

# GW\_167

## Global Summary

%DE = 0.14  
 # genes with fdr < 0.2 = 1769 ( 867 + / 902 - )  
 # genes with fdr < 0.1 = 1321 ( 648 + / 673 - )  
 # genes with fdr < 0.05 = 1208 ( 606 + / 602 - )  
 # genes with fdr < 0.01 = 788 ( 398 + / 390 - )  
 # genes in genesets = 16332

<FC> = 0  
 <shrinkage-t> = 0  
 <p-value> = 0.11  
 <fdr> = 0.86

## Global Genelist

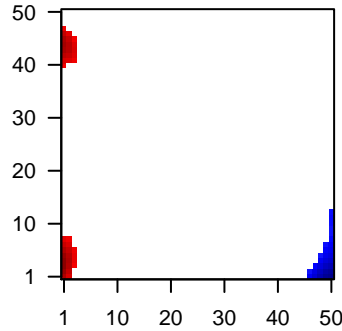
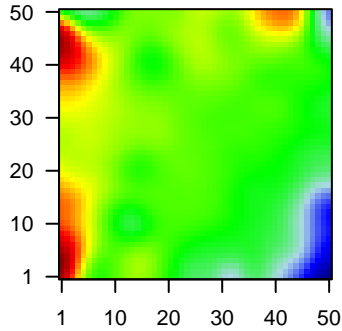
Rank	ID	log(FC)	fdr	p-value	Description
1	131	-2.61	2e-16	4e-14	1 x 50 alcohol dehydrogenase 7 (class IV), mu or sigma polypeptide
2	218	-3.37	2e-16	4e-14	1 x 50 aldehyde dehydrogenase 3 family, member A1 [Source:HGNC]
3	163782	1.71	2e-16	4e-14	1 x 2 KN motif and ankyrin repeat domains 4 [Source:HGNC Symb]
4	54443	1.46	2e-16	4e-14	43 x 50 anillin, actin binding protein [Source:HGNC Symbol;Acc:1408]
5	164284	1.82	2e-16	4e-14	1 x 3 adenomatosis polyposis coli down-regulated 1-like [Source:t]
6	684	-1.54	2e-16	4e-14	32 x 1 bone marrow stromal cell antigen 2 [Source:HGNC Symbol;A]
7	57172	-1.52	2e-16	4e-14	49 x 1 calcium/calmodulin-dependent protein kinase 1G [Source:HG]
8	894	-1.78	2e-16	4e-14	50 x 4 cyclin D2 [Source:HGNC Symbol;Acc:1583]
9	978	1.45	2e-16	4e-14	1 x 46 cytidine deaminase [Source:HGNC Symbol;Acc:1712]
10	1021	2.11	2e-16	4e-14	1 x 6 cyclin-dependent kinase 6 [Source:HGNC Symbol;Acc:1777]
11	1041	1.58	2e-16	4e-14	1 x 46 corneodesmosin [Source:HGNC Symbol;Acc:1802]
12	163732	1.45	2e-16	4e-14	1 x 43 Cbp/p300-interacting transactivator, with Glu/Asp-rich carbo
13	1308	1.87	2e-16	4e-14	1 x 43 collagen, type XVII, alpha 1 [Source:HGNC Symbol;Acc:2194]
14	169044	2.19	2e-16	4e-14	45 x 1 collagen, type XXII, alpha 1 [Source:HGNC Symbol;Acc:2298]
15	51200	1.82	2e-16	4e-14	1 x 44 carboxypeptidase A4 [Source:HGNC Symbol;Acc:15740]
16	49860	-1.94	2e-16	4e-14	1 x 50 cornulin [Source:HGNC Symbol;Acc:1230]
17	55894	2.17	2e-16	4e-14	1 x 47 defensin, beta 103B [Source:HGNC Symbol;Acc:31702]
18	414325	2.79	2e-16	4e-14	1 x 48 defensin, beta 103B [Source:HGNC Symbol;Acc:31702]
19	1673	3.21	2e-16	4e-14	1 x 49 defensin, beta 4B [Source:HGNC Symbol;Acc:30193]
20	1823	2.26	2e-16	4e-14	1 x 45 desmocollin 1 [Source:HGNC Symbol;Acc:3035]

