

# GW\_160

## Global Summary

%DE = 0.15  
 # genes with fdr < 0.2 = 1965 ( 1000 + / 965 - )  
 # genes with fdr < 0.1 = 1565 ( 769 + / 796 - )  
 # genes with fdr < 0.05 = 1390 ( 681 + / 709 - )  
 # genes with fdr < 0.01 = 937 ( 442 + / 495 - )  
 # genes in genesets = 16332

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

## Global Genelist

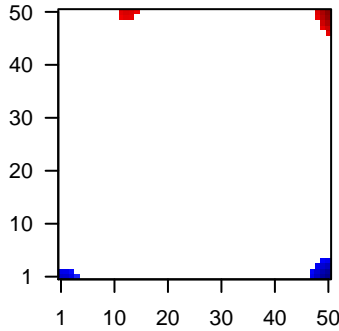
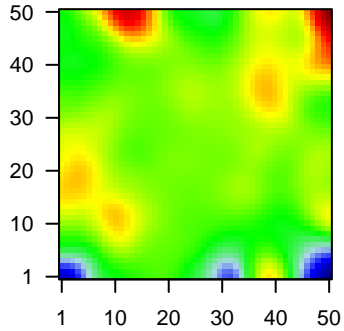
Rank	ID	log(FC)	fdr	p-value	Description
1	10551	2.55	2e-16	5e-14	50 x 10 anterior gradient 2 [Source:HGNC Symbol;Acc:328]
2	8644	2.68	2e-16	5e-14	1 x 50 aldo-keto reductase family 1, member C3 [Source:HGNC Syri
3	1109	2.62	2e-16	5e-14	13 x 50 aldo-keto reductase family 1, member C4 [Source:HGNC Syri
4	216	1.82	2e-16	5e-14	50 x 50 aldehyde dehydrogenase 1 family, member A1 [Source:HGNC
5	218	2.76	2e-16	5e-14	1 x 50 aldehyde dehydrogenase 3 family, member A1 [Source:HGNC
6	92747	3.18	2e-16	5e-14	50 x 10 BPI fold containing family B, member 1 [Source:HGNC Symbi
7	760	-1.81	2e-16	5e-14	1 x 44 carbonic anhydrase II [Source:HGNC Symbol;Acc:1373]
8	26256	1.82	2e-16	5e-14	50 x 50 calcium binding tyrosine-(Y)-phosphorylation regulated [Sou
9	6347	-1.97	2e-16	5e-14	50 x 4 chemokine (C-C motif) ligand 2 [Source:HGNC Symbol;Acc:1
10	414062	-2.13	2e-16	5e-14	1 x 1 chemokine (C-C motif) ligand 3-like 3 [Source:HGNC Symbc
11	1066	2.34	2e-16	5e-14	14 x 50 carboxylesterase 1 [Source:HGNC Symbol;Acc:1863]
12	9073	1.89	2e-16	5e-14	8 x 50 claudin 8 [Source:HGNC Symbol;Acc:2050]
13	1308	-2.09	2e-16	5e-14	1 x 43 collagen, type XVII, alpha 1 [Source:HGNC Symbol;Acc:2194
14	1277	-2.29	2e-16	5e-14	2 x 1 collagen, type I, alpha 1 [Source:HGNC Symbol;Acc:2197]
15	1278	-2.12	2e-16	5e-14	2 x 1 collagen, type I, alpha 2 [Source:HGNC Symbol;Acc:2198]
16	1281	-1.84	2e-16	5e-14	2 x 1 collagen, type III, alpha 1 [Source:HGNC Symbol;Acc:2201]
17	1289	-2.04	2e-16	5e-14	2 x 1 collagen, type V, alpha 1 [Source:HGNC Symbol;Acc:2209]
18	1290	-1.83	2e-16	5e-14	2 x 1 collagen, type V, alpha 2 [Source:HGNC Symbol;Acc:2210]
19	1293	-1.95	2e-16	5e-14	2 x 1 collagen, type VI, alpha 3 [Source:HGNC Symbol;Acc:2213]
20	49860	-2.38	2e-16	5e-14	1 x 50 cornulin [Source:HGNC Symbol;Acc:1230]

