

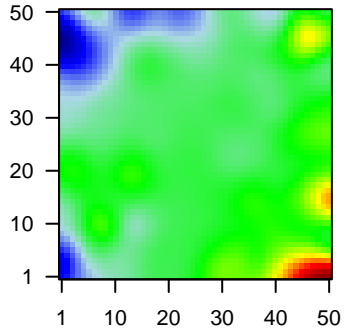
# GW\_088

## Global Summary

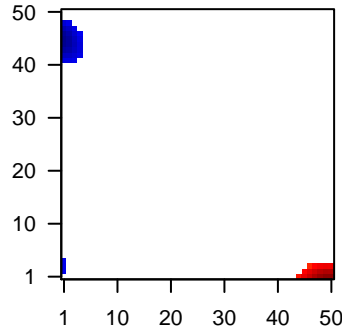
%DE = 0.16  
 # genes with  $fdr < 0.2$  = 2219 ( 1236 + / 983 - )  
 # genes with  $fdr < 0.1$  = 1863 ( 1044 + / 819 - )  
 # genes with  $fdr < 0.05$  = 1458 ( 833 + / 625 - )  
 # genes with  $fdr < 0.01$  = 1053 ( 606 + / 447 - )  
 # genes in genesets = 16332

<FC> = 0  
 <shrinkage-t> = 0  
 <p-value> = 0.08  
 <fdr> = 0.84

Profile



Regulated Spots



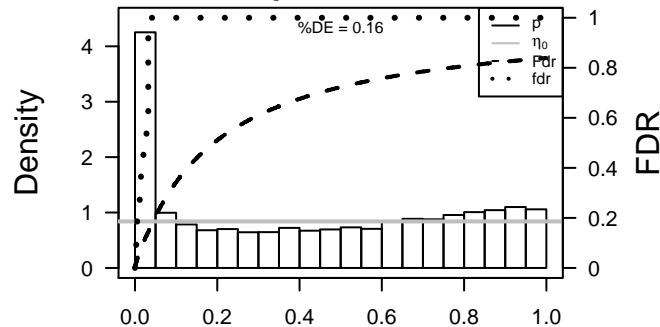
## Global Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	154664	1.47	2e-16	2e-14	50 x 50 ATP-binding cassette, sub-family A (ABC1), member 13 [Source:HGNC Symbol;Acc:607]
2	21	2.11	2e-16	2e-14	50 x 17 ATP-binding cassette, sub-family A (ABC1), member 3 [Source:HGNC Symbol;Acc:607]
3	58	1.76	2e-16	2e-14	25 x 1 actin, alpha 1, skeletal muscle [Source:HGNC Symbol;Acc:12528]
4	131	1.87	2e-16	2e-14	1 x 50 alcohol dehydrogenase 7 (class IV), mu or sigma polypeptide [Source:HGNC Symbol;Acc:607]
5	57016	-1.59	2e-16	2e-14	1 x 50 aldo-keto reductase family 1, member B10 (aldose reductase) [Source:HGNC Symbol;Acc:607]
6	441282	-1.79	2e-16	2e-14	1 x 49 aldo-keto reductase family 1, member B15 [Source:HGNC Symbol;Acc:607]
7	8644	-2.43	2e-16	2e-14	1 x 50 aldo-keto reductase family 1, member C3 [Source:HGNC Symbol;Acc:607]
8	1109	-2.13	2e-16	2e-14	13 x 50 aldo-keto reductase family 1, member C4 [Source:HGNC Symbol;Acc:607]
9	65124	-1.61	2e-16	2e-14	1 x 45 sosondowah ankyrin repeat domain family member C [Source:HGNC Symbol;Acc:607]
10	55107	-1.61	2e-16	2e-14	1 x 5 anoctamin 1, calcium activated chloride channel [Source:HGNC Symbol;Acc:607]
11	341	1.62	2e-16	2e-14	50 x 1 apolipoprotein C-I [Source:HGNC Symbol;Acc:607]
12	348	1.62	2e-16	2e-14	50 x 1 apolipoprotein E [Source:HGNC Symbol;Acc:613]
13	445	1.68	2e-16	2e-14	50 x 47 argininosuccinate synthase 1 [Source:HGNC Symbol;Acc:754]
14	23120	-1.52	2e-16	2e-14	1 x 50 ATPase, class V, type 10B [Source:HGNC Symbol;Acc:13543]
15	10974	1.83	2e-16	2e-14	5 x 50 adipogenesis regulatory factor [Source:HGNC Symbol;Acc:24]
16	387695	-1.76	2e-16	2e-14	1 x 49 chromosome 10 open reading frame 99 [Source:HGNC Symbol;Acc:607]
17	399948	2.16	2e-16	2e-14	50 x 15 colorectal cancer associated 1 [Source:HGNC Symbol;Acc:31]
18	116028	1.49	2e-16	2e-14	46 x 47 RecQ mediated genome instability 2 [Source:HGNC Symbol;Acc:607]
19	713	1.7	2e-16	2e-14	50 x 1 complement component 1, q subcomponent, B chain [Source:HGNC Symbol;Acc:607]
20	343990	1.72	2e-16	2e-14	50 x 12 KIAA1211-like [Source:HGNC Symbol;Acc:33454]

