

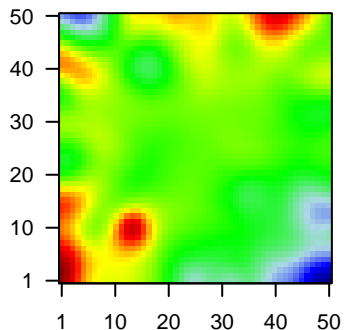
# GW\_244

## Global Summary

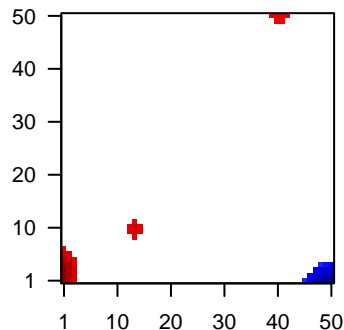
%DE = 0.14  
 # genes with fdr < 0.2 = 1564 ( 850 + / 714 - )  
 # genes with fdr < 0.1 = 1297 ( 723 + / 574 - )  
 # genes with fdr < 0.05 = 1117 ( 623 + / 494 - )  
 # genes with fdr < 0.01 = 787 ( 460 + / 327 - )  
 # genes in genesets = 16332

<FC> = 0  
 <shrinkage-t> = 0  
 <p-value> = 0.12  
 <fdr> = 0.86

Profile



Regulated Spots



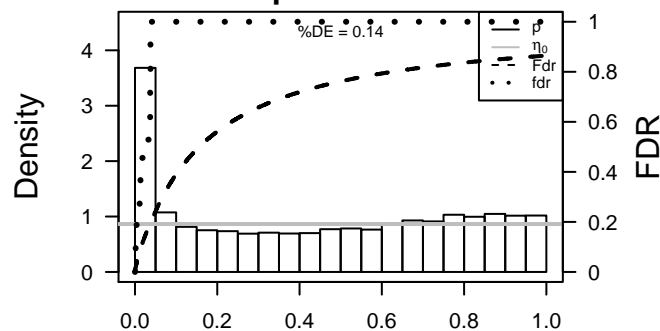
## Global Genelist

Rank	ID	log(FC)	fdr p-value	Description Metagene
1	131	-2.09	2e-16 5e-14	1 x 50 alcohol dehydrogenase 7 (class IV), mu or sigma polypeptide
2	220	2.14	2e-16 5e-14	4 x 46 aldehyde dehydrogenase 1 family, member A3 [Source:HGNC]
3	218	-2.18	2e-16 5e-14	1 x 50 aldehyde dehydrogenase 3 family, member A1 [Source:HGNC]
4	55107	1.56	2e-16 5e-14	1 x 5 anoctamin 1, calcium activated chloride channel [Source:HGNC]
5	445328	-2.3	2e-16 5e-14	4 x 46 Rho guanine nucleotide exchange factor (GEF) 35 [Source:HGNC]
6	590	1.65	2e-16 5e-14	16 x 50 butyrylcholinesterase [Source:HGNC Symbol;Acc:983]
7	387695	-1.79	2e-16 5e-14	1 x 49 chromosome 10 open reading frame 99 [Source:HGNC Symt]
8	51806	-1.58	2e-16 5e-14	4 x 50 calmodulin-like 5 [Source:HGNC Symbol;Acc:18180]
9	857	1.62	2e-16 5e-14	1 x 4 caveolin 1, caveolae protein, 22kDa [Source:HGNC Symbol;Acc:1528]
10	858	1.79	2e-16 5e-14	1 x 42 caveolin 2 [Source:HGNC Symbol;Acc:1528]
11	595	1.51	2e-16 5e-14	1 x 6 cyclin D1 [Source:HGNC Symbol;Acc:1582]
12	1675	-1.62	2e-16 5e-14	50 x 9 complement factor D (adipsin) [Source:HGNC Symbol;Acc:27]
13	2920	1.89	2e-16 5e-14	1 x 1 chemokine (C-X-C motif) ligand 2 [Source:HGNC Symbol;Acc:1528]
14	6372	1.67	2e-16 5e-14	1 x 1 chemokine (C-X-C motif) ligand 6 [Source:HGNC Symbol;Acc:1528]
15	131566	1.63	2e-16 5e-14	1 x 4 discoidin, CUB and LCCL domain containing 2 [Source:HGNC]
16	729428	3.39	2e-16 5e-14	14 x 11 G antigen 12C [Source:HGNC Symbol;Acc:28402]
17	729422	3.74	2e-16 5e-14	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
18	729431	1.62	2e-16 5e-14	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
19	100008586	2.81	2e-16 5e-14	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
20	645073	3.13	2e-16 5e-14	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]