## Global Geneset Analysis

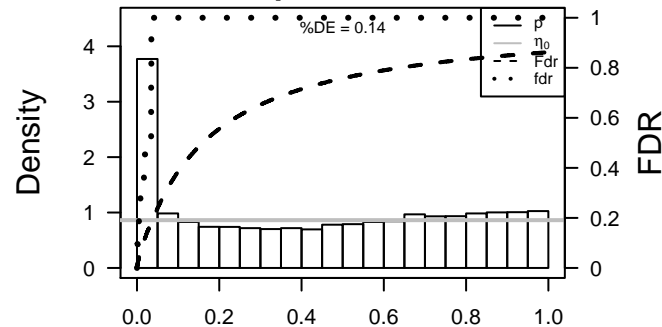
Rank	GSZ	p-value	#all	Geneset
<i>Overexpressed</i>				
1	10.96	NULL	15	GSEA C2CROMER_TUMORIGENESIS_UP
2	10.35	NULL	242	BP extracellular matrix organization
3	9.59	NULL	12	BP hemidesmosome assembly
4	9.57	NULL	64	BP collagen catabolic process
5	9.43	NULL	16	GSEA C2HUPER_BREAST_BASAL_VS_LUMINAL_UP
6	9.12	NULL	69	BP extracellular matrix disassembly
7	9.01	NULL	21	CC cornified envelope
8	8.91	NULL	142	Glio wilscher_GBM_Verhaak-CL_expression_C_up
9	8.91	NULL	142	Glio wilscher_GBM_Verhaak-PNmut_expression_C_down
10	8.25	NULL	530	Cancer Lembecke_Normal vs Adenoma
11	8.22	NULL	76	BP epidermis development
12	7.81	NULL	370	BP mitotic cell cycle
13	7.7	NULL	717	Chr Chr 16
14	7.6	NULL	21	CC desmosome
15	6.97	NULL	15	GSEA C2ONDER_CDH1_SIGNALING_VIA_CTNNB1
16	6.87	NULL	11	GSEA C2MISSIAGLIA_REGULATED_BY_METHYLATION_UP
17	6.84	NULL	15	GSEA C2SMID_BREAST_CANCER_LUMINAL_A_DN
18	6.7	NULL	16	GSEA C2GRATIAS_RETINOBLASTOMA_16Q24
19	6.52	NULL	16	GSEA C2BEGUM_TARGETS_OF_PAX3_FOXO1_FUSION_DN
20	6.51	NULL	190	CC extracellular matrix
<i>Underexpressed</i>				
1	-10.78	NULL	417	H.Tiss WIRTH_Immune system
2	-10.58	NULL	15	CC MHC class II protein complex
3	-10.13	NULL	312	BP immune response
4	-9.97	NULL	914	Chr Chr 3
5	-8.86	NULL	47	BP antigen processing and presentation
6	-8.05	NULL	23	CC integral to luminal side of endoplasmic reticulum membrane
7	-8.03	NULL	16	GSEA C2FARMER_BREAST_CANCER_CLUSTER_1
8	-7.5	NULL	51	BP type I interferon signaling pathway
9	-7.48	NULL	32	CC ER to Golgi transport vesicle membrane
10	-7.37	NULL	74	BP regulation of immune response
11	-7.06	NULL	553	Cancer Lembecke_Colonc Inflammation
12	-6.91	NULL	327	Lymphom SPANG_CD40 6hrs UP
13	-6.86	NULL	16	GSEA C2UROSEVIC_RESPONSE_TO_IMIQUIMOD
14	-6.66	NULL	60	BP interferon-gamma-mediated signaling pathway
15	-6.61	NULL	15	GSEA C2FINAK_BREAST_CANCER_SDPP_SIGNATURE
16	-6.56	NULL	274	Lymphom SPANG_IL21 DN
17	-6.5	NULL	28	CC transport vesicle membrane
18	-6.43	NULL	6	GSEA C2SARRIO_EPITHELIAL_MESENCHYMAL_TRANSITION_DN
19	-6.37	NULL	16	GSEA C2ZHANG_INTERFERON_RESPONSE
20	-6.32	NULL	16	GSEA C2CROMER_TUMORIGENESIS_DN

