

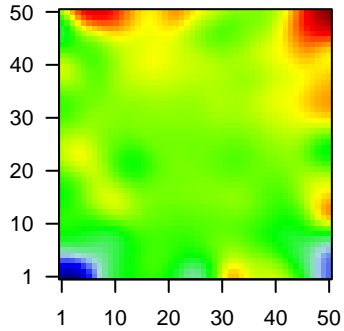
# GW\_005

## Global Summary

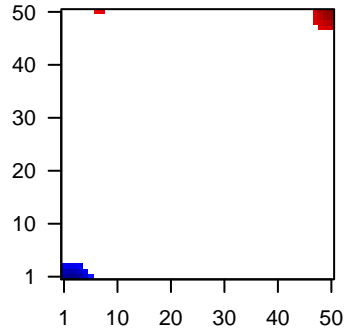
%DE = 0.14  
 # genes with fdr < 0.2 = 1801 ( 959 + / 842 - )  
 # genes with fdr < 0.1 = 1612 ( 858 + / 754 - )  
 # genes with fdr < 0.05 = 1281 ( 676 + / 605 - )  
 # genes with fdr < 0.01 = 937 ( 505 + / 432 - )  
 # genes in genesets = 16332

<FC> = 0  
 <shrinkage-t> = 0  
 <p-value> = 0.09  
 <fdr> = 0.86

Profile



Regulated Spots



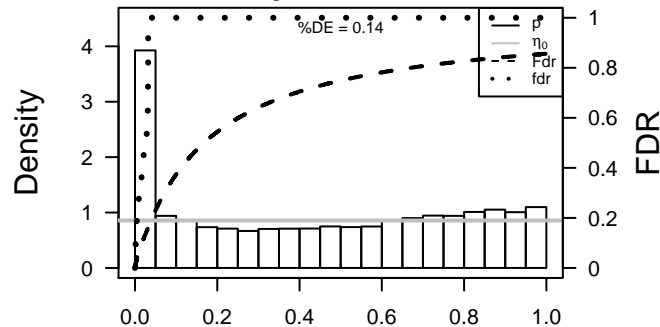
## Global Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	144568	1.47	2e-16	3e-14	1 x 50 alpha-2-macroglobulin-like 1 [Source:HGNC Symbol;Acc:23
2	8745	1.74	2e-16	3e-14	50 x 50 ADAM metallopeptidase domain 23 [Source:HGNC Symbol;A
3	124	1.74	2e-16	3e-14	50 x 11 alcohol dehydrogenase 1A (class I), alpha polypeptide [Sourc
4	126	1.49	2e-16	3e-14	50 x 12 alcohol dehydrogenase 1C (class I), gamma polypeptide [Sou
5	165	-1.59	2e-16	3e-14	3 x 1 AE binding protein 1 [Source:HGNC Symbol;Acc:303]
6	216	1.51	2e-16	3e-14	50 x 50 aldehyde dehydrogenase 1 family, member A1 [Source:HGNC
7	501	-1.88	2e-16	3e-14	6 x 46 aldehyde dehydrogenase 7 family, member A1 [Source:HGNC
8	154796	1.42	2e-16	3e-14	50 x 12 angiotenin [Source:HGNC Symbol;Acc:17810]
9	23780	1.53	2e-16	3e-14	32 x 1 apolipoprotein L 2 [Source:HGNC Symbol;Acc:619]
10	23120	1.49	2e-16	3e-14	1 x 50 ATPase, class V, type 10B [Source:HGNC Symbol;Acc:13543
11	633	-2.28	2e-16	3e-14	3 x 1 biglycan [Source:HGNC Symbol;Acc:1044]
12	64073	-2	2e-16	3e-14	1 x 46 chromosome 19 open reading frame 33 [Source:HGNC Synt
13	339512	2.28	2e-16	3e-14	50 x 50 chromosome 1 open reading frame 110 [Source:HGNC Synt
14	56892	1.42	2e-16	3e-14	50 x 7 chromosome 8 open reading frame 4 [Source:HGNC Symbol
15	57172	-1.68	2e-16	3e-14	49 x 1 calcium/calmodulin-dependent protein kinase IG [Source:HG
16	6364	1.84	2e-16	3e-14	46 x 1 chemokine (C-C motif) ligand 20 [Source:HGNC Symbol;Acc
17	595	-2.14	2e-16	3e-14	1 x 6 cyclin D1 [Source:HGNC Symbol;Acc:1582]
18	1048	1.62	2e-16	3e-14	2 x 50 carcinoembryonic antigen-related cell adhesion molecule 5 [
19	1056	2.31	2e-16	3e-14	50 x 50 carboxyl ester lipase [Source:HGNC Symbol;Acc:1848]
20	1951	1.4	2e-16	3e-14	9 x 13 cadherin, EGF LAG seven-pass G-type receptor 3 [Source:G