## Global Geneset Analysis

Rank	GSZ	p-value	#all	Geneset
<i>Overexpressed</i>				
1	16.04	NULL	417	H.Tiss WIRTH_Immune system
2	9.61	NULL	11	GSEA C2BIOCARTA_TCYTOTOXIC_PATHWAY
3	9.51	NULL	12	GSEA C2BIOCARTA_CTL_PATHWAY
4	9.04	NULL	14	GSEA C2BIOCARTA_NO2IL12_PATHWAY
5	8.83	NULL	1135	Chr Chr 19
6	8.82	NULL	74	BP regulation of immune response
7	8.73	NULL	11	GSEA C2BIOCARTA_THELPER_PATHWAY
8	8.01	NULL	312	BP immune response
9	8	NULL	15	CC MHC class II protein complex
10	7.81	NULL	7	Glio Donson-cytotoxic effectors-associated with LTS in HGA
11	7.74	NULL	633	Chr Chr 9
12	7.22	NULL	13	Cancer GENTLES_modul18
13	7.07	NULL	14	GSEA C2BIOCARTA_IL12_PATHWAY
14	6.79	NULL	142	Glio willscher_GBM_Verhaak-CL_expression_C_up
15	6.79	NULL	142	Glio willscher_GBM_Verhaak-PNmut_expression_C_down
16	6.72	NULL	12	CC T cell receptor complex
17	6.41	NULL	16	BP cytolysis
18	6.35	NULL	149	BP DNA replication
19	6.27	NULL	162	CC external side of plasma membrane
20	6.11	NULL	16	GSEA C2FARMER_BREAST_CANCER_CLUSTER_1
<i>Underexpressed</i>				
1	-12.45	NULL	714	Chr Chr 6
2	-10.97	NULL	135	H.Tiss WIRTH_Mucosa
3	-9.52	NULL	16	GSEA C2HUPER_BREAST_BASAL_VS_LUMINAL_UP
4	-8.75	NULL	16	GSEA C2AMIT_SERUM_RESPONSE_40_MCF10A
5	-7.92	NULL	76	BP epidermis development
6	-7.74	NULL	16	GSEA C2UZONYL_RESPONSE_TO_LEUKOTRIENE_AND_THROMBIN
7	-7.71	NULL	10	GSEA C2CHASSOT_SKIN_WOUND
8	-7.59	NULL	242	BP extracellular matrix organization
9	-7.55	NULL	190	CC extracellular matrix
10	-7.23	NULL	16	GSEA C2ELVIDGE_HYPOXIA_UP
11	-6.94	NULL	15	GSEA C2CROMER_TUMORIGENESIS_UP
12	-6.93	NULL	572	Disease GUDJ_poriasis up
13	-6.86	NULL	59	LymphomaENZ_Stromal signature 2
14	-6.82	NULL	53	BP keratinocyte differentiation
15	-6.72	NULL	914	Chr Chr 3
16	-6.67	NULL	83	CC basement membrane
17	-6.64	NULL	21	CC desmosome
18	-6.58	NULL	12	BP hemidesmosome assembly
19	-6.4	NULL	16	GSEA C2AMIT_EGF_RESPONSE_60_HEL4
20	-6.28	NULL	16	GSEA C2NAGASHIMA_EGF_SIGNALING_UP

p-values



# GW\_088

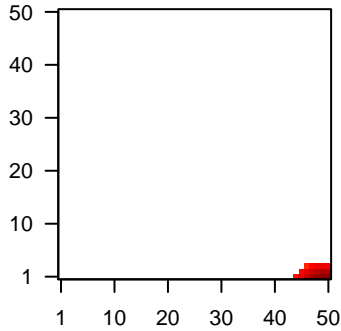
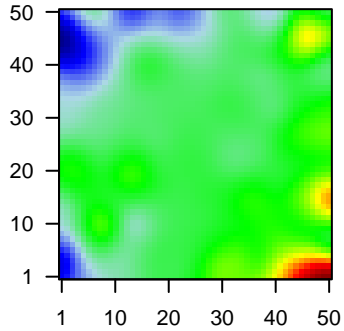
## Local Summary