Profile

Regulated Spots



p-values



# GW\_167

## Local Summary

%DE = 0.79  
 # metagenes = 20  
 # genes = 316  
 # genes in genesets = 313

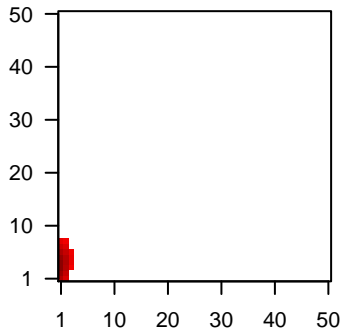
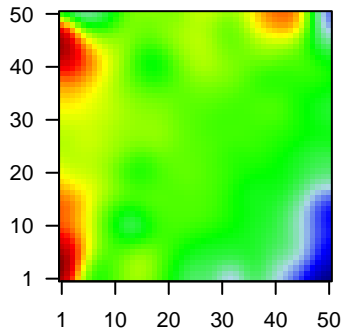
# genes with  $fdr < 0.1 = 205$  ( 199 + / 6 - )  
 # genes with  $fdr < 0.05 = 200$  ( 195 + / 5 - )  
 # genes with  $fdr < 0.01 = 158$  ( 156 + / 2 - )

<r> metagenes = 0.94  
 <r> genes = 0.33

<FC> = 0.6  
 <shrinkage-t> = 20.99  
 <p-value> = 0  
 <fdr> = 0.38

Profile

Spot



## Local Genelist

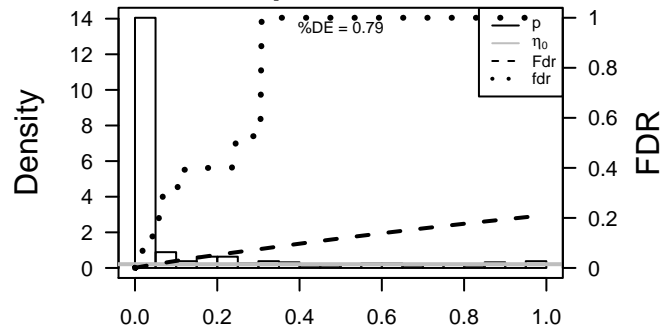
Rank	ID	log(FC)	fdr	p-value	Description
1	163782	1.71	2e-16	8e-16	1 x 2 KN motif and ankyrin repeat domains 4 [Source:HGNC Symb
2	164284	1.82	2e-16	8e-16	1 x 3 adenomatosis polyposis coli down-regulated 1-like [Source:t
3	1021	2.11	2e-16	8e-16	1 x 6 cyclin-dependent kinase 6 [Source:HGNC Symbol;Acc:1777]
4	84141	1.59	2e-16	8e-16	1 x 2 eva-1 homolog A (C. elegans) [Source:HGNC Symbol;Acc:2
5	10468	1.86	2e-16	8e-16	1 x 5 follistatin [Source:HGNC Symbol;Acc:3971]
6	259217	1.52	2e-16	8e-16	1 x 4 heat shock 70kDa protein 12A [Source:HGNC Symbol;Acc:1
7	3909	1.59	2e-16	8e-16	1 x 5 laminin, alpha 3 [Source:HGNC Symbol;Acc:6483]
8	3918	1.59	2e-16	8e-16	1 x 4 laminin, gamma 2 [Source:HGNC Symbol;Acc:6493]
9	4312	1.52	2e-16	8e-16	1 x 1 matrix metalloproteinase 1 (interstitial collagenase) [Source:H
10	4319	2.2	2e-16	8e-16	1 x 3 matrix metalloproteinase 10 (stromelysin 2) [Source:HGNC Sy
11	4502	1.47	2e-16	8e-16	1 x 3 metallothionein 2A [Source:HGNC Symbol;Acc:7406]
12	25914	1.55	2e-16	8e-16	1 x 8 rotatin [Source:HGNC Symbol;Acc:18654]
13	10512	1.99	2e-16	8e-16	1 x 4 sema domain, immunoglobulin domain (Ig), short basic doma
14	5054	1.91	2e-16	8e-16	1 x 2 serpin peptidase inhibitor, clade E (nexin, plasminogen activa
15	5270	1.69	2e-16	8e-16	1 x 3 serpin peptidase inhibitor, clade E (nexin, plasminogen activa
16	8406	1.59	2e-16	8e-16	2 x 1 sushi-repeat containing protein, X-linked [Source:HGNC Syr
17	7980	2.05	2e-16	8e-16	3 x 5 tissue factor pathway inhibitor 2 [Source:HGNC Symbol;Acc:1
18	7054	1.59	2e-16	8e-16	1 x 8 tyrosine hydroxylase [Source:HGNC Symbol;Acc:11782]
19	3956	1.42	4e-16	1e-14	1 x 1 lectin, galactoside-binding, soluble, 1 [Source:HGNC Symbol
20	9388	1.42	7e-16	4e-14	1 x 5 lipase, endothelial [Source:HGNC Symbol;Acc:6623]