## Global Geneset Analysis

Rank	GSZ	p-value	#all	Geneset
<i>Overexpressed</i>				
1	9.6	NULL	16	GSEA C2MOSERLE_IFNA_RESPONSE
2	9.49	NULL	572	Disease GUDJ_psooriasis up
3	8.93	NULL	16	GSEA C2ZHANG_INTERFERON_RESPONSE
4	8.44	NULL	274	Lymphon SPANG_IL21 DN
5	8.35	NULL	630	Chr Chr X
6	7.24	NULL	123	BP defense response to virus
7	6.92	NULL	13	GSEA C2BOWIE_RESPONSE_TO_TAMOXIFEN
8	6.92	NULL	31	BP negative regulation of viral genome replication
9	6.62	NULL	15	GSEA C2RICKMAN_HEAD_AND_NECK_CANCER_E
10	6.36	NULL	914	Chr Chr 3
11	6.11	NULL	10	GSEA C2BOWIE_RESPONSE_TO_EXTRACELLULAR_MATRIX
12	6.06	NULL	16	GSEA C2JROSEVIC_RESPONSE_TO_IMIQUIMOD
13	5.97	NULL	142	Glio willscher_GBM_Verhaak-CL_expression_C_up
14	5.97	NULL	142	Glio willscher_GBM_Verhaak-PNmut_expression_C_down
15	5.59	NULL	24	TF Tissue/AQUERIZAS_Trachea
16	5.54	NULL	8	GSEA C2ROETH_TERT_TARGETS_UP
17	5.34	NULL	9	GSEA C2REACTOME_ETHANOL_OXIDATION
18	5.33	NULL	10	GSEA C2DAUER_STAT3_TARGETS_DN
19	5.3	NULL	135	H.Tiss WIRTH_Mucosa
20	5.28	NULL	633	Chr Chr 9
<i>Underexpressed</i>				
1	-17.87	NULL	190	CC extracellular matrix
2	-15.35	NULL	250	LymphonL2N_Stromal signature 1
3	-13.58	NULL	16	GSEA C2FARMER_BREAST_CANCER_CLUSTER_5
4	-13.34	NULL	11	MF platelet-derived growth factor binding
5	-12.38	NULL	16	MMML C2CACIEJ_MMML_1
6	-11.71	NULL	242	BP extracellular matrix organization
7	-11.71	NULL	64	BP collagen catabolic process
8	-11.55	NULL	69	BP extracellular matrix disassembly
9	-11.1	NULL	57	MF extracellular matrix structural constituent
10	-10.81	NULL	12	miRNA target-29c
11	-10	NULL	957	Chr Chr 11
12	-9.55	NULL	183	CC proteinaceous extracellular matrix
13	-9.37	NULL	553	Cancer Lembecke_Colonc Inflammation
14	-9.19	NULL	37	BP collagen fibril organization
15	-8.72	NULL	1182	CC extracellular region
16	-8.38	NULL	683	CC extracellular space
17	-8.2	NULL	19	MF extracellular matrix binding
18	-7.95	NULL	8	GSEA C2HAEGERSTRAND_RESPONSE_TO_IMATINIB
19	-7.9	NULL	40	BP cellular response to amino acid stimulus
20	-7.86	NULL	15	GSEA C2ONDER_CDH1_TARGETS_2_UP

p-values



# GW\_005

## Local Summary

%DE = 0.73  
 # metagenes = 15  
 # genes = 207  
 # genes in genesets = 205  
 # genes with  $fdr < 0.1$  = 133 ( 119 + / 14 - )  
 # genes with  $fdr < 0.05$  = 115 ( 104 + / 11 - )  
 # genes with  $fdr < 0.01$  = 91 ( 85 + / 6 - )