%DE = 0.93  
 # metagenes = 18  
 # genes = 294  
 # genes in genesets = 291  
 # genes with  $fdr < 0.1$  = 247 ( 245 + / 2 - )  
 # genes with  $fdr < 0.05$  = 244 ( 242 + / 2 - )  
 # genes with  $fdr < 0.01$  = 217 ( 216 + / 1 - )

$\langle r \rangle$  metagenes = 0.98  
 $\langle r \rangle$  genes = 0.58  
 $\langle FC \rangle$  = 0.83  
 $\langle \text{shrinkage-t} \rangle$  = 29.23  
 $\langle p\text{-value} \rangle$  = 0  
 $\langle fdr \rangle$  = 0.21

Profile

Spot



## Local Genelist

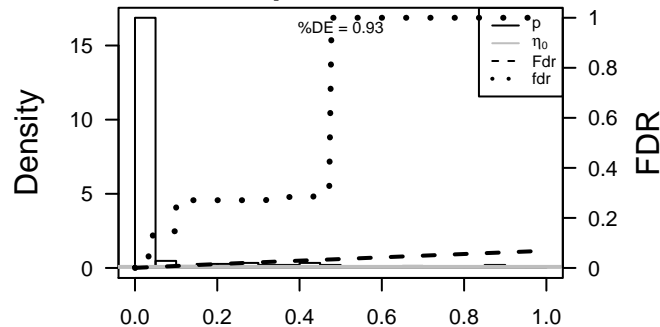
Rank	ID	log(FC)	fdr	p-value	Description
1	341	1.62	2e-16	1e-16	50 x 1 apolipoprotein C-I [Source:HGNC Symbol;Acc:607]
2	348	1.62	2e-16	1e-16	50 x 1 apolipoprotein E [Source:HGNC Symbol;Acc:613]
3	713	1.7	2e-16	1e-16	50 x 1 complement component 1, q subcomponent, B chain [Source
4	260436	3.43	2e-16	1e-16	50 x 1 follicular dendritic cell secreted protein [Source:HGNC Symbc
5	914	1.57	2e-16	1e-16	49 x 1 CD2 molecule [Source:HGNC Symbol;Acc:1639]
6	915	1.88	2e-16	1e-16	49 x 1 CD3d molecule, delta (CD3-TCR complex) [Source:HGNC S
7	924	1.57	2e-16	1e-16	49 x 1 CD7 molecule [Source:HGNC Symbol;Acc:1695]
8	925	1.5	2e-16	1e-16	48 x 1 CD8a molecule [Source:HGNC Symbol;Acc:1706]
9	169044	1.48	2e-16	1e-16	45 x 1 collagen, type XXII, alpha 1 [Source:HGNC Symbol;Acc:2298
10	6376	1.67	2e-16	1e-16	44 x 1 chemokine (C-X3-C motif) ligand 1 [Source:HGNC Symbol;f
11	4283	2.64	2e-16	1e-16	49 x 1 chemokine (C-X-C motif) ligand 9 [Source:HGNC Symbol;Ac
12	1593	1.5	2e-16	1e-16	50 x 3 cytochrome P450, family 27, subfamily A, polypeptide 1 [Sou
13	8320	1.67	2e-16	1e-16	48 x 1 eomesodermin [Source:HGNC Symbol;Acc:3372]
14	3001	1.89	2e-16	1e-16	48 x 1 granzyme A (granzyme 1, cytotoxic T-lymphocyte-associated
15	3002	2.25	2e-16	1e-16	49 x 1 granzyme B (granzyme 2, cytotoxic T-lymphocyte-associated
16	2999	1.89	2e-16	1e-16	47 x 1 granzyme H (cathepsin G-like 2, protein h-CCPX) [Source:H
17	3003	1.65	2e-16	1e-16	49 x 1 granzyme K (granzyme 3; tryptase II) [Source:HGNC Symbol
18	3109	1.49	2e-16	1e-16	50 x 1 major histocompatibility complex, class II, DM beta [Source:H
19	3113	1.67	2e-16	1e-16	50 x 1 major histocompatibility complex, class II, DP alpha 1 [Source
20	3120	1.71	2e-16	1e-16	47 x 1 major histocompatibility complex, class II, DQ beta 2 [Source:

## Local Geneset Analysis

Overexpression

Rank	GSZ	p-value	#in/all	Geneset
1	32.37	NULL	100 / 417	H.Tiss WIRTH_Immune system
2	24.9	NULL	13 / 15	CC MHC class II protein complex
3	24.18	NULL	4 / 7	Glio Donson-cytotoxic effectors-associated with LTS in HGA
4	23.83	NULL	7 / 11	GSEA C2BIOCARTA_TCYTOTOXIC_PATHWAY
5	21.37	NULL	96 / 553	Cancer Lembcke_Colonc Inflammation
6	21.17	NULL	7 / 11	GSEA C2BIOCARTA_THELPER_PATHWAY
7	20.76	NULL	6 / 12	GSEA C2BIOCARTA_CTL_PATHWAY
8	19.85	NULL	57 / 312	BP immune response
9	19	NULL	8 / 13	Cancer GENTLES_modul18
10	18.69	NULL	9 / 16	GSEA C2FARMER_BREAST_CANCER_CLUSTER_1
11	17.59	NULL	7 / 15	GSEA C2FINAK_BREAST_CANCER_SDP_SIGNATURE
12	17.09	NULL	17 / 74	BP regulation of immune response
13	16.94	NULL	6 / 13	GSEA C2BIOCARTA_IL17_PATHWAY
14	16.67	NULL	5 / 12	GSEA C2ZHAN_MULTIPLE_MYELOMA_DN
15	16.23	NULL	7 / 14	GSEA C2BIOCARTA_NO2IL12_PATHWAY
16	15.8	NULL	2 / 4	MMML C6SCIEJ_MMML 2
17	15.27	NULL	15 / 47	BP antigen processing and presentation
18	14.99	NULL	4 / 8	Glio Donson-migration tethering and rolling-associated with LTS in HGA
19	14.92	NULL	5 / 15	Glio Donson-chemokines/cytokines-associated with LTS in HGA
20	14.92	NULL	40 / 265	Glio willscher_GBM_Verhaak-CL_expression_B_up
21	14.92	NULL	40 / 265	Glio willscher_GBM_Verhaak-MES_expression_B_up
22	14.92	NULL	40 / 265	Glio willscher_GBM_Verhaak-PNwt_expression_B_down
23	14.92	NULL	40 / 265	Glio willscher_GBM_Verhaak-PNwt_expression_B_down
24	14.56	NULL	5 / 13	GSEA C2HAHTOLA_CTL_PATHOGENESIS
25	14.32	NULL	3 / 5	GSEA C2WONG_ENDOMETRIAL_CANCER_LATE
26	14.27	NULL	4 / 10	GSEA C2LEE_DIFFERENTIATING_T_LYMPHOCYTE
27	14.01	NULL	5 / 12	CC T cell receptor complex
28	13.95	NULL	4 / 8	GSEA C2REACTOME_IMMUNOREGULATORY_INTERACTIONS_BETWEEN
29	13.32	NULL	5 / 16	GSEA C2FERRANDO_TAL1_NEIGHBORS
30	13.23	NULL	4 / 8	GSEA C2BIOCARTA_TCAPOPTOSIS_PATHWAY
31	13.23	NULL	4 / 8	GSEA C2BIOCARTA_TCRA_PATHWAY
32	12.83	NULL	2 / 3	GSEA C2KEGG_VIRAL_MYOCARDITIS
33	12.82	NULL	4 / 10	GSEA C2FLECHNER_BIOPSY_KIDNEY_TRANSPLANT_REJECTED_VS_
34	12.66	NULL	6 / 13	MMML C6SCIEJ_MMML 6
35	12.63	NULL	28 / 162	CC external side of plasma membrane
36	12.51	NULL	26 / 204	BP cell surface receptor signaling pathway
37	12.4	NULL	4 / 10	GSEA C2BIOCARTA_LYM_PATHWAY
38	12.35	NULL	18 / 60	BP T cell costimulation
39	12.23	NULL	2 / 4	GSEA C2REACTOME_CLASSICAL_ANTIBODY_MEDIATED_COMPLEMEN
40	12.19	NULL	2 / 5	GSEA C2WEST_ADRENOCORITICAL_CARCCINOMA_VS_ADENOMA_DN

p-values



# GW\_088

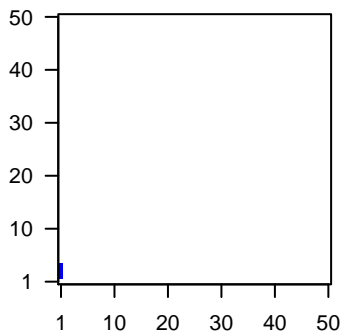
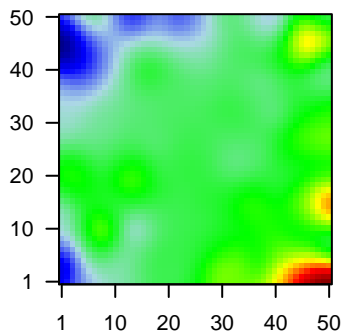
## Local Summary