## Global Geneset Analysis

Rank	GSZ	p-value	#all	Geneset
<i>Overexpressed</i>				
1	10.52	NULL	743	Chr Chr 7
2	9.95	NULL	15	GSEA C2CROMER_TUMORIGENESIS_UP
3	9.74	NULL	15	GSEA C2AGUIRRE_PANCREATIC_CANCER_COPY_NUMBER_UP
4	9.34	NULL	242	BP extracellular matrix organization
5	9.08	NULL	64	BP collagen catabolic process
6	8.81	NULL	69	BP extracellular matrix disassembly
7	8.73	NULL	16	GSEA C2NAGASHIMA_EGF_SIGNALING_UP
8	7.76	NULL	1720	Chr Chr 1
9	7.49	NULL	16	GSEA C2TIAN_TNF_SIGNALING_VIA_NFKB
10	7.41	NULL	16	GSEA C2AMIT_SERUM_RESPONSE_60_MCF10A
11	7.1	NULL	15	GSEA C2HOI_ST7_TARGETS_UP
12	7.08	NULL	16	GSEA C2AMIT_EGF_RESPONSE_60_HELA
13	7.02	NULL	15	GSEA C2NAGASHIMA_NRG1_SIGNALING_UP
14	6.95	NULL	11	GSEA C2BIOCARTA_PLATELETAPP_PATHWAY
15	6.84	NULL	9	GSEA C2ZERBINI_RESPONSE_TO_SULINDAC_UP
16	6.83	NULL	530	Cancer Lembecke_Normal vs Adenoma
17	6.73	NULL	11	GSEA C2MIDORIKAWA_AMPLIFIED_IN_LIVER_CANCER
18	6.66	NULL	10	GSEA C2CHASSOT_SKIN_WOUND
19	6.62	NULL	153	CC endoplasmic reticulum lumen
20	6.55	NULL	15	GSEA C2AMIT_EGF_RESPONSE_40_HELA
<i>Underexpressed</i>				
1	-10.85	NULL	417	H.Tiss WIRTH_Immune system
2	-10.73	NULL	15	CC MHC class II protein complex
3	-10.5	NULL	633	Chr Chr 9
4	-7.8	NULL	47	BP antigen processing and presentation
5	-7.71	NULL	8	GSEA C2RUNNE_GENDER_EFFECT_UP
6	-7.64	NULL	16	GSEA C2FARMER_BREAST_CANCER_CLUSTER_1
7	-7.31	NULL	7	MMML C2SCIEJ_MMML 5
8	-7.3	NULL	135	H.Tiss WIRTH_Mucosa
9	-7.23	NULL	23	CC integral to luminal side of endoplasmic reticulum membrane
10	-6.72	NULL	504	Chr Chr 15
11	-6.54	NULL	6	GSEA C2SANA_RESPONSE_TO_IFNG_UP
12	-6.51	NULL	21	CC clathrin-coated endocytic vesicle membrane
13	-6.16	NULL	60	BP T cell costimulation
14	-6.13	NULL	327	Lymphoma SPANG_CD40 6hrs UP
15	-6.06	NULL	74	BP regulation of immune response
16	-5.9	NULL	13	GSEA C2BOWIE_RESPONSE_TO_TAMOXIFEN
17	-5.6	NULL	12	BP cellular aldehyde metabolic process
18	-5.59	NULL	16	GSEA C2JROSEVIC_RESPONSE_TO_IMIQUMOD
19	-5.56	NULL	5	GSEA C2WONG_ENDOMETRIAL_CANCER_LATE
20	-5.45	NULL	127	H.Tiss WIRTH_Muscle

p-values



# GW\_244

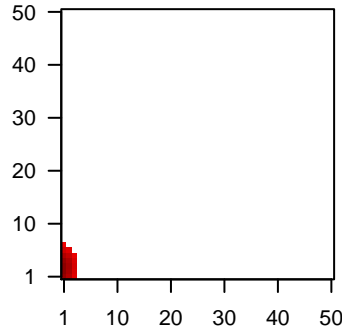
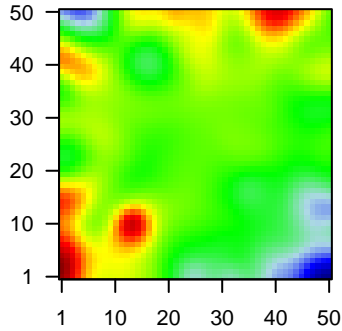
## Local Summary

%DE = 0.72  
 # metagenes = 18  
 # genes = 296  
 # genes in genesets = 294  
 # genes with  $fdr < 0.1$  = 159 ( 152 + / 7 - )  
 # genes with  $fdr < 0.05$  = 143 ( 137 + / 6 - )  
 # genes with  $fdr < 0.01$  = 121 ( 119 + / 2 - )

$\langle r \rangle$  metagenes = 0.95  
 $\langle r \rangle$  genes = 0.34  
 $\langle FC \rangle = 0.5$   
 $\langle \text{shrinkage-t} \rangle = 17.38$   
 $\langle p\text{-value} \rangle = 0$   
 $\langle fdr \rangle = 0.5$