## Global Geneset Analysis

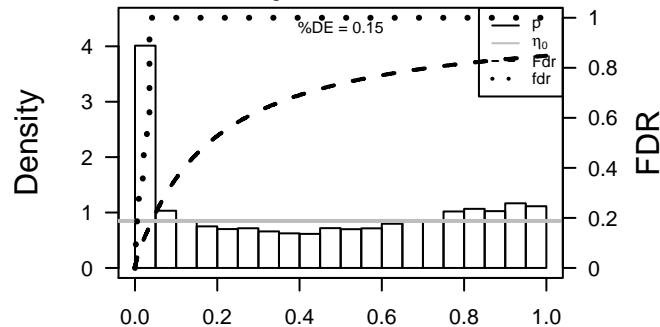
Rank	GSZ	p-value	#all	Geneset
<i>Overexpressed</i>				
1	11.72	NULL	743	Chr Chr 7
2	9.27	NULL	918	Chr Chr 17
3	8.1	NULL	866	Chr Chr 12
4	6.86	NULL	16	GSEA C2KORKOLA_EMBRYONAL_CARCINOMA_UP
5	6.53	NULL	534	Chr Chr 8
6	6.31	NULL	34	BP glutathione metabolic process
7	6.26	NULL	25	BP glutathione derivative biosynthetic process
8	5.45	NULL	19	BP cellular amino acid biosynthetic process
9	5.41	NULL	119	BP xenobiotic metabolic process
10	5.39	NULL	1253	BP small molecule metabolic process
11	5.22	NULL	1318	CC mitochondrion
12	5.2	NULL	20	MF glutathione transferase activity
13	5.17	NULL	13	GSEA C2KEGG_METABOLISM_OF_XENOBIOTICS_BY_CYTOCHROME
14	5.04	NULL	20	TF MYC_Metabolism UP
15	5.02	NULL	15	GSEA C2KEGG_Glutathione_Metabolism
16	5.01	NULL	434	BP oxidation-reduction process
17	4.85	NULL	16	GSEA C2KORKOLA_SEMINOMA_UP
18	4.81	NULL	15	GSEA C2REACTOME_Glutathione_Conjugation
19	4.8	NULL	15	GSEA C2KORKOLA_YOLK_SAC_TUMOR_UP
20	4.76	NULL	12	BP cellular aldehyde metabolic process
<i>Underexpressed</i>				
1	-21.37	NULL	553	Cancer Lembecke_Colonc Inflammation
2	-18.02	NULL	312	BP immune response
3	-16.73	NULL	250	Lymphoma ENZ_Stromal signature 1
4	-16.36	NULL	265	Glio willscher_GBM_Verhaak-CL_expression_B_up
5	-16.36	NULL	265	Glio willscher_GBM_Verhaak-MES_expression_B_up
6	-16.36	NULL	265	Glio willscher_GBM_Verhaak-PNwt_expression_B_down
7	-16.36	NULL	265	Glio willscher_GBM_Verhaak-PNmut_expression_B_down
8	-14.57	NULL	572	Disease GUDJ_psooriasis up
9	-13.71	NULL	417	H.Tiss WIRTH_Immune system
10	-12.85	NULL	190	CC extracellular matrix
11	-12.82	NULL	316	Cancer SPANG_BCL6-index2
12	-12.49	NULL	51	BP type I interferon signaling pathway
13	-12.32	NULL	1182	CC extracellular region
14	-12.24	NULL	69	BP extracellular matrix disassembly
15	-12.15	NULL	60	BP interferon-gamma-mediated signaling pathway
16	-12.14	NULL	618	Chr Chr 4
17	-12.04	NULL	683	CC extracellular space
18	-11.97	NULL	204	BP cytokine-mediated signaling pathway
19	-11.73	NULL	64	BP collagen catabolic process
20	-11.52	NULL	16	GSEA C2MOSERLE_IFNA_RESPONSE

Profile

Regulated Spots



p-values



# GW\_160

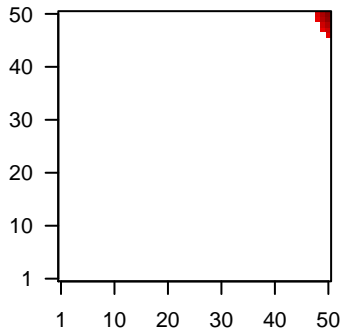
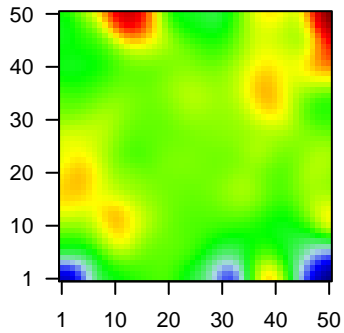
## Local Summary

%DE = 0.89  
 # metagenes = 11  
 # genes = 182  
 # genes in genesets = 181  
 # genes with  $fdr < 0.1$  = 137 ( 134 + / 3 - )  
 # genes with  $fdr < 0.05$  = 121 ( 120 + / 1 - )  
 # genes with  $fdr < 0.01$  = 104 ( 103 + / 1 - )

<r> metagenes = 0.98  
 <r> genes = 0.28  
 <FC> = 0.78  
 <shrinkage-t> = 27.19  
 <p-value> = 0  
 <fdr> = 0.36