%DE = 0.96  
 # metagenes = 3  
 # genes = 66  
 # genes in genesets = 66  
 # genes with  $fdr < 0.1$  = 56 ( 4 + / 52 - )  
 # genes with  $fdr < 0.05$  = 54 ( 4 + / 50 - )  
 # genes with  $fdr < 0.01$  = 54 ( 4 + / 50 - )

$\langle r \rangle$  metagenes = 0.99  
 $\langle r \rangle$  genes = 0.44  
 $\langle FC \rangle = -0.61$   
 $\langle \text{shrinkage-t} \rangle = -21.33$   
 $\langle p\text{-value} \rangle = 0$   
 $\langle fdr \rangle = 0.24$

Profile

Spot



## Local Genelist

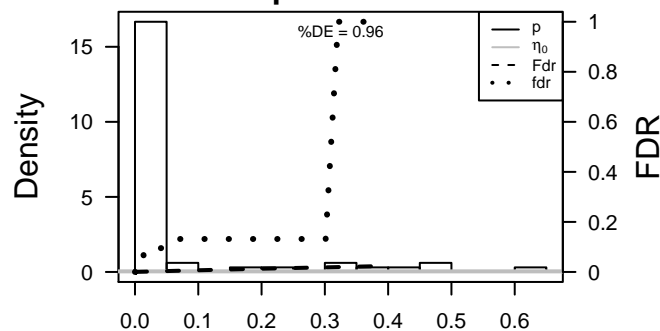
Rank	ID	log(FC)	fdr	p-value	Description
1	4319	-2.32	2e-16	2e-16	1 x 3 matrix metalloproteinase 10 (stromelysin 2) [Source:HGNC Sy
2	5054	-1.65	2e-16	2e-16	1 x 2 serpin peptidase inhibitor, clade E (nexin, plasminogen activa
3	3371	-1.78	2e-16	2e-16	1 x 3 tenascin C [Source:HGNC Symbol;Acc:5318]
4	27122	-1.46	4e-16	2e-15	1 x 3 dickkopf WNT signaling pathway inhibitor 3 [Source:HGNC S
5	1687	-1.44	1e-15	4e-15	1 x 4 deafness, autosomal dominant 5 [Source:HGNC Symbol;Acc
6	10512	-1.42	3e-15	2e-11	1 x 4 sema domain, immunoglobulin domain (Ig), short basic doma
7	6591	-1.23	1e-11	2e-11	1 x 4 snail family zinc finger 2 [Source:HGNC Symbol;Acc:11094]
8	4907	-1.21	2e-11	3e-10	1 x 3 5'-nucleotidase, ecto (CD73) [Source:HGNC Symbol;Acc:80
9	857	-1.16	1e-10	7e-10	1 x 4 caveolin 1, caveolae protein, 22kDa [Source:HGNC Symbol;A
10	8870	-1.13	4e-10	2e-09	1 x 3 immediate early response 3 [Source:HGNC Symbol;Acc:539
11	7045	-1	1e-09	2e-08	1 x 2 transforming growth factor, beta-induced, 68kDa [Source:HG
12	11009	-1.04	8e-09	2e-07	1 x 3 interleukin 24 [Source:HGNC Symbol;Acc:11346]
13	10381	-0.96	1e-07	2e-07	1 x 4 tubulin, beta 3 class III [Source:HGNC Symbol;Acc:20772]
14	5328	-0.94	2e-07	2e-07	1 x 3 plasminogen activator, urokinase [Source:HGNC Symbol;Acc
15	56603	-0.93	2e-07	3e-07	1 x 4 cytochrome P450, family 26, subfamily B, polypeptide 1 [Sour
16	3918	-0.91	4e-07	3e-07	1 x 4 laminin, gamma 2 [Source:HGNC Symbol;Acc:6493]
17	4322	-0.91	4e-07	1e-06	1 x 2 matrix metalloproteinase 13 (collagenase 3) [Source:HGNC S
18	259217	-0.89	9e-07	5e-06	1 x 4 heat shock 70kDa protein 12A [Source:HGNC Symbol;Acc:1
19	51050	-0.85	3e-06	6e-05	1 x 2 peptidase inhibitor 15 [Source:HGNC Symbol;Acc:8946]
20	5270	-0.74	4e-05	6e-05	1 x 3 serpin peptidase inhibitor, clade E (nexin, plasminogen activa