<r> metagenes = 0.96

<r> genes = 0.28

<FC> = 0.45

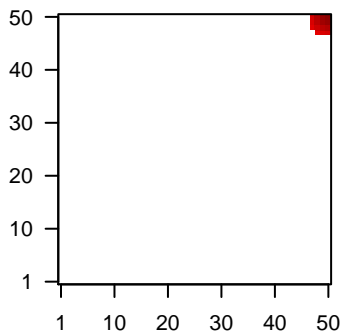
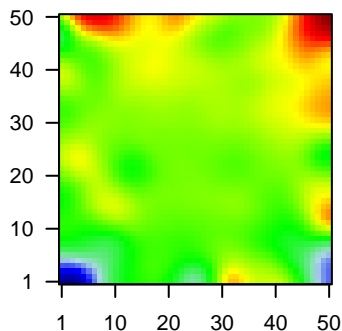
<shrinkage-t> = 15.65

<p-value> = 0

<fdr> = 0.43

Profile

Spot



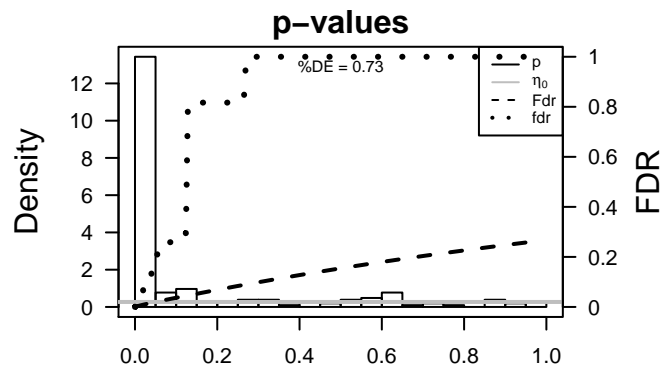
## Local Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	8745	1.74	2e-16	1e-15	50 x 50 ADAM metallopeptidase domain 23 [Source:HGNC Symbol;Acc:1848]
2	216	1.51	2e-16	1e-15	50 x 50 aldehyde dehydrogenase 1 family, member A1 [Source:HGNC Symbol;Acc:1848]
3	339512	2.28	2e-16	1e-15	50 x 50 chromosome 1 open reading frame 110 [Source:HGNC Synt
4	1056	2.31	2e-16	1e-15	50 x 50 carboxyl ester lipase [Source:HGNC Symbol;Acc:1848]
5	9076	1.54	2e-16	1e-15	49 x 50 claudin 1 [Source:HGNC Symbol;Acc:2032]
6	3866	2.31	2e-16	1e-15	50 x 50 keratin 15 [Source:HGNC Symbol;Acc:6421]
7	3880	1.64	2e-16	1e-15	50 x 49 keratin 19 [Source:HGNC Symbol;Acc:6436]
8	3856	1.95	2e-16	1e-15	50 x 48 keratin 8 pseudogene 3 [Source:HGNC Symbol;Acc:31056]
9	4922	1.99	2e-16	1e-15	50 x 50 neurotensin [Source:HGNC Symbol;Acc:8038]
10	59342	1.38	2e-16	1e-15	50 x 47 serine carboxypeptidase 1 [Source:HGNC Symbol;Acc:29507]
11	6657	1.35	4e-16	2e-14	50 x 50 SRY (sex determining region Y)-box 2 [Source:HGNC Symb
12	445	1.34	9e-16	2e-14	50 x 47 argininosuccinate synthase 1 [Source:HGNC Symbol;Acc:758]
13	7037	1.22	1e-15	2e-14	47 x 50 transferrin receptor [Source:HGNC Symbol;Acc:11763]
14	139728	1.33	2e-15	5e-11	49 x 49 pregnancy up-regulated nonubiquitous CaM kinase [Source:l
15	154664	1.19	1e-12	5e-11	50 x 50 ATP-binding cassette, sub-family A (ABC1), member 13 [Soi
16	2946	-1.17	2e-12	5e-11	50 x 50 glutathione S-transferase mu 2 (muscle) [Source:HGNC Syrr
17	10057	1.17	2e-12	7e-11	50 x 50 ATP-binding cassette, sub-family C (CFTR/MRP), member 5
18	255758	1.15	4e-12	7e-11	50 x 50 Tctex1 domain containing 2 [Source:HGNC Symbol;Acc:2848]
19	2944	-1.15	5e-12	2e-10	50 x 50 glutathione S-transferase mu 1 [Source:HGNC Symbol;Acc:4
20	3304	1.04	9e-12	4e-10	49 x 49 heat shock 70kDa protein 1A [Source:HGNC Symbol;Acc:522]