Profile

Spot



## Local Genelist

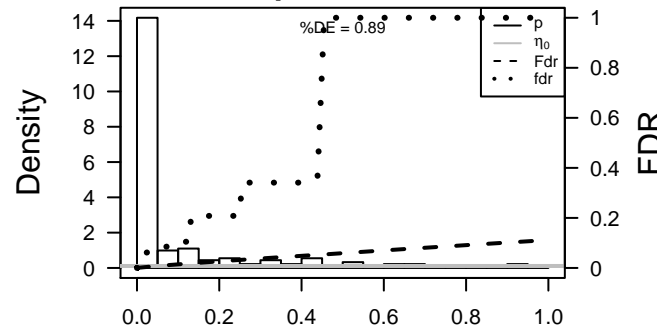
Rank	ID	log(FC)	fdr	p-value	Description
1	216	1.82	2e-16	6e-16	50 x 50 aldehyde dehydrogenase 1 family, member A1 [Source:HGNC]
2	26256	1.82	2e-16	6e-16	50 x 50 calcium binding tyrosine-(Y)-phosphorylation regulated [Sou
3	4072	2.5	2e-16	6e-16	50 x 50 epithelial cell adhesion molecule [Source:HGNC Symbol;Acc:
4	2719	2.16	2e-16	6e-16	50 x 50 glypican 3 [Source:HGNC Symbol;Acc:4451]
5	2938	1.82	2e-16	6e-16	50 x 50 glutathione S-transferase alpha 2 [Source:HGNC Symbol;Ac
6	3866	1.92	2e-16	6e-16	50 x 50 keratin 15 [Source:HGNC Symbol;Acc:6421]
7	7345	2	2e-16	6e-16	50 x 46 ubiquitin carboxyl-terminal esterase L1 (ubiquitin thiolesteras
8	79844	1.86	2e-16	6e-16	50 x 50 zinc finger, DHHC-type containing 11 [Source:HGNC Symbo
9	339512	1.74	3e-15	2e-14	50 x 50 chromosome 1 open reading frame 110 [Source:HGNC Synt
10	5625	1.74	3e-15	2e-14	50 x 48 proline dehydrogenase (oxidase) 1 [Source:HGNC Symbol;A
11	79679	1.74	3e-15	2e-14	50 x 50 V-set domain containing T cell activation inhibitor 1 [Source:t
12	2946	1.73	4e-15	3e-14	50 x 50 glutathione S-transferase mu 2 (muscle) [Source:HGNC Syrr
13	3880	1.72	6e-15	3e-14	50 x 49 keratin 19 [Source:HGNC Symbol;Acc:6436]
14	214	1.72	6e-15	2e-12	50 x 50 activated leukocyte cell adhesion molecule [Source:HGNC Sy
15	7546	1.64	1e-13	2e-12	48 x 50 Zic family member 2 [Source:HGNC Symbol;Acc:12873]
16	56963	1.62	2e-13	2e-12	50 x 50 repulsive guidance molecule family member a [Source:HGNC
17	10057	1.61	3e-13	2e-12	50 x 50 ATP-binding cassette, sub-family C (CFTR/MRP), member 5
18	400916	1.6	3e-13	4e-12	50 x 47 coiled-coil-helix-coiled-coil-helix domain containing 10 [Sou
19	1780	1.59	5e-13	8e-12	50 x 50 dynein, cytoplasmic 1, intermediate chain 1 [Source:HGNC S
20	352954	1.57	9e-13	9e-12	50 x 46

## Local Geneset Analysis

Overexpression

Rank	GSZ	p-value	#in/all	Geneset
1	16.69	NULL	3 / 8	GSEA C2JUCDX2_TARGETS_DN
2	16.55	NULL	5 / 15	GSEA C2KEGG_GLUTATHIONE_METABOLISM
3	15.24	NULL	6 / 25	BP glutathione derivative biosynthetic process
4	15.11	NULL	8 / 34	BP glutathione metabolic process
5	13.99	NULL	4 / 15	GSEA C2RICKMAN_HEAD_AND_NECK_CANCER_E
6	13.77	NULL	4 / 13	GSEA C2KEGG_METABOLISM_OF_XENOBIOTICS_BY_CYTOCHROME
7	13.37	NULL	3 / 11	GSEA C2TO_PTTG1_TARGETS_UP
8	13.21	NULL	5 / 20	MF glutathione transferase activity
9	12.68	NULL	3 / 9	GSEA C2REACTOME_METABOLISM_OF_AMINO_ACIDS
10	12.63	NULL	1 / 4	GSEA C2MYLLYKANGAS_AMPLIFICATION_HOT_SPOT_13
11	12.44	NULL	3 / 11	MF glutathione binding
12	12.44	NULL	3 / 11	GSEA C2KEGG_DRUG_METABOLISM_CYTOCHROME_P450
13	11.71	NULL	11 / 119	BP xenobiotic metabolic process
14	11.29	NULL	2 / 7	GSEA C2FREDERICK_PRKCI_TARGETS
15	10.6	NULL	1 / 2	miRNA target-127
16	10.52	NULL	4 / 13	BP regulation of blood vessel size
17	10.21	NULL	2 / 6	GSEA C2GAUSSMANN_MLL_AF4_FUSION_TARGETS_D_DN
18	9.27	NULL	2 / 11	GSEA C2SMID_BREAST_CANCER_BASAL_UP
19	9.05	NULL	4 / 15	GSEA C2REACTOME_GLUTATHIONE_CONJUGATION
20	8.8	NULL	1 / 5	GSEA C2TURASHVILI_BREAST_CARCINOMA_DUCTAL_VS_LOBULAR
21	8.78	NULL	3 / 19	BP cellular amino acid biosynthetic process
22	8.7	NULL	3 / 16	GSEA C2KAN_RESPONSE_TO_ARSENIC_TRIOXIDE
23	8.25	NULL	2 / 12	GSEA C2KAYO_AGING_MUSCLE_UP
24	8.24	NULL	1 / 6	GSEA C2KAPOSI_LIVER_CANCER_POOR_SURVIVAL_DN
25	8.17	NULL	2 / 11	GSEA C2SATO_SILENCED_BY_METHYLATION_IN_PANCREATIC_CANC
26	7.86	NULL	2 / 13	GSEA C2BLUM_RESPONSE_TO_SALIRASIB_UP
27	7.81	NULL	2 / 6	GSEA C2MYLLYKANGAS_AMPLIFICATION_HOT_SPOT_7
28	7.66	NULL	2 / 12	GSEA C2LEE_METASTASIS_AND_ALTERNATIVE_SPLICING_DN
29	7.64	NULL	3 / 16	GSEA C2BOYVAULT_LIVER_CANCER_SUBCLASS_G1_DN
30	7.63	NULL	1 / 8	GSEA C2MUNSHI_MULTIPLE_MYELOMA_DN
31	7.57	NULL	2 / 14	CC membrane-bounded vesicle
32	7.53	NULL	2 / 9	GSEA C2REACTOME_GLCURONIDATION
33	7.48	NULL	3 / 12	GSEA C2HELLER_SILENCED_BY_METHYLATION_DN
34	7.47	NULL	4 / 32	BP glycosaminoglycan biosynthetic process
35	7.34	NULL	2 / 12	GSEA C2ONDER_CDH1_TARGETS_1_UP
36	7.29	NULL	3 / 14	GSEA C2ANTVEER_BREAST_CANCER_METASTASIS_DN
37	7.28	NULL	2 / 16	GSEA C2ANTVEER_BREAST_CANCER_ESR1_DN
38	7.28	NULL	2 / 16	GSEA C2SESTO_RESPONSE_TO_UV_C7
39	7.27	NULL	2 / 16	GSEA C2MAHADEVAN_RESPONSE_TO_MP470_UP
40	7.23	NULL	2 / 12	BP cellular aldehyde metabolic process