## Local Geneset Analysis

Underexpression

Rank	GSZ	p-value	#in/all	Geneset
1	-27.18	NULL	2 / 7	GSEA C2FREDERICK_PRKCI_TARGETS
2	-22.23	NULL	1 / 4	GSEA C2DACOSTA_LOW_DOSE_UV_RESPONSE_VIA_ERCC3_XPCS_D
3	-21.98	NULL	3 / 15	GSEA C2CROMER_TUMORIGENESIS_UP
4	-19.58	NULL	2 / 14	GSEA C2AZARD_UV_RESPONSE_CLUSTER_G4
5	-18.93	NULL	2 / 10	BP regulation of receptor activity
6	-18.93	NULL	2 / 10	GSEA C2BIOCARTA_FIBRINOLYSIS_PATHWAY
7	-18.92	NULL	1 / 5	GSEA C2VERNELL_RETINOBLASTOMA_PATHWAY_DN
8	-18.91	NULL	2 / 16	GSEA C2BEGUM_TARGETS_OF_PAX3_FOXO1_FUSION_DN
9	-17.85	NULL	2 / 11	GSEA C2BIOCARTA_PLATELETAPP_PATHWAY
10	-17.57	NULL	2 / 15	GSEA C2ONDER_CDH1_SIGNALING_VIA_CTNNB1
11	-17.46	NULL	2 / 10	BP negative regulation of blood coagulation
12	-17.33	NULL	3 / 37	Glio Christensen_hypomethylated_in_ependymoma
13	-17.19	NULL	3 / 15	BP fibrinolysis
14	-17.04	NULL	2 / 13	GSEA C2XU_HGF_TARGETS_INDUCED_BY_AKT1_48HR_UP
15	-16.96	NULL	1 / 10	GSEA C2L_CISPLATIN_RESISTANCE_DN
16	-16.91	NULL	2 / 16	GSEA C2SESTO_RESPONSE_TO_UV_C8
17	-16.83	NULL	3 / 15	BP negative regulation of anoikis
18	-16.69	NULL	1 / 6	GSEA C2MAINA_HYPOXIA_VHL_TARGETS_UP
19	-16.54	NULL	5 / 35	Glio Colman_survival_associated
20	-15.66	NULL	1 / 2	miRNA target-101b
21	-15.44	NULL	2 / 16	GSEA C2KERLEY_RESPONSE_TO_CISPLATIN_UP
22	-15.15	NULL	1 / 12	GSEA C2Y_AGING_MIDDLE_UP
23	-15.06	NULL	1 / 7	GSEA C2GAUTSCHI_SRC_SIGNALING
24	-15.06	NULL	1 / 7	GSEA C2DASU_IL6_SIGNALING_DN
25	-14.43	NULL	1 / 13	GSEA C2AUNG_GASTRIC_CANCER
26	-14.36	NULL	2 / 15	GSEA C2OSADA_ASCL1_TARGETS_DN
27	-13.92	NULL	3 / 16	GSEA C2FERRARI_RESPONSE_TO_FENRETINIDE_UP
28	-13.81	NULL	1 / 8	GSEA C2NAKAYAMA_SOFT_TISSUE_TUMORS_PCA1_UP
29	-13.81	NULL	1 / 8	GSEA C2KEGG_COMPLEMENT_AND_COAGULATION_CASCADES
30	-13.8	NULL	1 / 14	GSEA C2COWLING_MYCN_TARGETS
31	-13.78	NULL	2 / 14	GSEA C2ZHANG_ANTIVIRAL_RESPONSE_TO_RIBAVIRIN_DN
32	-13.71	NULL	1 / 2	TF MYC_ECM cell adhesion DOWN
33	-13.62	NULL	20 / 683	CC extracellular space
34	-13.24	NULL	1 / 15	GSEA C2TRAYNOR_RETT_SYNDROM_UP
35	-12.96	NULL	1 / 7	GSEA C2KANG_CISPLATIN_RESISTANCE_DN
36	-12.96	NULL	1 / 10	BP prostate gland epithelium morphogenesis
37	-12.74	NULL	1 / 16	GSEA C2ONDER_CDH1_TARGETS_3_DN
38	-12.74	NULL	1 / 16	GSEA C2HUPER_BREAST_BASAL_VS_LUMINAL_UP
39	-12.5	NULL	2 / 15	GSEA C2LEE_LIVER_CANCER_HEPATOBLAST
40	-12.44	NULL	7 / 190	CC extracellular matrix