## Local Geneset Analysis

Overexpression

Rank	GSZ	p-value	#in/all	Geneset
1	25.99	NULL	3 / 8	GSEA C2:JU_CDX2_TARGETS_DN
2	17.6	NULL	2 / 7	GSEA C2:MCCOLLUM_GELDANAMYCIN_RESISTANCE_DN
3	17.55	NULL	3 / 9	GSEA C2:BROWNE_HCMV_INFECTION_8HR_UP
4	16.94	NULL	4 / 15	GSEA C2:RICKMAN_HEAD_AND_NECK_CANCER_E
5	16.27	NULL	3 / 6	GSEA C2:MYLLYKANGAS_AMPLIFICATION_HOT_SPOT_7
6	15.71	NULL	2 / 10	GSEA C2:HANN_RESISTANCE_TO_BCL2_INHIBITOR_DN
7	15.16	NULL	1 / 2	GSEA C2:KUROKAWA_LIVER_CANCER_EARLY_RECURRENCE_UP
8	13.31	NULL	3 / 12	GSEA C2:ROCKE_APOPTOSIS_REVERSED_BY_IL6
9	12.37	NULL	4 / 13	BP regulation of blood vessel size
10	11.53	NULL	2 / 10	GSEA C2:SERVERA_SDHB_TARGETS_1_DN
11	11.2	NULL	1 / 8	GSEA C2:KEGG_GLYCEROLIPID_METABOLISM
12	10.99	NULL	2 / 12	GSEA C2:MROSETTI_FACIOSCAPULOHUMERAL_MUSCULAR_DISTRO
13	10.23	NULL	2 / 7	GSEA C2:FREDERICK_PRKCI_TARGETS
14	10.17	NULL	2 / 10	GSEA C2:ONRAD_STEM_CELL
15	9.91	NULL	1 / 2	miRNA target-127
16	9.31	NULL	1 / 11	GSEA C2:BROWNE_HCMV_INFECTION_10HR_UP
17	9.17	NULL	3 / 16	GSEA C2:BOYVAULT_LIVER_CANCER_SUBCLASS_G1_DN
18	8.97	NULL	2 / 6	GSEA C2:VAGUE_PRETUMOR_DRUG_RESISTANCE_UP
19	8.86	NULL	2 / 8	GSEA C2:SATO_SILENCED_EPIGENETICALLY_IN_PANCREATIC_CANCE
20	8.7	NULL	2 / 16	GSEA C2:KEGG_STEROID_BIOSYNTHESIS
21	8.61	NULL	1 / 6	GSEA C2:GAUSSMANN_MLL_AF4_FUSION_TARGETS_D_DN
22	8.61	NULL	1 / 6	GSEA C2:KAPOLI_LIVER_CANCER_POOR_SURVIVAL_DN
23	8.52	NULL	1 / 5	GSEA C2:DASU_IL6_SIGNALING_UP
24	8.46	NULL	1 / 5	GSEA C2:NIELSEN_SCHWANNOMA_DN
25	8.46	NULL	1 / 13	MF triglyceride lipase activity
26	8.42	NULL	1 / 5	miRNA target-320
27	8.29	NULL	4 / 15	GSEA C2:MMS_MOUSE_LYMPH_HIGH_4HRS_UP
28	8.1	NULL	1 / 14	GSEA C2:WATANABE_COLON_CANCER_MSI_VS_MSS_DN
29	7.99	NULL	1 / 11	Glio neurons_glio
30	7.88	NULL	3 / 14	GSEA C2:ANTVEER_BREAST_CANCER_METASTASIS_DN
31	7.85	NULL	1 / 4	GSEA C2:U_TUMOR_ENDOTHELIAL_MARKERS_DN
32	7.79	NULL	1 / 15	H.Tiss WIRTH_Cerebellum
33	7.74	NULL	2 / 12	GSEA C2:HELLER_SILENCED_BY_METHYLATION_DN
34	7.63	NULL	1 / 6	GSEA C2:SESTO_RESPONSE_TO_UV_CO
35	7.63	NULL	1 / 6	GSEA C2:BIOCARTA_TID_PATHWAY
36	7.55	NULL	2 / 12	BP cellular aldehyde metabolic process
37	7.5	NULL	1 / 16	GSEA C2:ROY_WOUND_BLOOD_VESSEL_DN
38	7.41	NULL	2 / 16	GSEA C2:TCGA_GLIOMASTOMA_COPY_NUMBER_UP
39	7.33	NULL	2 / 13	GSEA C2:ENAOUR_DENDRITIC_CELL_MATURATION_UP
40	7.23	NULL	53 / 914	Chr Chr 3