p-values



# GW\_160

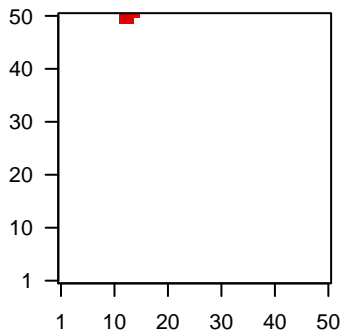
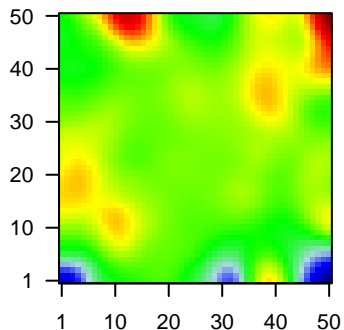
## Local Summary

%DE = 0.72  
 # metagenes = 7  
 # genes = 111  
 # genes in genesets = 110  
 # genes with  $fdr < 0.1$  = 64 ( 62 + / 2 - )  
 # genes with  $fdr < 0.05$  = 52 ( 50 + / 2 - )  
 # genes with  $fdr < 0.01$  = 48 ( 46 + / 2 - )

<r> metagenes = 0.99  
 <r> genes = 0.28  
 <FC> = 0.64  
 <shrinkage-t> = 22.45  
 <p-value> = 0  
 <fdr> = 0.46

Profile

Spot



## Local Genelist

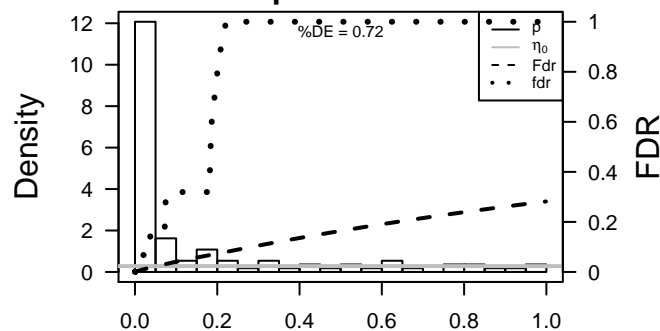
Rank	ID	log(FC)	fdr	p-value	Description
1	1109	2.62	2e-16	2e-15	13 x 50 aldo-keto reductase family 1, member C4 [Source:HGNC Symb
2	1066	2.34	2e-16	2e-15	14 x 50 carboxylesterase 1 [Source:HGNC Symbol;Acc:1863]
3	57834	1.86	2e-16	2e-15	13 x 50 cytochrome P450, family 4, subfamily F, polypeptide 11 [Sour
4	10457	1.71	8e-15	1e-12	13 x 50 glycoprotein (transmembrane) nmb [Source:HGNC Symbol;A
5	63928	1.67	4e-14	5e-12	13 x 50 calcineurin-like EF-hand protein 2 [Source:HGNC Symbol;A
6	1749	1.61	3e-13	5e-12	13 x 50 distal-less homeobox 5 [Source:HGNC Symbol;Acc:2918]
7	1646	1.6	4e-13	8e-10	13 x 50 aldo-keto reductase family 1, member C2 [Source:HGNC Symb
8	55065	1.45	5e-11	8e-10	14 x 50 solute carrier family 52 (riboflavin transporter), member 1 [So
9	7062	1.45	5e-11	6e-09	13 x 50 trichohyalin [Source:HGNC Symbol;Acc:11791]
10	7296	1.4	2e-10	2e-08	14 x 50 thioredoxin reductase 1 [Source:HGNC Symbol;Acc:12437]
11	140809	1.35	8e-10	2e-07	13 x 50 sulfiredoxin 1 [Source:HGNC Symbol;Acc:16132]
12	2736	1.24	2e-08	2e-07	14 x 50 GLI family zinc finger 2 [Source:HGNC Symbol;Acc:4318]
13	23108	1.24	2e-08	2e-07	15 x 50 RAP1 GTPase activating protein 2 [Source:HGNC Symbol;Ac
14	2539	1.23	2e-08	7e-07	13 x 50 glucose-6-phosphate dehydrogenase [Source:HGNC Symb
15	4147	1.19	7e-08	7e-07	15 x 50 matrilin 2 [Source:HGNC Symbol;Acc:6908]
16	1399	1.18	8e-08	7e-07	14 x 50 v-crk avian sarcoma virus CT10 oncogene homolog-like [So
17	51071	1.17	1e-07	7e-07	13 x 50 deoxyribose-phosphate aldolase (putative) [Source:HGNC S
18	7086	1.16	1e-07	7e-07	13 x 50 transketolase [Source:HGNC Symbol;Acc:11834]
19	2690	1.16	2e-07	7e-07	15 x 50 growth hormone receptor [Source:HGNC Symbol;Acc:4263]
20	29948	1.15	2e-07	7e-07	13 x 50 oxidative stress induced growth inhibitor 1 [Source:HGNC Symb