p-values



# GW\_088

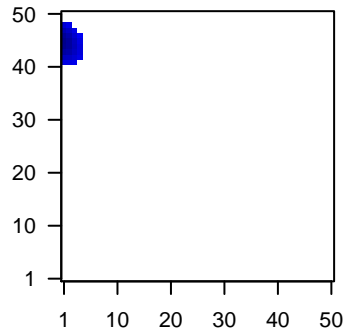
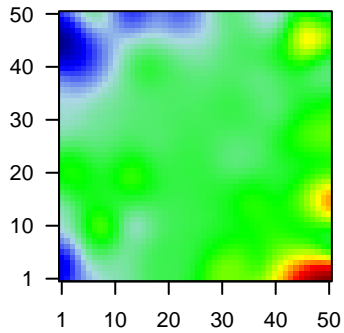
## Local Summary

%DE = 0.88  
 # metagenes = 28  
 # genes = 309  
 # genes in genesets = 303  
 # genes with  $fdr < 0.1$  = 254 ( 14 + / 240 - )  
 # genes with  $fdr < 0.05$  = 241 ( 14 + / 227 - )  
 # genes with  $fdr < 0.01$  = 201 ( 12 + / 189 - )

$\langle r \rangle$  metagenes = 0.92  
 $\langle r \rangle$  genes = 0.37  
 $\langle FC \rangle = -0.65$   
 $\langle \text{shrinkage-t} \rangle = -22.96$   
 $\langle p\text{-value} \rangle = 0$   
 $\langle fdr \rangle = 0.27$

Profile

Spot



## Local Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	65124	-1.61	2e-16	3e-16	1 x 45 sosondowah ankyrin repeat domain family member C [Source:HGNC Symbol;Acc:13711]
2	771	-1.91	2e-16	3e-16	1 x 44 carbonic anhydrase XII [Source:HGNC Symbol;Acc:13711]
3	9635	-2.23	2e-16	3e-16	1 x 46 chloride channel accessory 2 [Source:HGNC Symbol;Acc:20711]
4	51200	-1.48	2e-16	3e-16	1 x 44 carboxypeptidase A4 [Source:HGNC Symbol;Acc:15740]
5	9547	-2.1	2e-16	3e-16	1 x 46 chemokine (C-X-C motif) ligand 14 [Source:HGNC Symbol;Acc:15740]
6	2150	-1.74	2e-16	3e-16	1 x 44 coagulation factor II (thrombin) receptor-like 1 [Source:HGNC Symbol;Acc:15740]
7	2171	-2.31	2e-16	3e-16	1 x 46 fatty acid binding protein 5 (psoriasis-associated) [Source:HGNC Symbol;Acc:15740]
8	9982	-1.78	2e-16	3e-16	1 x 47 fibroblast growth factor binding protein 1 [Source:HGNC Symbol;Acc:15740]
9	2697	-1.76	2e-16	3e-16	1 x 44 gap junction protein, alpha 1, 43kDa [Source:HGNC Symbol;Acc:15740]
10	10804	-1.92	2e-16	3e-16	1 x 47 gap junction protein, beta 6, 30kDa [Source:HGNC Symbol;Acc:15740]
11	56169	-1.5	2e-16	3e-16	1 x 46 gasdermin C [Source:HGNC Symbol;Acc:7151]
12	3489	-2.02	2e-16	3e-16	1 x 44 insulin-like growth factor binding protein 6 [Source:HGNC Symbol;Acc:7151]
13	53833	-1.96	2e-16	3e-16	1 x 46 interleukin 20 receptor beta [Source:HGNC Symbol;Acc:6004]
14	3861	-2.62	2e-16	3e-16	1 x 45 keratin 14 [Source:HGNC Symbol;Acc:6416]
15	3868	-1.65	2e-16	3e-16	1 x 46 keratin 16 [Source:HGNC Symbol;Acc:6423]
16	5744	-2.2	2e-16	3e-16	1 x 43 parathyroid hormone-like hormone [Source:HGNC Symbol;Acc:6423]
17	5836	-1.82	2e-16	3e-16	1 x 44 phosphorylase, glycogen, liver [Source:HGNC Symbol;Acc:9711]
18	23682	-2.05	2e-16	3e-16	1 x 46 RAB38, member RAS oncogene family [Source:HGNC Symbol;Acc:9711]
19	5947	-1.62	2e-16	3e-16	1 x 43 retinol binding protein 1, cellular [Source:HGNC Symbol;Acc:9711]
20	338324	-2.08	2e-16	3e-16	1 x 48 S100 calcium binding protein A7A [Source:HGNC Symbol;Acc:9711]

