGNC Symbol;Acc:30193]
14	2877	1.59	2e-16	1e-16	1 x 50 glutathione peroxidase 2 (gastrointestinal) [Source:HGNC Sy
15	26085	-1.41	2e-16	1e-16	1 x 50 kallikrein-related peptidase 13 [Source:HGNC Symbol;Acc:6
16	5653	-1.4	2e-16	1e-16	1 x 50 kallikrein-related peptidase 6 [Source:HGNC Symbol;Acc:63
17	5650	-1.33	2e-16	1e-16	1 x 49 kallikrein-related peptidase 7 [Source:HGNC Symbol;Acc:63
18	3851	-2.07	2e-16	1e-16	1 x 50 keratin 4 [Source:HGNC Symbol;Acc:6441]
19	4118	-2.08	2e-16	1e-16	1 x 50 mal, T-cell differentiation protein [Source:HGNC Symbol;Acc
20	342897	-1.87	2e-16	1e-16	1 x 50 non-specific cytotoxic cell receptor protein 1 homolog (zebraf

## Local Geneset Analysis

Underexpression

Rank	GSZ	p-value	#in/all	Geneset
1	-41.29	NULL	67 / 135	H.Tiss WIRTH_Mucosa
2	-39.67	NULL	14 / 21	CC cornified envelope
3	-34.39	NULL	16 / 42	BP keratinization
4	-28.65	NULL	19 / 53	BP keratinocyte differentiation
5	-23.96	NULL	8 / 19	BP peptide cross-linking
6	-23.53	NULL	18 / 76	BP epidermis development
7	-19.81	NULL	70 / 572	Disease GUUDJ_poriasis up
8	-18.98	NULL	6 / 13	BP negative regulation of peptidase activity
9	-17.04	NULL	5 / 16	GSEA C2WANG_BARRETTES_ESOPHAGUS_DN
10	-16.38	NULL	4 / 10	MF RAGE receptor binding
11	-15.86	NULL	6 / 15	GSEA C2WANG_BARRETTES_ESOPHAGUS_AND_ESOPHAGUS_CANCE
12	-14.23	NULL	6 / 16	GSEA C2CROMER_TUMORIGENESIS_DN
13	-12.51	NULL	4 / 13	H.Tiss WIRTH_Tonsil
14	-11.89	NULL	6 / 16	GSEA C2SENGUPTA_NASOPHARYNGEAL_CARCINOMA_DN
15	-10.77	NULL	1 / 8	GSEA C2LIU_CDX2_TARGETS_DN
16	-10.45	NULL	6 / 38	BP epithelial cell differentiation
17	-10.32	NULL	3 / 15	GSEA C2RICKMAN_HEAD_AND_NECK_CANCER_E
18	-10.03	NULL	13 / 186	MF structural molecule activity
19	-9.82	NULL	6 / 15	GSEA C2HINATA_NFKB_TARGETS_KERATINOCYTE_DN
20	-9.75	NULL	3 / 15	GSEA C2PYEON_CANCER_HEAD_AND_NECK_VS_CERVICAL_DN
21	-9.36	NULL	4 / 15	GSEA C2LEE_LIVER_CANCER_MYC_E2F1_UP
22	-8.57	NULL	3 / 16	GSEA C2SMID_BREAST_CANCER_RELAPSE_IN_LUNG_UP
23	-8.35	NULL	2 / 14	GSEA C2ZHAN_MULTIPLE_MYELOMA_MF_UP
24	-8.3	NULL	10 / 79	MF serine-type endopeptidase inhibitor activity
25	-7.6	NULL	2 / 15	GSEA C2ALONSO_METASTASIS_NEURAL_UP
26	-7.45	NULL	1 / 12	GSEA C2DODDNEILL_METASTASIS_DN
27	-7.45	NULL	1 / 12	GSEA C2SYED ESTRADIOL_RESPONSE
28	-7.43	NULL	1 / 5	GSEA C2NAKAMURA_LUNG_CANCER
29	-7.43	NULL	1 / 5	GSEA C2NAKAMURA_LUNG_CANCER_MARKERS
30	-7.43	NULL	8 / 52	BP negative regulation of endopeptidase activity
31	-7.13	NULL	3 / 14	GSEA C2KIM_RESPONSE_TO_TSA_AND_DECITABINE_UP
32	-7.06	NULL	2 / 15	GSEA C2LEE_LIVER_CANCER_E2F1_UP
33	-7.04	NULL	2 / 17	Disease BCHETNIA_EBM up
34	-7.03	NULL	3 / 16	GSEA C2AMIT_SERUM_RESPONSE_480_MCF10A
35	-6.94	NULL	5 / 29	BP regulation of proteolysis
36	-6.92	NULL	5 / 21	CC desmosome
37	-6.87	NULL	6 / 82	CC intermediate filament
38	-6.67	NULL	10 / 122	MF serine-type endopeptidase activity
39	-6.66	NULL	4 / 44	CC keratin filament
40	-6.6	NULL	1 / 11	Glio VERHAAK_Brain

p-values