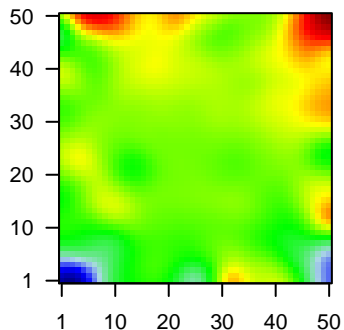


# GW\_005

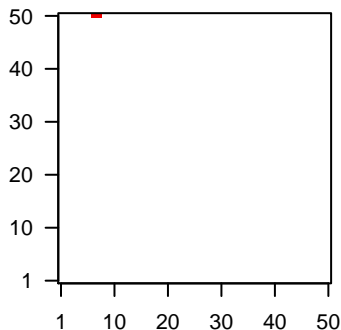
## Local Summary

%DE = 0.87  
 # metagenes = 2  
 # genes = 59  
 # genes in genesets = 59  
  
 # genes with  $fdr < 0.1 = 44$  ( 40 + / 4 - )  
 # genes with  $fdr < 0.05 = 30$  ( 29 + / 1 - )  
 # genes with  $fdr < 0.01 = 24$  ( 24 + / 0 - )  
  
 $\langle r \rangle$  metagenes = 1  
 $\langle r \rangle$  genes = 0.36  
  
 $\langle FC \rangle = 0.39$   
 $\langle \text{shrinkage-t} \rangle = 13.83$   
 $\langle p\text{-value} \rangle = 0$   
 $\langle fdr \rangle = 0.52$

Profile



Spot



## Local Genelist

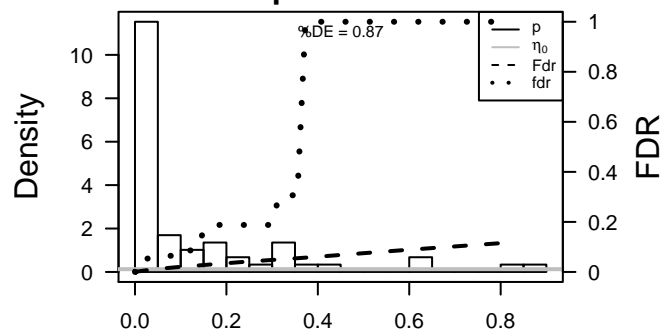
Rank	ID	log(FC)	fdr	p-value	Description
1	4128	1.8	2e-16	2e-15	7 x 50 monoamine oxidase A [Source:HGNC Symbol;Acc:6833]
2	157506	1.33	2e-15	2e-08	8 x 50 retinol dehydrogenase 10 (all-trans) [Source:HGNC Symbol;Acc:11858]
3	7105	0.99	3e-09	3e-07	7 x 50 tetraspanin 6 [Source:HGNC Symbol;Acc:11858]
4	57530	0.92	4e-08	1e-06	7 x 50 cingulin [Source:HGNC Symbol;Acc:17429]
5	9524	0.87	2e-07	2e-06	7 x 50 trans-2,3-enoyl-CoA reductase [Source:HGNC Symbol;Acc:11858]
6	79956	0.84	4e-07	5e-06	7 x 50 endoplasmic reticulum metalloproteinase 1 [Source:HGNC Symbol;Acc:11858]
7	8000	0.8	2e-06	5e-06	7 x 50 prostate stem cell antigen [Source:HGNC Symbol;Acc:9500]
8	4070	0.73	2e-06	5e-06	7 x 50 tumor-associated calcium signal transducer 2 [Source:HGNC Symbol;Acc:11858]
9	55552	0.78	3e-06	5e-06	8 x 50 zinc finger protein 823 [Source:HGNC Symbol;Acc:30936]
10	201501	0.77	4e-06	5e-06	7 x 50 zinc finger and BTB domain containing 7C [Source:HGNC Symbol;Acc:11858]
11	200942	0.76	5e-06	5e-06	7 x 50 kelch domain containing 8B [Source:HGNC Symbol;Acc:28552]
12	3157	0.76	5e-06	5e-06	7 x 50 3-hydroxy-3-methylglutaryl-CoA synthase 1 (soluble) [Source:HGNC Symbol;Acc:11858]
13	11261	0.76	5e-06	1e-05	7 x 50 calcineurin-like EF-hand protein 1 [Source:HGNC Symbol;Acc:11858]
14	54677	0.75	7e-06	6e-05	8 x 50 carnitine O-octanoyltransferase [Source:HGNC Symbol;Acc:11858]
15	9957	0.72	2e-05	2e-04	7 x 50 heparan sulfate (glucosamine) 3-O-sulfotransferase 1 [Source:HGNC Symbol;Acc:11858]
16	50506	0.69	4e-05	6e-04	8 x 50 dual oxidase 2 [Source:HGNC Symbol;Acc:13273]
17	58489	0.62	2e-04	6e-04	7 x 50 abhydrolase domain containing 17C [Source:HGNC Symbol;Acc:11858]
18	121273	0.61	2e-04	6e-04	8 x 50 chromosome 12 open reading frame 54 [Source:HGNC Symbol;Acc:11858]
19	55030	0.61	3e-04	6e-04	8 x 50 F-box protein 34 [Source:HGNC Symbol;Acc:20201]
20	55602	0.6	3e-04	9e-04	7 x 50 CDKN2A interacting protein [Source:HGNC Symbol;Acc:2432]