## Local Geneset Analysis

Overexpression

Rank	GSZ	p-value	#in/all	Geneset
1	15.51	NULL	1 / 2	miRNA target-124a
2	12.94	NULL	2 / 12	BP head development
3	12.93	NULL	1 / 2	Cancer GENTLES_modul8
4	12.59	NULL	3 / 13	GSEA C2ZSINGH_NFE2L2_TARGETS
5	12.01	NULL	2 / 10	BP response to food
6	11.84	NULL	1 / 12	BP androgen metabolic process
7	11.55	NULL	3 / 19	BP anatomical structure formation involved in morphogenesis
8	11.53	NULL	1 / 7	Glio Donson-cytotoxic effectors-associated with LTS in HGA
9	10.98	NULL	1 / 6	GSEA C2ZAIID_OSTEOBLAST_TRANSCRIPTION_FACTORS
10	10.98	NULL	1 / 6	GSEA C2NIELSEN_GIST_VS_SYNOVIAL_SARCOMA_UP
11	10.81	NULL	1 / 14	BP bile acid and bile salt transport
12	10.5	NULL	2 / 15	GSEA C2KANG_FLUOROURACIL_RESISTANCE_UP
13	9.48	NULL	2 / 15	BP pentose-phosphate shunt
14	9.37	NULL	3 / 32	MF NADP binding
15	9.34	NULL	1 / 18	BP bile acid biosynthetic process
16	9.15	NULL	2 / 44	BP steroid metabolic process
17	9.14	NULL	3 / 51	BP osteoblast differentiation
18	9.12	NULL	1 / 9	Glio Colman_survival_robust
19	8.95	NULL	13 / 434	BP oxidation-reduction process
20	8.86	NULL	1 / 4	GSEA C2NIELSEN_LEIOMYOSARCOMA_DN
21	8.64	NULL	2 / 12	BP nitric oxide biosynthetic process
22	8.56	NULL	1 / 10	GSEA C2FOURNIER_ACINAR_DEVELOPMENT_LATE_UP
23	8.2	NULL	2 / 22	BP response to axon injury
24	8.08	NULL	1 / 11	GSEA C2TO_PTTG1_TARGETS_UP
25	7.95	NULL	2 / 17	MF proline-rich region binding
26	7.83	NULL	2 / 15	GSEA C2FARMER_BREAST_CANCER_CLUSTER_7
27	7.59	NULL	1 / 11	BP ear development
28	7.59	NULL	1 / 11	GSEA C2SU_PLACENTA
29	7.55	NULL	1 / 11	BP prostaglandin metabolic process
30	7.5	NULL	4 / 63	MF oxidoreductase activity, acting on paired donors, with incorporation
31	7.45	NULL	2 / 12	BP positive regulation of protein import into nucleus
32	7.37	NULL	3 / 34	BP glutathione metabolic process
33	7.31	NULL	1 / 13	GSEA C2GAUSSMANN_MLL_AF4_FUSION_TARGETS_E_DN
34	7.02	NULL	1 / 16	GSEA C2BOYVAULT_LIVER_CANCER_SUBCLASS_G1_DN
35	6.86	NULL	1 / 13	GSEA C2SMID_BREAST_CANCER_RELAPSE_IN_BRAIN_UP
36	6.85	NULL	2 / 15	GSEA C2KEGG_PROPANOATE_METABOLISM
37	6.85	NULL	2 / 35	MF monoxygenase activity
38	6.84	NULL	3 / 31	BP positive regulation of actin filament polymerization
39	6.79	NULL	1 / 31	BP bile acid metabolic process
40	6.73	NULL	2 / 15	BP leukotriene metabolic process

p-values



# GW\_160

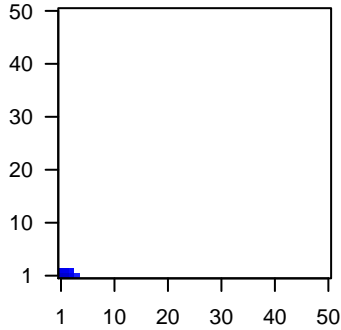
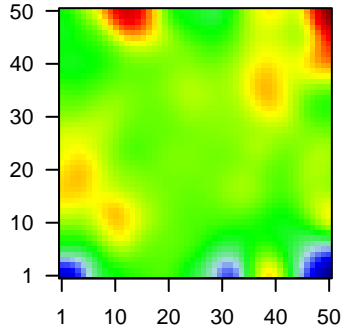
## Local Summary

%DE = 0.94  
 # metagenes = 7  
 # genes = 141  
 # genes in genesets = 141  
 # genes with  $fdr < 0.1$  = 131 ( 6 + / 125 - )  
 # genes with  $fdr < 0.05$  = 131 ( 6 + / 125 - )  
 # genes with  $fdr < 0.01$  = 124 ( 6 + / 118 - )

$\langle r \rangle$  metagenes = 0.99  
 $\langle r \rangle$  genes = 0.48  
 $\langle FC \rangle = -0.98$   
 $\langle \text{shrinkage-t} \rangle = -34.41$   
 $\langle p\text{-value} \rangle = 0$   
 $\langle fdr \rangle = 0.15$