Profile

Spot



## Local Genelist

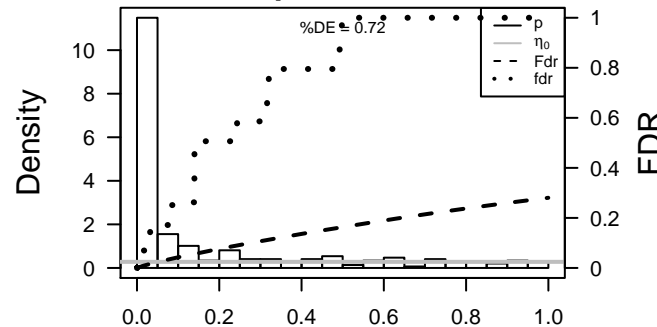
Rank	ID	log(FC)	fdr	p-value	Description
1	55107	1.56	2e-16	1e-15	1 x 5 anoctamin 1, calcium activated chloride channel [Source:HGNC Symbol;Acc:1582]
2	857	1.62	2e-16	1e-15	1 x 4 caveolin 1, caveolae protein, 22kDa [Source:HGNC Symbol;Acc:1582]
3	595	1.51	2e-16	1e-15	1 x 6 cyclin D1 [Source:HGNC Symbol;Acc:1582]
4	2920	1.89	2e-16	1e-15	1 x 1 chemokine (C-X-C motif) ligand 2 [Source:HGNC Symbol;Acc:1582]
5	6372	1.67	2e-16	1e-15	1 x 1 chemokine (C-X-C motif) ligand 6 [Source:HGNC Symbol;Acc:1582]
6	131566	1.63	2e-16	1e-15	1 x 4 discoidin, CUB and LCCL domain containing 2 [Source:HGNC Symbol;Acc:1582]
7	8870	1.86	2e-16	1e-15	1 x 3 immediate early response 3 [Source:HGNC Symbol;Acc:5392]
8	3576	1.56	2e-16	1e-15	1 x 1 interleukin 8 [Source:HGNC Symbol;Acc:6025]
9	3918	1.67	2e-16	1e-15	1 x 4 laminin, gamma 2 [Source:HGNC Symbol;Acc:6493]
10	4319	1.93	2e-16	1e-15	1 x 3 matrix metalloproteinase 10 (stromelysin 2) [Source:HGNC Symbol;Acc:6493]
11	4314	1.87	2e-16	1e-15	1 x 1 matrix metalloproteinase 3 (stromelysin 1, progelatinase) [Source:HGNC Symbol;Acc:6493]
12	4316	2.2	2e-16	1e-15	2 x 1 matrix metalloproteinase 7 (matrilysin, uterine) [Source:HGNC Symbol;Acc:6493]
13	55714	1.86	2e-16	1e-15	1 x 1 teneurin transmembrane protein 3 [Source:HGNC Symbol;Acc:6493]
14	56034	1.78	2e-16	1e-15	1 x 4 platelet derived growth factor C [Source:HGNC Symbol;Acc:6493]
15	5328	1.6	2e-16	1e-15	1 x 3 plasminogen activator, urokinase [Source:HGNC Symbol;Acc:6493]
16	5054	1.75	2e-16	1e-15	1 x 2 serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1) [Source:HGNC Symbol;Acc:6493]
17	7980	1.59	2e-16	1e-15	3 x 5 tissue factor pathway inhibitor 2 [Source:HGNC Symbol;Acc:6493]
18	7128	1.81	2e-16	1e-15	1 x 1 tumor necrosis factor, alpha-induced protein 3 [Source:HGNC Symbol;Acc:6493]
19	84141	1.48	5e-15	2e-12	1 x 2 eva-1 homolog A (C. elegans) [Source:HGNC Symbol;Acc:22000]
20	4907	1.44	3e-14	2e-12	1 x 3 5'-nucleotidase, ecto (CD73) [Source:HGNC Symbol;Acc:802]

## Local Geneset Analysis

Overexpression

Rank	GSZ	p-value	#in/all	Geneset
1	26.15	NULL	11 / 15	GSEA C2CROMER_TUMORIGENESIS_UP
2	21.59	NULL	60 / 242	BP extracellular matrix organization
3	21.37	NULL	3 / 5	GSEA C2VERNELL_RETINOBLASTOMA_PATHWAY_DN
4	20.69	NULL	6 / 13	GSEA C2FRIDMAN_SENESCENCE_UP
5	20.67	NULL	24 / 64	BP collagen catabolic process
6	20.44	NULL	25 / 69	BP extracellular matrix disassembly
7	19.33	NULL	47 / 190	CC extracellular matrix
8	18.95	NULL	4 / 9	GSEA C2ZERBINI_RESPONSE_TO_SULINDAC_UP
9	18.27	NULL	4 / 10	GSEA C2YENGAR_RESPONSE_TO_ADIPOCYTE_FACTORS
10	17.7	NULL	7 / 16	GSEA C2AMIT_EGF_RESPONSE_60_HEL4
11	17.43	NULL	7 / 11	MF platelet-derived growth factor binding
12	17.11	NULL	71 / 683	CC extracellular space
13	16.94	NULL	4 / 10	GSEA C2JEON_SMAD6_TARGETS_UP
14	16.94	NULL	9 / 15	GSEA C2ONDER_CDH1_SIGNALING_VIA_CTNNB1
15	16.35	NULL	14 / 37	BP collagen fibril organization
16	16.22	NULL	59 / 250	Lymphocyte chemokine receptor 1
17	16.22	NULL	6 / 13	GSEA C2SAI_RESPONSE_TO_RADIATION_THERAPY
18	16.17	NULL	10 / 40	BP cellular response to amino acid stimulus
19	15.94	NULL	14 / 16	MMML C2CIEJ_MMML 1
20	15.33	NULL	5 / 11	GSEA C2BIOCARTA_PLATELETAPP_PATHWAY
21	15.06	NULL	3 / 7	GSEA C2TUNODA_CISPLATIN_RESISTANCE_UP
22	15.02	NULL	6 / 16	GSEA C2AMIT_SERUM_RESPONSE_60_MCF10A
23	14.95	NULL	7 / 14	GSEA C2VERRECCHIA_EARLY_RESPONSE_TO_TGFB1
24	14.84	NULL	6 / 10	GSEA C2VERRECCHIA_RESPONSE_TO_TGFB1_C4
25	14.32	NULL	100 / 1182	CC extracellular region
26	14.24	NULL	7 / 12	miRNA target-29c
27	14.09	NULL	32 / 183	CC proteinaceous extracellular matrix
28	14.02	NULL	4 / 7	GSEA C2WANG_ESOPHAGUS_CANCER_PROGRESSION_UP
29	13.95	NULL	4 / 15	GSEA C2SNIJERS_AMPLIFIED_IN_HEAD_AND_NECK_TUMORS
30	13.93	NULL	3 / 13	GSEA C2SUZUKI_AMPLIFIED_IN_ORAL_CANCER
31	13.87	NULL	4 / 5	GSEA C2COLLER_MYC_TARGETS_DN
32	13.84	NULL	1 / 2	miRNA target-16-1
33	13.84	NULL	6 / 15	GSEA C2DASU_IL6_SIGNALING_SCAR_DN
34	13.6	NULL	7 / 15	GSEA C2ONDER_CDH1_TARGETS_2_UP
35	13.52	NULL	2 / 7	GSEA C2FREDERICK_PRKCI_TARGETS
36	13.4	NULL	5 / 14	GSEA C2SIBULAN_UV_RESPONSE_IMMORTALIZED_DN
37	13.35	NULL	2 / 6	GSEA C2SEIKE_LUNG_CANCER_POOR_SURVIVAL
38	13.28	NULL	55 / 403	BP cell adhesion
39	13.22	NULL	3 / 11	GSEA C2BIOCARTA_STEM_PATHWAY
40	13.19	NULL	8 / 13	GSEA C2MAHADEVAN_GIST_MORPHOLOGICAL_SWITCH