## Local Geneset Analysis

Overexpression

Rank	GSZ	p-value	#in/all	Geneset
1	31.39	NULL	10 / 15	GSEA C2CROMER_TUMORIGENESIS_UP
2	25.04	NULL	58 / 242	BP extracellular matrix organization
3	22.69	NULL	21 / 64	BP collagen catabolic process
4	22.02	NULL	22 / 69	BP extracellular matrix disassembly
5	21.83	NULL	36 / 190	CC extracellular matrix
6	18.42	NULL	10 / 16	MMML C6C6CIEJ_MMML 1
7	18.18	NULL	8 / 16	GSEA C2BEGUM_TARGETS_OF_PAX3_FOXO1_FUSION_DN
8	18.1	NULL	6 / 10	GSEA C2VERRECCHIA_RESPONSE_TO_TGFB1_C4
9	17.53	NULL	7 / 16	GSEA C2FARMER_BREAST_CANCER_CLUSTER_5
10	17.48	NULL	7 / 15	GSEA C2ONDER_CDH1_SIGNALING_VIA_CTNNB1
11	17.37	NULL	5 / 11	GSEA C2BIOCARTA_PLATELETAPP_PATHWAY
12	17.12	NULL	6 / 11	MF platelet-derived growth factor binding
13	16.59	NULL	1 / 2	miRNA target-124a
14	16.48	NULL	43 / 250	LymphontENZ_Stromal signature 1
15	16.25	NULL	5 / 10	GSEA C2KEGG_ECM_RECEPTOR_INTERACTION
16	15.22	NULL	4 / 14	GSEA C2CHARAFE_BREAST_CANCER_LUMINAL_VS_MESENCHYMAL
17	15.02	NULL	3 / 11	GSEA C2MISSIAGLIA_REGULATED_BY_METHYLATION_UP
18	14.91	NULL	11 / 40	BP cellular response to amino acid stimulus
19	14.52	NULL	53 / 403	BP cell adhesion
20	14.21	NULL	4 / 12	GSEA C2Y_AGING_MIDDLE_UP
21	14	NULL	5 / 14	GSEA C2SIMBULAN_UV_RESPONSE_IMMORTALIZED_DN
22	14	NULL	6 / 12	BP hemidesmosome assembly
23	13.59	NULL	5 / 15	GSEA C2ONDER_CDH1_TARGETS_2_UP
24	13.59	NULL	5 / 16	GSEA C2JRS_ADIPOCYTE_DIFFERENTIATION_DN
25	13.35	NULL	64 / 683	CC extracellular space
26	13.32	NULL	97 / 1182	CC extracellular region
27	13.24	NULL	3 / 5	GSEA C2DASU_IL6_SIGNALING_UP
28	13.2	NULL	5 / 13	GSEA C2FRIDMAN_SENESCENCE_UP
29	13.17	NULL	6 / 13	GSEA C2MAHADEVAN_GIST_MORPHOLOGICAL_SWITCH
30	13.17	NULL	2 / 4	miRNA target-195
31	12.99	NULL	25 / 183	CC proteinaceous extracellular matrix
32	12.97	NULL	6 / 11	Glio Phillips MES up vs Prolif & PN
33	12.96	NULL	6 / 12	miRNA target-29c
34	12.88	NULL	14 / 57	MF extracellular matrix structural constituent
35	12.84	NULL	10 / 35	Glio Colman_survival_associated
36	12.52	NULL	7 / 14	GSEA C2VERRECCHIA_EARLY_RESPONSE_TO_TGFB1
37	12.42	NULL	17 / 83	CC basement membrane
38	12.41	NULL	3 / 15	GSEA C2KEGG_P53_SIGNALING_PATHWAY
39	12.32	NULL	5 / 16	GSEA C2KIM_WT1_TARGETS_UP
40	11.99	NULL	4 / 16	GSEA C2AMUNDSON_POOR_SURVIVAL_AFTER_GAMMA_RADIATION_