## Local Geneset Analysis

Overexpression

Rank	GSZ	p-value	#in/all	Geneset
1	25.5	NULL	1 / 2	Cancer GENTLES_modul8
2	22.11	NULL	1 / 8	GSEA C2SCHURINGA_STAT5A_TARGETS_UP
3	19.29	NULL	1 / 10	GSEA C2REACTOME_NOREPINEPHRINE_NEUROTRANSMITTER_RELEASE
4	18.21	NULL	1 / 11	BP neurotransmitter biosynthetic process
5	17.29	NULL	1 / 12	GSEA C2REACTOME_PHASE_1_FUNCTIONALIZATION
6	15.78	NULL	1 / 14	GSEA C2KEGG_PHENYLALANINE_METABOLISM
7	14.2	NULL	1 / 10	BP embryonic camera-type eye development
8	14.2	NULL	1 / 10	BP retinal metabolic process
9	13.62	NULL	2 / 13	GSEA C2SABATES_COLORECTAL_ADENOMA_SIZE_DN
10	13.4	NULL	1 / 11	BP ear development
11	13.4	NULL	1 / 11	BP embryonic viscerocranium morphogenesis
12	12.59	NULL	1 / 5	GSEA C2KERLEY_RESPONSE_TO_CISPLATIN_DN
13	11.65	NULL	1 / 6	Glio Martinez_Glio_hypometh
14	11.6	NULL	1 / 14	BP neural crest cell development
15	11.27	NULL	1 / 25	BP behavior
16	11.14	NULL	1 / 15	MF retinol dehydrogenase activity
17	11.14	NULL	1 / 15	GSEA C2BEIER_GLIOMA_STEM_CELL_UP
18	10.53	NULL	1 / 7	GSEA C2DE_YY1_TARGETS_UP
19	10.44	NULL	2 / 15	GSEA C2AIGNER_ZEB1_TARGETS
20	10.35	NULL	1 / 17	miRNA target miR-151
21	10.01	NULL	1 / 18	BP retinol metabolic process
22	9.67	NULL	1 / 8	GSEA C2MILICIC_FAMILIAL_ADENOMATOUS_POLYPOSIS_UP
23	9.14	NULL	1 / 21	BP embryonic organ development
24	8.86	NULL	2 / 16	miRNA target miR-1298
25	8.71	NULL	1 / 12	CC apical junction complex
26	8.67	NULL	1 / 23	BP gonad development
27	8.55	NULL	2 / 15	GSEA C2RICKMAN_HEAD_AND_NECK_CANCER_E
28	8.54	NULL	2 / 15	GSEA C2REACTOME_CHOLESTEROL_BIOSYNTHESIS
29	8.41	NULL	3 / 82	miRNA target miR-397
30	8.38	NULL	1 / 42	BP neurotransmitter secretion
31	8.06	NULL	1 / 10	GSEA C2KEGG_AMYOTROPHIC_LATERAL_SCLEROSIS_ALS
32	7.94	NULL	1 / 11	BP regulation of epithelial cell proliferation
33	7.62	NULL	1 / 15	GSEA C2OZEN_MIR125B1_TARGETS
34	7.6	NULL	1 / 11	BP positive regulation of protein targeting to membrane
35	7.58	NULL	1 / 29	BP embryonic forelimb morphogenesis
36	7.54	NULL	1 / 12	GSEA C2PEPPER_CHRONIC_LYMPHOCTIC_LEUKEMIA_UP
37	7.48	NULL	1 / 11	BP fatty acid beta-oxidation using acyl-CoA oxidase
38	7.44	NULL	2 / 66	MF flavin adenine dinucleotide binding
39	7.32	NULL	2 / 14	GSEA C2KEGG_BIOSYNTHESIS_OF_UNSATURATED_FATTY_ACIDS
40	7.25	NULL	1 / 10	BP hormone biosynthetic process