p-values



# GW\_244

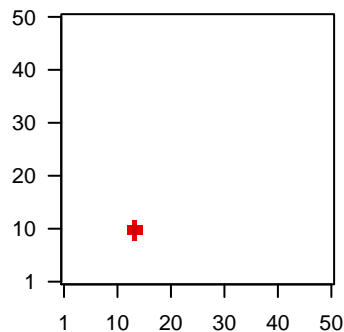
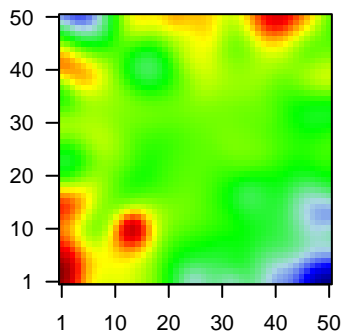
## Local Summary

%DE = 0.61  
 # metagenes = 8  
 # genes = 62  
 # genes in genesets = 46  
 # genes with  $fdr < 0.1 = 35$  ( 32 + / 3 - )  
 # genes with  $fdr < 0.05 = 30$  ( 30 + / 0 - )  
 # genes with  $fdr < 0.01 = 29$  ( 29 + / 0 - )

<r> metagenes = 0.99  
 <r> genes = 0.38  
 <FC> = 1.01  
 <shrinkage-t> = 35.4  
 <p-value> = 0  
 <fdr> = 0.45

Profile

Spot



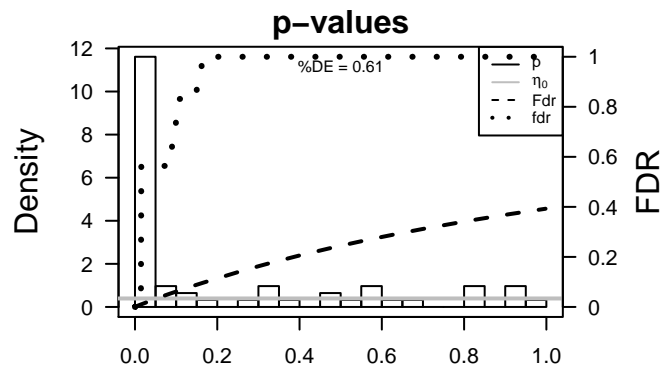
## Local Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	729428	3.39	2e-16	3e-16	14 x 11 G antigen 12C [Source:HGNC Symbol;Acc:28402]
2	729422	3.74	2e-16	3e-16	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
3	729431	1.62	2e-16	3e-16	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
4	100008586	2.81	2e-16	3e-16	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
5	645073	3.13	2e-16	3e-16	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
6	729442	3.51	2e-16	3e-16	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
7	26748	3.41	2e-16	3e-16	14 x 11 G antigen 12I [Source:HGNC Symbol;Acc:4105]
8	729396	2.57	2e-16	3e-16	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
9	729447	2.86	2e-16	3e-16	14 x 11 G antigen 2A [Source:HGNC Symbol;Acc:4099]
10	645037	3.6	2e-16	3e-16	14 x 11 G antigen 2C [Source:HGNC Symbol;Acc:31958]
11	26749	2.92	2e-16	3e-16	14 x 11 G antigen 2E [Source:HGNC Symbol;Acc:31960]
12	2576	3.27	2e-16	3e-16	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
13	2577	3.48	2e-16	3e-16	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
14	2578	1.9	2e-16	3e-16	14 x 11 G antigen 12J [Source:HGNC Symbol;Acc:17778]
15	2579	2.9	2e-16	3e-16	14 x 11 G antigen 12I [Source:HGNC Symbol;Acc:4105]
16	100101629	2.38	2e-16	3e-16	14 x 11 G antigen 2E [Source:HGNC Symbol;Acc:31960]
17	4109	1.63	2e-16	3e-16	14 x 11 melanoma antigen family A, 10 [Source:HGNC Symbol;Acc:6
18	4103	1.57	2e-16	3e-16	14 x 10 melanoma antigen family A, 4 [Source:HGNC Symbol;Acc:68
19	5446	1.77	2e-16	3e-16	13 x 10 paraoxonase 3 [Source:HGNC Symbol;Acc:9206]
20	402381	1.57	2e-16	3e-16	13 x 11 spermatogenesis and oogenesis specific basic helix-loop-he