p-values



# GW\_167

## Local Summary

%DE = 0.78  
 # metagenes = 19  
 # genes = 262  
 # genes in genesets = 256

# genes with  $fdr < 0.1$  = 182 ( 169 + / 13 - )  
 # genes with  $fdr < 0.05$  = 162 ( 153 + / 9 - )  
 # genes with  $fdr < 0.01$  = 138 ( 132 + / 6 - )

$\langle r \rangle$  metagenes = 0.94

$\langle r \rangle$  genes = 0.37

$\langle FC \rangle = 0.57$

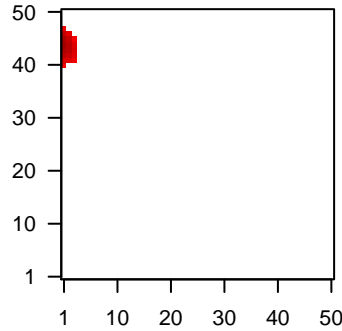
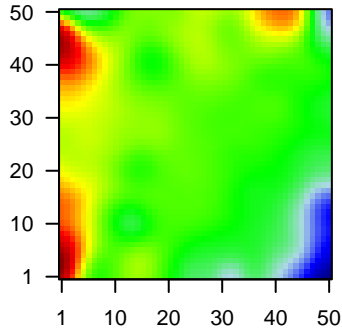
$\langle \text{shrinkage-t} \rangle = 19.99$

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

$\langle fdr \rangle = 0.37$

Profile

Spot



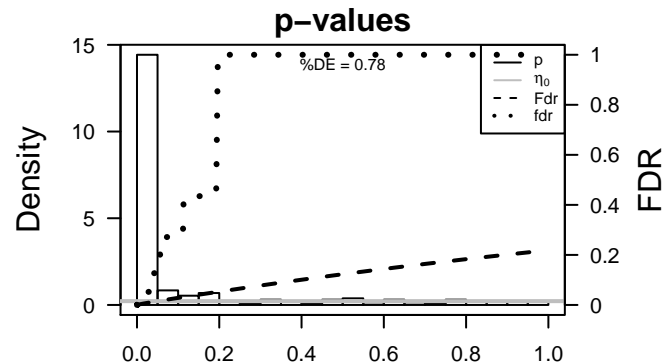
## Local Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	978	1.45	2e-16	6e-16	1 x 46 cytidine deaminase [Source:HGNC Symbol;Acc:1712]
2	1041	1.58	2e-16	6e-16	1 x 46 corneodesmosin [Source:HGNC Symbol;Acc:1802]
3	163732	1.45	2e-16	6e-16	1 x 43 Cbp/p300-interacting transactivator, with Glu/Asp-rich carbo
4	1308	1.87	2e-16	6e-16	1 x 43 collagen, type XVII, alpha 1 [Source:HGNC Symbol;Acc:2194]
5	51200	1.82	2e-16	6e-16	1 x 44 carboxypeptidase A4 [Source:HGNC Symbol;Acc:15740]
6	55894	2.17	2e-16	6e-16	1 x 47 defensin, beta 103B [Source:HGNC Symbol;Acc:31702]
7	1823	2.26	2e-16	6e-16	1 x 45 desmocollin 1 [Source:HGNC Symbol;Acc:3035]
8	3306	1.58	2e-16	6e-16	1 x 42 heat shock 70kDa protein 2 [Source:HGNC Symbol;Acc:5235]
9	3552	1.57	2e-16	6e-16	1 x 43 interleukin 1, alpha [Source:HGNC Symbol;Acc:5991]
10	56300	1.8	2e-16	6e-16	1 x 47 interleukin 36, gamma [Source:HGNC Symbol;Acc:15741]
11	3848	2.33	2e-16	6e-16	1 x 47 keratin 1 [Source:HGNC Symbol;Acc:6412]
12	3858	1.84	2e-16	6e-16	1 x 47 keratin 10 [Source:HGNC Symbol;Acc:6413]
13	3861	1.36	2e-16	6e-16	1 x 45 keratin 14 [Source:HGNC Symbol;Acc:6416]
14	3868	1.75	2e-16	6e-16	1 x 46 keratin 16 [Source:HGNC Symbol;Acc:6423]
15	286887	1.32	2e-16	6e-16	1 x 47 keratin 6C [Source:HGNC Symbol;Acc:20406]
16	9119	2.14	2e-16	6e-16	1 x 44 keratin 75 [Source:HGNC Symbol;Acc:24431]
17	5744	1.74	2e-16	6e-16	1 x 43 parathyroid hormone-like hormone [Source:HGNC Symbol;A
18	8601	1.55	2e-16	6e-16	1 x 44 regulator of G-protein signaling 20 [Source:HGNC Symbol;A
19	54809	1.49	2e-16	6e-16	1 x 46 sterile alpha motif domain containing 9 [Source:HGNC Symb
20	8710	1.87	2e-16	6e-16	1 x 46 serpin peptidase inhibitor, clade B (ovalbumin), member 7 [Sc