Profile

Spot



## Local Genelist

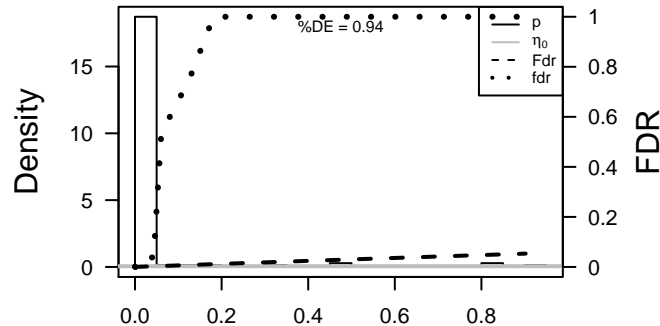
Rank	ID	log(FC)	fdr	p-value	Description
1	414062	-2.13	2e-16	9e-17	1 x 1 chemokine (C-C motif) ligand 3-like 3 [Source:HGNC Symbol;Acc:2197]
2	1277	-2.29	2e-16	9e-17	2 x 1 collagen, type I, alpha 1 [Source:HGNC Symbol;Acc:2197]
3	1278	-2.12	2e-16	9e-17	2 x 1 collagen, type I, alpha 2 [Source:HGNC Symbol;Acc:2198]
4	1281	-1.84	2e-16	9e-17	2 x 1 collagen, type III, alpha 1 [Source:HGNC Symbol;Acc:2201]
5	1289	-2.04	2e-16	9e-17	2 x 1 collagen, type V, alpha 1 [Source:HGNC Symbol;Acc:2209]
6	1290	-1.83	2e-16	9e-17	2 x 1 collagen, type V, alpha 2 [Source:HGNC Symbol;Acc:2210]
7	1293	-1.95	2e-16	9e-17	2 x 1 collagen, type VI, alpha 3 [Source:HGNC Symbol;Acc:2213]
8	3491	-1.87	2e-16	9e-17	2 x 1 cysteine-rich, angiogenic inducer, 61 [Source:HGNC Symbol;Acc:2213]
9	3040	-2.05	2e-16	9e-17	4 x 1 hemoglobin, alpha 2 [Source:HGNC Symbol;Acc:4824]
10	3553	-2.37	2e-16	9e-17	1 x 1 interleukin 1, beta [Source:HGNC Symbol;Acc:5992]
11	3576	-2.13	2e-16	9e-17	1 x 1 interleukin 8 [Source:HGNC Symbol;Acc:6025]
12	3956	-2.02	2e-16	9e-17	1 x 1 lectin, galactoside-binding, soluble, 1 [Source:HGNC Symbol;Acc:6025]
13	4060	-2.05	2e-16	9e-17	2 x 1 lumican [Source:HGNC Symbol;Acc:6724]
14	4312	-2.11	2e-16	9e-17	1 x 1 matrix metalloproteinase 1 (interstitial collagenase) [Source:HGNC Symbol;Acc:6724]
15	4314	-2.84	2e-16	9e-17	1 x 1 matrix metalloproteinase 3 (stromelysin 1, progelatinase) [Source:HGNC Symbol;Acc:6724]
16	4316	-2.07	2e-16	9e-17	2 x 1 matrix metalloproteinase 7 (matrilysin, uterine) [Source:HGNC Symbol;Acc:6724]
17	4318	-1.83	2e-16	9e-17	1 x 1 matrix metalloproteinase 9 (gelatinase B, 92kDa gelatinase, 92kDa gelatinase with collagenase activity) [Source:HGNC Symbol;Acc:6724]
18	6515	-2.23	2e-16	9e-17	3 x 1 solute carrier family 2 (facilitated glucose transporter), member 2 [Source:HGNC Symbol;Acc:11786]
19	7058	-1.91	2e-16	9e-17	2 x 1 thrombospondin 2 [Source:HGNC Symbol;Acc:11786]
20	7431	-1.81	2e-16	9e-17	4 x 1 vimentin [Source:HGNC Symbol;Acc:12692]