## Local Geneset Analysis

Underexpression

Rank	GSZ	p-value	#in/all	Geneset
1	-24.63	NULL	40 / 135	H.Tiss WIRTH_Mucosa
2	-22.4	NULL	8 / 16	GSEA C2HUPER_BREAST_BASAL_VS_LUMINAL_UP
3	-18.58	NULL	84 / 572	Disease GUDJ_psooriasis_up
4	-17.08	NULL	3 / 6	GSEA C2SMID_BREAST_CANCER_RELAPSE_IN_PLEURA_UP
5	-16.6	NULL	11 / 21	CC desmosome
6	-15.19	NULL	3 / 8	GSEA C2LIU_CDX2_TARGETS_DN
7	-14.68	NULL	2 / 2	miRNA target-199a*
8	-14.49	NULL	19 / 82	CC intermediate filament
9	-14.28	NULL	17 / 76	BP epidermis development
10	-13.57	NULL	4 / 13	BP intermediate filament cytoskeleton organization
11	-13.17	NULL	2 / 8	GSEA C2DORN_ADENOVIRUS_INFECTION_24HR_UP
12	-12.59	NULL	3 / 12	GSEA C2REACTOME_GAP_JUNCTION_ASSEMBLY
13	-12.49	NULL	4 / 10	GSEA C2REACTOME_APOPTOTIC_CLEAVAGE_OF_CELL_ADHESION_P
14	-11.93	NULL	3 / 11	GSEA C2GAUSSMANN_MLL_AF4_FUSION_TARGETS_G_UP
15	-11.82	NULL	3 / 16	GSEA C2BECKER_TAMOXIFEN_RESISTANCE_DN
16	-11.66	NULL	4 / 13	GSEA C2REACTOME_GAP_JUNCTION_TRAFFICKING
17	-11.44	NULL	5 / 21	CC gap junction
18	-11.33	NULL	2 / 7	GSEA C2YE_METASTATIC_LIVER_CANCER
19	-11.15	NULL	4 / 15	GSEA C2RICKMAN_TUMOR_DIFFERENTIATED_WELL_VS_POORLY_DN
20	-11.08	NULL	3 / 15	CC connexon complex
21	-10.71	NULL	5 / 12	BP hemidesmosome assembly
22	-10.68	NULL	9 / 44	CC keratin filament
23	-9.97	NULL	4 / 16	GSEA C2COLDREN_GEFITINIB_RESISTANCE_DN
24	-9.81	NULL	3 / 10	MF gap junction channel activity
25	-9.73	NULL	4 / 38	BP epithelial cell differentiation
26	-9.41	NULL	12 / 82	BP structural constituent of cytoskeleton
27	-9.22	NULL	3 / 25	BP response to zinc ion
28	-9.2	NULL	2 / 12	MF fatty acid binding
29	-9.04	NULL	6 / 21	CC cornified envelope
30	-8.83	NULL	2 / 16	GSEA C2DORN_ADENOVIRUS_INFECTION_12HR_UP
31	-8.82	NULL	2 / 6	GSEA C2WALLACE_PROSTATE_CANCER_DN
32	-8.71	NULL	3 / 16	GSEA C2ROY_WOUND_BLOOD_VESSEL_DN
33	-8.29	NULL	3 / 10	BP negative regulation of interleukin-2 production
34	-8.22	NULL	2 / 15	GSEA C2NGUYEN_NOTCH1_TARGETS_UP
35	-8.2	NULL	2 / 15	GSEA C2RIGGINS_TAMOXIFEN_RESISTANCE_DN
36	-8.1	NULL	21 / 186	MF structural molecule activity
37	-8.09	NULL	1 / 5	GSEA C2BUSA_SAM68_TARGETS_UP
38	-8.05	NULL	4 / 16	GSEA C2ELVIDGE_HIF1A_TARGETS_DN
39	-7.89	NULL	2 / 15	GSEA C2STOSI_RESPONSE_TO ESTRADIOL
40	-7.84	NULL	6 / 48	Glio Noushmehr_Pron_GCIMP_hypermeth_DN