## Local Geneset Analysis

Overexpression

Rank	GSZ	p-value	#in/all	Geneset
1	20.96	NULL	18 / 82	CC intermediate filament
2	20.27	NULL	9 / 44	CC keratin filament
3	17.3	NULL	5 / 12	BP hemidesmosome assembly
4	16.34	NULL	14 / 76	BP epidermis development
5	16.22	NULL	3 / 8	GSEA C2L1U_CDX2_TARGETS_DN
6	15.75	NULL	7 / 16	GSEA C2HUPER_BREAST_BASAL_VS_LUMINAL_UP
7	15.64	NULL	63 / 572	Disease GUDJ_psooriasis up
8	15.33	NULL	25 / 135	H.Tiss WIRTH_Mucosa
9	14.37	NULL	6 / 15	GSEA C2RICKMAN_TUMOR_DIFFERENTIATED_WELL_VS_MODERATE
10	14.07	NULL	5 / 21	CC gap junction
11	13.98	NULL	4 / 13	BP intermediate filament cytoskeleton organization
12	13.21	NULL	7 / 21	CC desmosome
13	12.61	NULL	4 / 12	GSEA C2REACTOME_GAP_JUNCTION_ASSEMBLY
14	11.72	NULL	11 / 82	MF structural constituent of cytoskeleton
15	11.48	NULL	17 / 186	MF structural molecule activity
16	11.41	NULL	4 / 13	GSEA C2REACTOME_GAP_JUNCTION_TRAFFICKING
17	11.38	NULL	4 / 15	GSEA C2AIGNER_ZEB1_TARGETS
18	11.1	NULL	4 / 15	CC connexon complex
19	10.88	NULL	4 / 38	BP epithelial cell differentiation
20	10.05	NULL	3 / 16	GSEA C2BECKER_TAMOXIFEN_RESISTANCE_DN
21	10.04	NULL	3 / 10	MF gap junction channel activity
22	9.48	NULL	2 / 8	GSEA C2DORN_ADENOVIRUS_INFECTION_24HR_UP
23	8.93	NULL	2 / 15	GSEA C2SMID_BREAST_CANCER_LUMINAL_A_DN
24	8.78	NULL	2 / 15	MF interleukin-1 receptor binding
25	8.73	NULL	1 / 4	GSEA C2BUDHU_LIVER_CANCER_METASTASIS_DN
26	8.53	NULL	4 / 16	GSEA C2ELVIDGE_HIF1A_AND_HIF2A_TARGETS_DN
27	8.33	NULL	3 / 25	BP response to zinc ion
28	8.33	NULL	2 / 5	GSEA C2FERRARI_RESPONSE_TO_FENRETINIDE_DN
29	8.24	NULL	3 / 12	CC fascia adherens
30	8.02	NULL	4 / 16	GSEA C2ELVIDGE_HIF1A_TARGETS_DN
31	8.01	NULL	2 / 11	GSEA C2MURAKAMI_UV_RESPONSE_24HR
32	7.99	NULL	2 / 9	GSEA C2KYNG_DNA_DAMAGE_UP
33	7.99	NULL	2 / 9	GSEA C2KYNG_ENVIRONMENTAL_STRESS_RESPONSE_UP
34	7.91	NULL	3 / 16	GSEA C2ELVIDGE_HYPOXIA_BY_DMOG_UP
35	7.88	NULL	3 / 15	GSEA C2RICKMAN_TUMOR_DIFFERENTIATED_WELL_VS_POORLY_DN
36	7.61	NULL	2 / 15	GSEA C2NGUYEN_NOTCH1_TARGETS_UP
37	7.51	NULL	2 / 10	GSEA C2RUGO_ENVIRONMENTAL_STRESS_RESPONSE_UP
38	7.51	NULL	2 / 10	GSEA C2KYNG_ENVIRONMENTAL_STRESS_RESPONSE_NOT_BY_GAM
39	7.39	NULL	2 / 15	BP fibrinolysis
40	7.32	NULL	2 / 10	MF neutral amino acid transmembrane transporter activity