## Local Geneset Analysis

Underexpression

Rank	GSZ	p-value	#in/all	Geneset
1	-45.6	NULL	14 / 16	MMML_C27CIEJ_MMML_1
2	-42.26	NULL	12 / 16	GSEA_C27FARMER_BREAST_CANCER_CLUSTER_5
3	-39.93	NULL	28 / 69	BP extracellular matrix disassembly
4	-39.57	NULL	25 / 64	BP collagen catabolic process
5	-38.23	NULL	7 / 11	MF platelet-derived growth factor binding
6	-37.07	NULL	50 / 190	CC extracellular matrix
7	-33.15	NULL	51 / 250	LymphomL2ENZ_Stromal signature 1
8	-32.4	NULL	8 / 12	miRNA target-29c
9	-29.79	NULL	49 / 242	BP extracellular matrix organization
10	-29.04	NULL	10 / 15	GSEA_C27CROMER_TUMORIGENESIS_UP
11	-26.49	NULL	5 / 10	GSEA_C27KEGG_ECM_RECEPTOR_INTERACTION
12	-25.91	NULL	4 / 5	GSEA_C27COLLER_MYC_TARGETS_DN
13	-25.75	NULL	13 / 37	BP collagen fibril organization
14	-24.66	NULL	18 / 57	MF extracellular matrix structural constituent
15	-24.2	NULL	11 / 19	BP extracellular matrix binding
16	-23.69	NULL	8 / 40	MF cellular response to amino acid stimulus
17	-22.46	NULL	5 / 16	GSEA_C27URS_ADIPOCYTE_DIFFERENTIATION_DN
18	-22.06	NULL	4 / 10	BP protein heterotrimerization
19	-21.69	NULL	7 / 16	GSEA_C27TURASHVIL_BREAST_LOBULAR_CARCINOMA_VS_DUCTAL_CARCINOMA
20	-21.34	NULL	5 / 10	GSEA_C27ERRECCHIA_RESPONSE_TO_TGFB1_C4
21	-20.54	NULL	5 / 15	GSEA_C27CHANG_POU5F1_TARGETS_UP
22	-20.28	NULL	6 / 15	GSEA_C27MISHRA_CARCINOMA_ASSOCIATED_FIBROBLAST_UP
23	-20.18	NULL	6 / 16	GSEA_C27AMIT_EGF_RESPONSE_60_MCF10A
24	-20.18	NULL	5 / 16	GSEA_C27REACTOME_SIGNALING_BY_PDGF
25	-20.15	NULL	6 / 13	GSEA_C27TURASHVIL_BREAST_LOBULAR_CARCINOMA_VS_LOBULAR_CARCINOMA
26	-19.97	NULL	5 / 15	GSEA_C27LEE_LIVER_CANCER_HEPATOBLAST
27	-19.88	NULL	2 / 6	GSEA_C27SEIKE_LUNG_CANCER_POOR_SURVIVAL
28	-19.88	NULL	8 / 15	GSEA_C27ONDER_CDH1_TARGETS_2_UP
29	-19.51	NULL	4 / 12	GSEA_C27ERRECCHIA_RESPONSE_TO_TGFB1_C2
30	-19.42	NULL	7 / 16	GSEA_C27ROZANOV_MMP14_TARGETS_SUBSET
31	-19.24	NULL	20 / 119	LymphomL2BOSOLOWSKI_green total
32	-18.87	NULL	26 / 183	CC proteinaceous extracellular matrix
33	-18.76	NULL	5 / 16	GSEA_C27AMIT_SERUM_RESPONSE_60_MCF10A
34	-18.72	NULL	69 / 1182	CC extracellular region
35	-18.21	NULL	4 / 8	GSEA_C27HAEGERSTRAND_RESPONSE_TO_IMATINIB
36	-18.17	NULL	51 / 683	CC extracellular space
37	-18	NULL	46 / 553	Cancer Lembecke_Colonc Inflammation
38	-17.95	NULL	13 / 68	CC collagen
39	-17.84	NULL	6 / 13	GSEA_C27SAL_RESPONSE_TO_RADIATION_THERAPY
40	-17.8	NULL	4 / 12	GSEA_C27Y_AGING_MIDDLE_UP

p-values



# GW\_160

## Local Summary

%DE = 0.97  
 # metagenes = 13  
 # genes = 245  
 # genes in genesets = 243

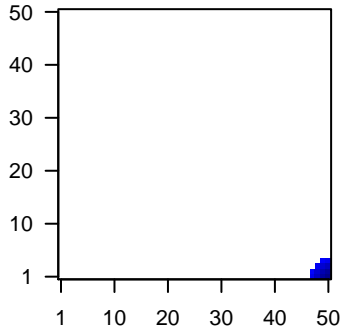
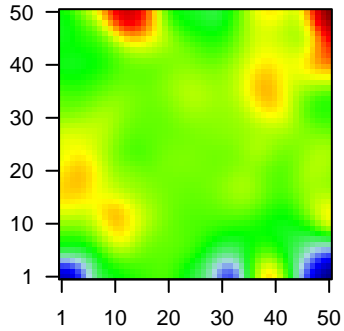
# genes with  $fdr < 0.1 = 224$  ( 4 + / 220 - )  
 # genes with  $fdr < 0.05 = 224$  ( 4 + / 220 - )  
 # genes with  $fdr < 0.01 = 210$  ( 4 + / 206 - )

<r> metagenes = 0.99  
 <r> genes = 0.6

<FC> = -0.82  
 <shrinkage-t> = -28.76  
 <p-value> = 0  
 <fdr> = 0.22

Profile

Spot



## Local Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	6347	-1.97	2e-16	3e-16	50 x 4 chemokine (C-C motif) ligand 2 [Source:HGNC Symbol;Acc:...
2	3113	-1.85	2e-16	3e-16	50 x 1 major histocompatibility complex, class II, DP alpha 1 [Source
3	3122	-1.98	2e-16	3e-16	50 x 1 major histocompatibility complex, class II, DR alpha [Source:...
4	3936	-2.07	2e-16	3e-16	50 x 1 lymphocyte cytosolic protein 1 (L-plastin) [Source:HGNC Syr
5	5341	-1.88	2e-16	3e-16	50 x 1 pleckstrin [Source:HGNC Symbol;Acc:9070]
6	5552	-1.97	2e-16	3e-16	50 x 1 serglycin [Source:HGNC Symbol;Acc:9361]
7	5880	-1.73	4e-15	6e-14	50 x 1 ras-related C3 botulinum toxin substrate 2 (rho family, small (
8	3002	-1.7	1e-14	3e-13	49 x 1 granzyme B (granzyme 2, cytotoxic T-lymphocyte-associated
9	4283	-1.66	6e-14	3e-13	49 x 1 chemokine (C-X-C motif) ligand 9 [Source:HGNC Symbol;Ac
10	5996	-1.64	9e-14	1e-12	50 x 1 regulator of G-protein signaling 1 [Source:HGNC Symbol;Acc
11	3512	-1.61	2e-13	2e-12	50 x 1 immunoglobulin J polypeptide, linker protein for immunoglobu
12	260436	-1.58	7e-13	2e-12	50 x 1 follicular dendritic cell secreted protein [Source:HGNC Symbc
13	23643	-1.58	8e-13	5e-11	50 x 3 lymphocyte antigen 96 [Source:HGNC Symbol;Acc:17156]
14	3059	-1.5	1e-11	5e-11	50 x 1 hematopoietic cell-specific Lyn substrate 1 [Source:HGNC S
15	10537	-1.49	1e-11	9e-11	50 x 1 ubiquitin D [Source:HGNC Symbol;Acc:18795]
16	23180	-1.47	3e-11	9e-11	50 x 1 raftlin, lipid raft linker 1 [Source:HGNC Symbol;Acc:30278]
17	241	-1.46	4e-11	1e-10	50 x 1 arachidonate 5-lipoxygenase-activating protein [Source:HGNC
18	972	-1.43	8e-11	1e-10	50 x 1 CD74 molecule, major histocompatibility complex, class II inv
19	3689	-1.43	8e-11	1e-10	50 x 1 integrin, beta 2 (complement component 3 receptor 3 and 4 s
20	6352	-1.43	9e-11	1e-10	48 x 1 chemokine (C-C motif) ligand 5 [Source:HGNC Symbol;Acc:...