## Local Geneset Analysis

Overexpression

Rank	GSZ	p-value	#in/all	Geneset
1	29.25	NULL	1 / 2	miRNA target-107
2	17.57	NULL	1 / 12	GSEA C2RAY_TARGETS_OF_P210_BCR_ABL_FUSION_UP
3	11.98	NULL	25 / 630	Chr Chr X
4	11.14	NULL	1 / 10	GSEA C2NAKAMURA_TUMOR_ZONE_PERIPHERAL_VS_CENTRAL_DN
5	10.62	NULL	1 / 4	GSEA C2WEBER_METHYLATED_ICP_IN_SPERM_DN
6	10.42	NULL	1 / 11	GSEA C2NIKOLSKY_BREAST_CANCER_7Q21_Q22_AMPLICON
7	9.82	NULL	1 / 12	GSEA C2HSIAO_LIVER_SPECIFIC_GENES
8	9.55	NULL	1 / 11	GSEA C2SU_PLACENTA
9	9.53	NULL	1 / 7	GSEA C2KONDO_PROSTATE_CANCER_WITH_H3K27ME3
10	9.31	NULL	1 / 13	GSEA C2HOSHIDA_LIVER_CANCER_SURVIVAL_DN
11	9.31	NULL	1 / 10	GSEA C2XU_RESPONSE_TO_TRETINOIN_DN
12	8.47	NULL	1 / 15	GSEA C2WHITEFORD_PEDIATRIC_CANCER_MARKERS
13	8.47	NULL	1 / 15	GSEA C2AGUIRRE_PANCREATIC_CANCER_COPY_NUMBER_UP
14	8.47	NULL	1 / 15	GSEA C2SHEDDEN_LUNG_CANCER_GOOD_SURVIVAL_A4
15	8.47	NULL	1 / 15	GSEA C2HOSHIDA_LIVER_CANCER_SUBCLASS_S3
16	8.13	NULL	1 / 16	GSEA C2RICKMAN_HEAD_AND_NECK_CANCER_A
17	8.13	NULL	1 / 16	GSEA C2JI_METASTASIS_REPRESSED_BY_STK11
18	8.12	NULL	1 / 14	GSEA C2NIELSEN_GIST
19	7.97	NULL	1 / 5	miRNA target-181a
20	7.83	NULL	1 / 14	GSEA C2RICKMAN_HEAD_AND_NECK_CANCER_B
21	7.76	NULL	1 / 15	GSEA C2BROWNE_HCMV_INFECTION_8HR_DN
22	7.33	NULL	1 / 10	GSEA C2BOYERINAS_ONCOFETAL_TARGETS_OF_LET7A1
23	7.33	NULL	1 / 10	GSEA C2CONRAD_STEM_CELL
24	7.31	NULL	1 / 6	GSEA C2NIELSEN_GIST_VS_SYNOVIAL_SARCOMA_UP
25	6.85	NULL	1 / 11	GSEA C2ODONNELL_TFRC_TARGETS_DN
26	6.81	NULL	1 / 6	GSEA C2MYLYKANGAS_AMPLIFICATION_HOT_SPOT_16
27	6.81	NULL	1 / 6	miRNA target-181b
28	6.45	NULL	1 / 7	GSEA C2NIELSEN_SYNOVIAL_SARCOMA_UP
29	6.45	NULL	1 / 19	BP oogenesis
30	6.01	NULL	1 / 7	GSEA C2MYLYKANGAS_AMPLIFICATION_HOT_SPOT_9
31	5.82	NULL	1 / 8	GSEA C2WEBER_METHYLATED_ICP_IN_FIBROBLAST
32	5.56	NULL	1 / 15	GSEA C2ODONNELL_TARGETS_OF_MYC_AND_TFRC_DN
33	5.56	NULL	1 / 15	miRNA target-379
34	5.42	NULL	1 / 21	BP negative regulation of Notch signaling pathway
35	4.98	NULL	1 / 26	MF cyclin-dependent protein serine/threonine kinase activity
36	4.61	NULL	1 / 10	GSEA C2GRANDVAUX_IRF3_TARGETS_DN
37	4.61	NULL	1 / 10	miRNA target-181b
38	4.47	NULL	1 / 17	BP positive regulation of interleukin-1 beta secretion
39	4.3	NULL	6 / 419	CC cellular_component
40	4.26	NULL	1 / 37	BP ovarian follicle development



# GW\_244

## Local Summary

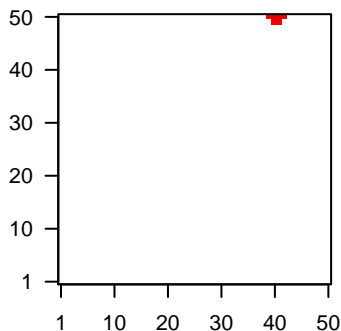
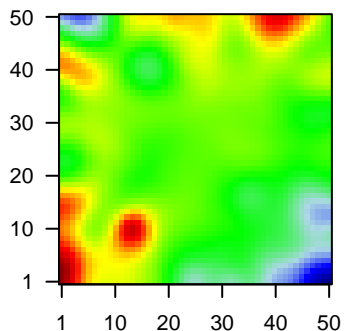
%DE = 0.73  
 # metagenes = 6  
 # genes = 168  
 # genes in genesets = 167  
 # genes with  $fdr < 0.1$  = 84 ( 81 + / 3 - )  
 # genes with  $fdr < 0.05$  = 73 ( 70 + / 3 - )  
 # genes with  $fdr < 0.01$  = 46 ( 46 + / 0 - )