p-values



# GW\_005

## Local Summary

%DE = 0.86  
 # metagenes = 15  
 # genes = 254  
 # genes in genesets = 253

# genes with  $fdr < 0.1 = 208$  ( 13 + / 195 - )  
 # genes with  $fdr < 0.05 = 205$  ( 13 + / 192 - )  
 # genes with  $fdr < 0.01 = 166$  ( 9 + / 157 - )

$\langle r \rangle$  metagenes = 0.97

$\langle r \rangle$  genes = 0.42

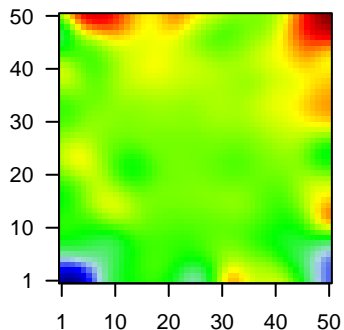
$\langle FC \rangle = -0.63$

$\langle \text{shrinkage-t} \rangle = -22.22$

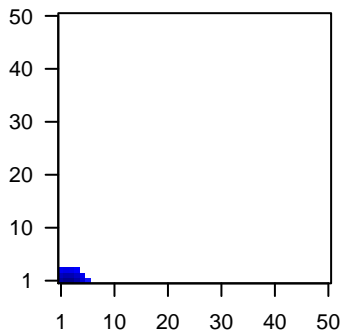
$\langle p\text{-value} \rangle = 0$

$\langle fdr \rangle = 0.26$

Profile



Spot



## Local Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	165	-1.59	2e-16	3e-16	3 x 1 AE binding protein 1 [Source:HGNC Symbol;Acc:303]
2	633	-2.28	2e-16	3e-16	3 x 1 biglycan [Source:HGNC Symbol;Acc:1044]
3	1277	-2.44	2e-16	3e-16	2 x 1 collagen, type I, alpha 1 [Source:HGNC Symbol;Acc:2197]
4	1278	-2.29	2e-16	3e-16	2 x 1 collagen, type I, alpha 2 [Source:HGNC Symbol;Acc:2198]
5	1281	-2.64	2e-16	3e-16	2 x 1 collagen, type III, alpha 1 [Source:HGNC Symbol;Acc:2201]
6	1289	-1.6	2e-16	3e-16	2 x 1 collagen, type V, alpha 1 [Source:HGNC Symbol;Acc:2209]
7	1290	-1.75	2e-16	3e-16	2 x 1 collagen, type V, alpha 2 [Source:HGNC Symbol;Acc:2210]
8	1291	-1.7	2e-16	3e-16	2 x 1 collagen, type VI, alpha 1 [Source:HGNC Symbol;Acc:2211]
9	1293	-2.16	2e-16	3e-16	2 x 1 collagen, type VI, alpha 3 [Source:HGNC Symbol;Acc:2213]
10	1397	-1.44	2e-16	3e-16	4 x 3 cysteine-rich protein 2 [Source:HGNC Symbol;Acc:2361]
11	1513	-1.57	2e-16	3e-16	4 x 1 cathepsin K [Source:HGNC Symbol;Acc:2536]
12	2199	-1.6	2e-16	3e-16	4 x 1 fibulin 2 [Source:HGNC Symbol;Acc:3601]
13	11167	-1.59	2e-16	3e-16	3 x 1 follistatin-like 1 [Source:HGNC Symbol;Acc:3972]
14	3040	-1.5	2e-16	3e-16	4 x 1 hemoglobin, alpha 2 [Source:HGNC Symbol;Acc:4824]
15	3043	-1.54	2e-16	3e-16	5 x 1 hemoglobin, beta [Source:HGNC Symbol;Acc:4827]
16	3956	-1.59	2e-16	3e-16	1 x 1 lectin, galactoside-binding, soluble, 1 [Source:HGNC Symbol]
17	4312	-1.8	2e-16	3e-16	1 x 1 matrix metalloproteinase 1 (interstitial collagenase) [Source:HGNC Symbol]
18	4316	-1.42	2e-16	3e-16	2 x 1 matrix metalloproteinase 7 (matrilysin, uterine) [Source:HGNC Symbol]
19	4692	-1.39	2e-16	3e-16	5 x 1 necdin, melanoma antigen (MAGE) family member [Source:HGNC Symbol]
20	10631	-1.64	2e-16	3e-16	2 x 1 periostin, osteoblast specific factor [Source:HGNC Symbol;Acc:10631]