## Local Geneset Analysis

Underexpression

Rank	GSZ	p-value	#in/all	Geneset
1	-32.4	NULL	12 / 15	CC MHC class II protein complex
2	-30.27	NULL	86 / 417	H.Tiss WIRTH_Immune system
3	-23.6	NULL	86 / 553	Cancer Lembcke_Colonc Inflammation
4	-22.96	NULL	47 / 312	BP immune response
5	-20.37	NULL	3 / 5	GSEA C2WONG_ENDOMETRIAL_CANCER_LATE
6	-20.29	NULL	39 / 265	Glio willscher_GBM_Verhaak-CL_expression_B_up
7	-20.29	NULL	39 / 265	Glio willscher_GBM_Verhaak-MES_expression_B_up
8	-20.29	NULL	39 / 265	Glio willscher_GBM_Verhaak-PNwt_expression_B_down
9	-20.29	NULL	39 / 265	Glio willscher_GBM_Verhaak-PNwt_expression_B_down
10	-19.76	NULL	9 / 16	GSEA C2FARMER_BREAST_CANCER_CLUSTER_1
11	-19.5	NULL	15 / 47	BP antigen processing and presentation
12	-19.07	NULL	6 / 15	GSEA C2FINAK_BREAST_CANCER_SDPP_SIGNATURE
13	-18.38	NULL	6 / 11	GSEA C2BIOCARTA_TCYTOTOXIC_PATHWAY
14	-17.82	NULL	6 / 8	Glio Donson-migration tethering and rolling-associated with LTS in HGA
15	-17.65	NULL	7 / 21	CC clathrin-coated endocytic vesicle membrane
16	-17.23	NULL	4 / 8	GSEA C2GRAHAM_CML_QUIESCENT_VS_NORMAL_DIVIDING_DN
17	-16.89	NULL	5 / 12	GSEA C2BIOCARTA_CTL_PATHWAY
18	-16.77	NULL	7 / 23	CC integral to luminal side of endoplasmic reticulum membrane
19	-16.56	NULL	5 / 15	Glio Donson-chemokines/cytokines-associated with LTS in HGA
20	-16.38	NULL	13 / 60	BP T cell costimulation
21	-16.38	NULL	4 / 7	Glio Donson-cytotoxic effectors-associated with LTS in HGA
22	-16.05	NULL	5 / 11	GSEA C2BIOCARTA_THELPER_PATHWAY
23	-15.92	NULL	3 / 7	GSEA C2GRAHAM_CML_DIVIDING_VS_NORMAL_DIVIDING_DN
24	-15.24	NULL	17 / 74	BP regulation of immune response
25	-15.02	NULL	2 / 6	GSEA C2BUDHU_LIVER_CANCER_METASTASIS_UP
26	-15.01	NULL	7 / 28	CC transport vesicle membrane
27	-14.91	NULL	5 / 10	GSEA C2LEE_DIFFERENTIATING_T_LYMPHOCYTE
28	-14.86	NULL	3 / 6	GSEA C2SANA_RESPONSE_TO_IFNG_UP
29	-14.57	NULL	2 / 3	GSEA C2KEGG_VIRAL_MYOCARDITIS
30	-14.46	NULL	5 / 12	GSEA C2ZHAN_MULTIPLE_MYELOMA_DN
31	-14.2	NULL	5 / 13	GSEA C2HAHTOLA_CTL_PATHOGENESIS
32	-13.92	NULL	7 / 32	CC ER to Golgi transport vesicle membrane
33	-13.63	NULL	8 / 35	CC trans-Golgi network membrane
34	-13.53	NULL	4 / 10	GSEA C2FLECHNER_BIOPSY_KIDNEY_TRANSPLANT_REJECTED_VS_
35	-13.43	NULL	8 / 16	GSEA C2SU_THYMUS
36	-13.33	NULL	5 / 12	BP immunoglobulin mediated immune response
37	-13.15	NULL	23 / 162	CC external side of plasma membrane
38	-12.88	NULL	2 / 6	GSEA C2LUI_THYROID_CANCER_CLUSTER_4
39	-12.62	NULL	10 / 60	BP interferon-gamma-mediated signaling pathway
40	-12.53	NULL	12 / 87	BP antigen processing and presentation of exogenous peptide antigen

p-values