<r> metagenes = 0.99  
 <r> genes = 0.36

<FC> = 0.4  
 <shrinkage-t> = 14.03  
 <p-value> = 0.01  
 <fdr> = 0.59

Profile

Spot



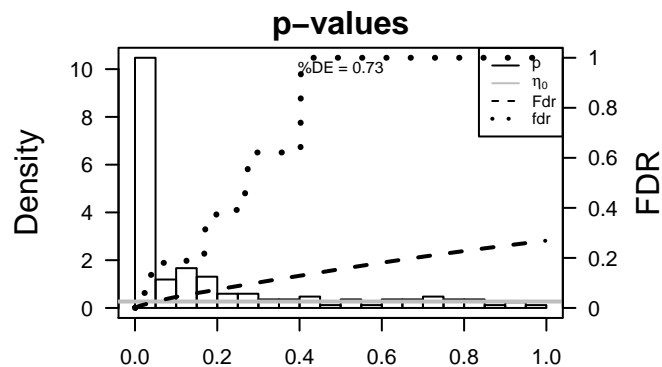
## Local Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	8500	1.67	2e-16	5e-15	42 x 50 protein tyrosine phosphatase, receptor type, f polypeptide (P1
2	26872	1.76	2e-16	5e-15	40 x 50 six transmembrane epithelial antigen of the prostate 1 [Source
3	136	1.33	2e-12	4e-10	41 x 50 adenosine A2b receptor [Source:HGNC Symbol;Acc:264]
4	54517	1.29	1e-11	3e-09	41 x 50 pseudouridylylase synthase 7 homolog (S. cerevisiae) [Source:
5	4904	1.13	7e-11	3e-08	41 x 49 Y box binding protein 1 [Source:HGNC Symbol;Acc:8014]
6	51678	1.16	1e-09	3e-08	40 x 50 membrane protein, palmitoylated 6 (MAGUK p55 subfamily m
7	10165	1.15	1e-09	4e-07	40 x 50 solute carrier family 25 (aspartate/glutamate carrier), membe
8	28969	1.09	1e-08	8e-07	39 x 50 basic leucine zipper and W2 domains 2 [Source:HGNC Symb
9	10026	1.04	4e-08	8e-07	40 x 49 phosphatidylinositol glycan anchor biosynthesis, class K [Sou
10	55536	1.04	5e-08	2e-06	42 x 50 cell division cycle associated 7-like [Source:HGNC Symbol;A
11	83787	1.01	9e-08	2e-05	39 x 50 armadillo repeat containing 10 [Source:HGNC Symbol;Acc:2:
12	55127	0.95	5e-07	3e-05	40 x 50 HEAT repeat containing 1 [Source:HGNC Symbol;Acc:25517]
13	23161	0.92	1e-06	3e-05	39 x 50 sorting nexin 13 [Source:HGNC Symbol;Acc:21335]
14	3251	0.9	2e-06	4e-05	42 x 50 hypoxanthine phosphoribosyltransferase 1 [Source:HGNC Sy
15	1503	0.89	3e-06	4e-05	41 x 50 CTP synthase 1 [Source:HGNC Symbol;Acc:2519]
16	55706	0.88	4e-06	9e-05	40 x 50 NDC1 transmembrane nucleoporin [Source:HGNC Symbol;A
17	388962	0.84	1e-05	9e-05	41 x 50 bolA family member 3 [Source:HGNC Symbol;Acc:24415]
18	26774	0.83	1e-05	9e-05	41 x 50 growth arrest-specific 5 (non-protein coding) [Source:HGNC
19	9793	0.83	1e-05	9e-05	42 x 50 cytoskeleton associated protein 5 [Source:HGNC Symbol;Acc
20	23279	0.82	1e-05	9e-05	42 x 50 nucleoporin 160kDa [Source:HGNC Symbol;Acc:18017]