## Local Geneset Analysis

Underexpression

Rank	GSZ	p-value	#in/all	Geneset
1	-43.41	NULL	67 / 190	CC extracellular matrix
2	-42.82	NULL	12 / 16	GSEA C2FARMER_BREAST_CANCER_CLUSTER_5
3	-42.12	NULL	8 / 11	MF platelet-derived growth factor binding
4	-41.34	NULL	14 / 16	MMML C6SCIEJ_MMML 1
5	-38.37	NULL	76 / 250	LymphocyteENZ_Stromal signature 1
6	-37.58	NULL	31 / 69	BP extracellular matrix disassembly
7	-36.18	NULL	27 / 64	BP collagen catabolic process
8	-33.76	NULL	8 / 12	miRNA target-29c
9	-33.51	NULL	61 / 242	BP extracellular matrix organization
10	-29.22	NULL	19 / 57	MF extracellular matrix structural constituent
11	-27.64	NULL	14 / 37	BP collagen fibril organization
12	-24.84	NULL	11 / 19	MF extracellular matrix binding
13	-23.56	NULL	5 / 10	GSEA C2KEGG_ECM_RECEPTOR_INTERACTION
14	-23.52	NULL	7 / 16	GSEA C2TURASHVILI_BREAST_LOBULAR_CARCINOMA_VS_DUCTAL_CARCINOMA
15	-22.84	NULL	4 / 12	GSEA C2ERRECCHIA_RESPONSE_TO_TGFB1_C2
16	-22.81	NULL	10 / 15	GSEA C2ONDER_CDH1_TARGETS_2_UP
17	-22.16	NULL	4 / 10	BP protein heterotrimerization
18	-22.05	NULL	4 / 8	GSEA C2HAEGERSTRAND_RESPONSE_TO_IMATINIB
19	-21.91	NULL	10 / 40	BP cellular response to amino acid stimulus
20	-21.43	NULL	6 / 13	GSEA C2TURASHVILI_BREAST_LOBULAR_CARCINOMA_VS_LOBULAR_CARCINOMA
21	-21.27	NULL	5 / 13	GSEA C2PICCALUGA_ANGIOIMMUNOBLASTIC_LYMPHOMA_UP
22	-21.04	NULL	36 / 183	CC proteinaceous extracellular matrix
23	-20.52	NULL	4 / 5	GSEA C2COLLER_MYC_TARGETS_DN
24	-20.25	NULL	11 / 15	GSEA C2CROMER_TUMORIGENESIS_UP
25	-20.13	NULL	16 / 68	CC collagen
26	-18.57	NULL	6 / 15	GSEA C2VECCHI_GASTRIC_CANCER_ADVANCED_VS_EARLY_UP
27	-18.09	NULL	5 / 16	GSEA C2REACTOME_SIGNALING_BY_PDGF
28	-18.06	NULL	21 / 119	LymphocyteBOSOLOWSKI_green total
29	-17.9	NULL	7 / 15	GSEA C2MISHRA_CARCINOMA_ASSOCIATED_FIBROBLAST_UP
30	-17.79	NULL	102 / 1182	CC extracellular region
31	-17.78	NULL	5 / 10	GSEA C2SCHUETZ_BREAST_CANCER_DUCTAL_INVASIVE_UP
32	-17.54	NULL	7 / 16	GSEA C2LIEN_BREAST_CARCINOMA_METAPLASTIC
33	-17.46	NULL	6 / 11	MMML C6SCIEJ_MMML 31
34	-16.95	NULL	5 / 15	GSEA C2CHANG_POU5F1_TARGETS_UP
35	-16.78	NULL	77 / 683	CC extracellular space
36	-16.64	NULL	7 / 16	GSEA C2ROONQUIST_STROMAL_STIMULATION_UP
37	-16.61	NULL	7 / 16	GSEA C2ROZANOV_MMP14_TARGETS_SUBSET
38	-16.56	NULL	12 / 35	Gilo Colman_survival_associated
39	-16.35	NULL	6 / 10	GSEA C2ERRECCHIA_RESPONSE_TO_TGFB1_C4
40	-16.24	NULL	7 / 16	GSEA C2ZHU_CMV_ALL_DN

p-values