## Local Geneset Analysis

Overexpression

Rank	GSZ	p-value	#in/all	Geneset
1	12.19	NULL	4 / 13	GSEA C2SCHUHMACHER_MYC_TARGETS_UP
2	11.03	NULL	3 / 14	GSEA C2MAYBURD_RESPONSE_TO_L663536_DN
3	9.8	NULL	3 / 10	CC nuclear pore outer ring
4	9.77	NULL	2 / 16	GSEA C2GALE_APL_WITH_FLT3_MUTATED_UP
5	9.63	NULL	3 / 16	GSEA C2REACTOME_TRANSPORT_OF_THE_SLBP_INDEPENDENT_MA
6	9.61	NULL	1 / 12	MF channel activity
7	9.61	NULL	1 / 12	GSEA C2ZHANG_TARGETS_OF_EWSR1_FLI1_FUSION
8	9.18	NULL	1 / 13	GSEA C2ZUCCHI_METASTASIS_UP
9	8.99	NULL	2 / 15	GSEA C2YAGI_AML_WITH_11Q23_REARRANGED
10	8.95	NULL	3 / 14	GSEA C2REACTOME_NUCLEAR_IMPORT_OF_REV_PROTEIN
11	8.61	NULL	3 / 15	GSEA C2REACTOME_TRANSPORT_OF_RIBONUCLEOPROTEINS_INTO
12	8.61	NULL	3 / 15	GSEA C2REACTOME_NEP_NS2_INTERACTS_WITH_THE_CELLULAR_E
13	8.59	NULL	6 / 29	BP regulation of glucose transport
14	8.57	NULL	8 / 59	CC nuclear pore
15	8.48	NULL	2 / 9	GSEA C2REACTOME_RNA_POLYMERASE_I_III_AND_MITOCHONDRIAL
16	8.46	NULL	1 / 15	GSEA C2NEWMAN_ERCC6_TARGETS_UP
17	8.46	NULL	1 / 15	GSEA C2WANG_SMARCE1_TARGETS_UP
18	8.37	NULL	2 / 15	GSEA C2GRAHAM_CML_DIVIDING_VS_NORMAL_QUIESCENT_UP
19	8.3	NULL	3 / 16	GSEA C2REACTOME_REV_MEDIATED_NUCLEAR_EXPORT_OF_HIV1_F
20	8.3	NULL	3 / 16	GSEA C2REACTOME_REGULATION_OF_GLYCOKINASE_BY_GLYCOKI
21	8.3	NULL	2 / 15	GSEA C2TIEN_INTESTINE_PROBIOTICS_24HR_UP
22	8.22	NULL	2 / 11	BP mitotic metaphase plate congression
23	8.08	NULL	4 / 18	LymphomaTAAVE_c-myc.BL UP
24	7.99	NULL	1 / 15	GSEA C2CROMER_TUMORIGENESIS_UP
25	7.7	NULL	6 / 35	BP mitotic nuclear envelope disassembly
26	7.59	NULL	2 / 10	Cancer GENTLES_modul3
27	7.48	NULL	2 / 14	PathwayAcBENTINK_src.2
28	7.46	NULL	6 / 37	BP hexose transport
29	7.42	NULL	2 / 14	GSEA C2REACTOME_GLYCOSE_TRANSPORT
30	7.38	NULL	2 / 18	BP glutamine metabolic process
31	7.29	NULL	1 / 9	GSEA C2FLECHNER_BIOPSY_KIDNEY_TRANSPLANT_OK_VS_DONOR
32	7.29	NULL	1 / 9	GSEA C2BROWNE_HCMV_INFECTION_18HR_UP
33	7.2	NULL	2 / 10	CC microtubule plus-end
34	7.15	NULL	2 / 14	MF pseudouridine synthase activity
35	7.11	NULL	3 / 16	GSEA C2BIDUS_METASTASIS_UP
36	6.98	NULL	1 / 21	BP iron ion homeostasis
37	6.89	NULL	2 / 8	GSEA C2KEGG_VALINE_LEUCINE_AND_ISOLEUCINE_BIOSYNTHESIS
38	6.88	NULL	2 / 14	GSEA C2REACTOME_TRNA_AMINOACYLATION
39	6.87	NULL	2 / 16	GSEA C2REACTOME_VPR_MEDIATED_NUCLEAR_IMPORT_OF_PICS
40	6.86	NULL	2 / 14	BP purine nucleotide biosynthetic process



# GW\_244

## Local Summary

%DE = 0.94  
 # metagenes = 18  
 # genes = 289  
 # genes in genesets = 286

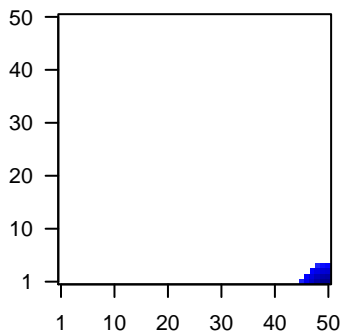
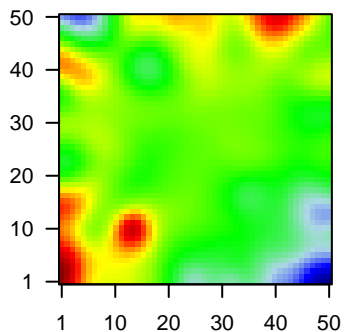
# genes with  $fdr < 0.1$  = 242 ( 10 + / 232 - )  
 # genes with  $fdr < 0.05$  = 234 ( 7 + / 227 - )  
 # genes with  $fdr < 0.01$  = 189 ( 5 + / 184 - )

$\langle r \rangle$  metagenes = 0.99  
 $\langle r \rangle$  genes = 0.57

$\langle FC \rangle = -0.55$   
 $\langle \text{shrinkage-t} \rangle = -19.09$   
 $\langle p\text{-value} \rangle = 0$   
 $\langle fdr \rangle = 0.35$

Profile

Spot



## Local Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	3122	-1.47	2e-16	1e-15	50 x 1 major histocompatibility complex, class II, DR alpha [Source:Ensembl]
2	3512	-1.87	2e-16	1e-15	50 x 1 immunoglobulin J polypeptide, linker protein for immunoglobulin
3	5920	-1.57	2e-16	1e-15	48 x 1 retinoic acid receptor responder (tazarotene induced) 3 [Source:Ensembl]
4	54855	-1.51	2e-15	5e-13	49 x 1 family with sequence similarity 46, member C [Source:HGNC]
5	3113	-1.44	3e-14	5e-13	50 x 1 major histocompatibility complex, class II, DP alpha 1 [Source:Ensembl]
6	3109	-1.43	6e-14	2e-12	50 x 1 major histocompatibility complex, class II, DM beta [Source:Ensembl]
7	3108	-1.4	2e-13	1e-11	50 x 1 major histocompatibility complex, class II, DM alpha [Source:Ensembl]
8	3123	-1.36	7e-13	8e-11	45 x 1 major histocompatibility complex, class II, DR beta 1 [Source:Ensembl]
9	10628	-1.27	9e-12	8e-11	48 x 1 thioredoxin interacting protein [Source:HGNC Symbol;Acc:16880]
10	6352	-1.29	1e-11	8e-11	48 x 1 chemokine (C-C motif) ligand 5 [Source:HGNC Symbol;Acc:16880]
11	8635	-1.28	1e-11	1e-09	46 x 1 ribonuclease T2 [Source:HGNC Symbol;Acc:21686]
12	23643	-1.2	2e-10	1e-09	50 x 3 lymphocyte antigen 96 [Source:HGNC Symbol;Acc:17156]
13	972	-1.2	2e-10	1e-09	50 x 1 CD74 molecule, major histocompatibility complex, class II invariant chain
14	919	-1.2	3e-10	1e-09	50 x 1 CD247 molecule [Source:HGNC Symbol;Acc:1677]
15	692084	-1.19	3e-10	3e-09	48 x 4 small nucleolar RNA, C/D box 13 [Source:HGNC Symbol;Acc:1677]
16	3059	-1.18	4e-10	1e-08	50 x 1 hematopoietic cell-specific Lyn substrate 1 [Source:HGNC Symbol;Acc:1677]
17	55303	-1.14	2e-09	1e-08	50 x 1 GTPase, IMAP family member 4 [Source:HGNC Symbol;Acc:1677]
18	3120	-1.14	2e-09	2e-08	47 x 1 major histocompatibility complex, class II, DQ beta 2 [Source:Ensembl]
19	6347	1.13	3e-09	3e-08	50 x 4 chemokine (C-C motif) ligand 2 [Source:HGNC Symbol;Acc:16880]
20	57172	-1.1	6e-09	3e-08	49 x 1 calcium/calmodulin-dependent protein kinase I gamma [Source:HGNC Symbol;Acc:16880]

## Local Geneset Analysis

Underexpression

Rank	GSZ	p-value	#in/all	Geneset
1	-40.43	NULL	13 / 15	CC MHC class II protein complex
2	-28.79	NULL	93 / 417	H.Tiss WIRTH_Immune system
3	-25.43	NULL	16 / 47	BP antigen processing and presentation
4	-23.07	NULL	3 / 3	MMML C6S3CIEJ_MMML 7
5	-22.74	NULL	8 / 21	CC clathrin-coated endocytic vesicle membrane
6	-22.02	NULL	3 / 5	GSEA C2WONG_ENDOMETRIAL_CANCER_LATE
7	-22.02	NULL	3 / 6	GSEA C2SANA_RESPONSE_TO_IFNG_UP
8	-21.63	NULL	8 / 23	CC integral to luminal side of endoplasmic reticulum membrane
9	-20.92	NULL	9 / 16	GSEA C2FARMER_BREAST_CANCER_CLUSTER_1
10	-20.89	NULL	97 / 553	Cancer Lembecke_Colonic Inflammation
11	-20.82	NULL	18 / 60	BP T cell costimulation
12	-19.83	NULL	7 / 11	GSEA C2BIOCARTA_TCYTOTOXIC_PATHWAY
13	-19.41	NULL	8 / 28	CC transport vesicle membrane
14	-19.09	NULL	54 / 312	BP immune response
15	-18.58	NULL	7 / 15	GSEA C2FINAK_BREAST_CANCER_SDPD_SIGNATURE
16	-18.14	NULL	9 / 35	CC trans-Golgi network membrane
17	-18.03	NULL	8 / 32	CC ER to Golgi transport vesicle membrane
18	-18.01	NULL	2 / 3	GSEA C2KEGG_VIRAL_MYOCARDITIS
19	-17.29	NULL	6 / 11	GSEA C2BIOCARTA_THELPER_PATHWAY
20	-15.74	NULL	18 / 84	BP T cell receptor signaling pathway
21	-15.47	NULL	14 / 87	BP antigen processing and presentation of exogenous peptide antigen
22	-15.3	NULL	9 / 46	CC endocytic vesicle membrane
23	-15.19	NULL	2 / 4	GSEA C2KEGG_LEISHMANIA_INFECTION
24	-14.99	NULL	18 / 74	BP regulation of immune response
25	-14.62	NULL	5 / 12	BP immunoglobulin mediated immune response
26	-14.53	NULL	5 / 12	BP dendritic cell chemotaxis
27	-14.35	NULL	44 / 265	Glio willscher_GBM_Verhaak-CL_expression_B_up
28	-14.35	NULL	44 / 265	Glio willscher_GBM_Verhaak-MES_expression_B_up
29	-14.35	NULL	44 / 265	Glio willscher_GBM_Verhaak-PNwt_expression_B_down
30	-14.35	NULL	44 / 265	Glio willscher_GBM_Verhaak-PNmut_expression_B_down
31	-14.22	NULL	12 / 60	BP interferon-gamma-mediated signaling pathway
32	-14.16	NULL	9 / 52	Chr Chr HSCHR6_MHC_QBL
33	-14.03	NULL	4 / 8	GSEA C2NIELSEN_SYNOVIAL_SARCOMA_DN
34	-13.97	NULL	6 / 12	GSEA C2BIOCARTA_CTL_PATHWAY
35	-13.94	NULL	5 / 10	GSEA C2LEE_DIFFERENTIATING_T_LYMPHOCYTE
36	-13.92	NULL	4 / 8	GSEA C2GRAHAM_CML_QUIESCENT_VS_NORMAL_DIVIDING_DN
37	-13.87	NULL	6 / 8	Glio Donson-migration tethering and rolling-associated with LTS in HG
38	-13.78	NULL	2 / 4	MMML C6S3CIEJ_MMML 2
39	-13.61	NULL	3 / 8	GSEA C2INDSTEDT_DENDRITIC_CELL_MATURATION_D
40	-13.38	NULL	5 / 17	BP positive regulation of neutrophil chemotaxis

p-values