# GW\_167

## Local Summary

%DE = 0.87  
 # metagenes = 30  
 # genes = 525  
 # genes in genesets = 522

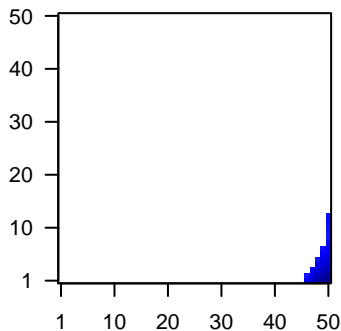
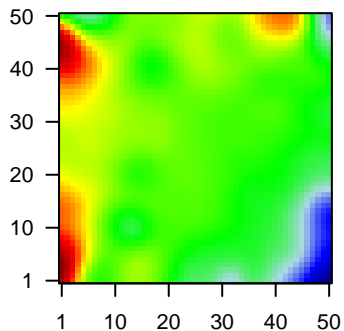
# genes with  $fdr < 0.1 = 412$  ( 9 + / 403 - )  
 # genes with  $fdr < 0.05 = 376$  ( 8 + / 368 - )  
 # genes with  $fdr < 0.01 = 277$  ( 6 + / 271 - )

$\langle r \rangle$  metagenes = 0.83  
 $\langle r \rangle$  genes = 0.33

$\langle FC \rangle = -0.54$   
 $\langle \text{shrinkage-t} \rangle = -19.07$   
 $\langle p\text{-value} \rangle = 0$   
 $\langle fdr \rangle = 0.38$

Profile

Spot



## Local Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	57172	-1.52	2e-16	1e-15	49 x 1 calcium/calmodulin-dependent protein kinase IG [Source:HGNC Symbol;Acc:15833]
2	894	-1.78	2e-16	1e-15	50 x 4 cyclin D2 [Source:HGNC Symbol;Acc:15833]
3	3169	-1.68	2e-16	1e-15	50 x 12 forkhead box A1 [Source:HGNC Symbol;Acc:5021]
4	2878	-1.47	2e-16	1e-15	50 x 9 glutathione peroxidase 3 (plasma) [Source:HGNC Symbol;Acc:15833]
5	3108	-1.45	2e-16	1e-15	50 x 1 major histocompatibility complex, class II, DM alpha [Source:HGNC Symbol;Acc:15833]
6	3122	-1.5	2e-16	1e-15	50 x 1 major histocompatibility complex, class II, DR alpha [Source:HGNC Symbol;Acc:15833]
7	3488	-1.77	2e-16	1e-15	50 x 7 insulin-like growth factor binding protein 5 [Source:HGNC Symbol;Acc:15833]
8	3512	-1.79	2e-16	1e-15	50 x 1 immunoglobulin J polypeptide, linker protein for immunoglobulin J [Source:HGNC Symbol;Acc:15833]
9	3543	-2.89	2e-16	1e-15	49 x 1 immunoglobulin lambda-like polypeptide 1 [Source:HGNC Symbol;Acc:15833]
10	5920	-1.76	2e-16	1e-15	48 x 1 retinoic acid receptor responder (tazarotene induced) 3 [Source:HGNC Symbol;Acc:15833]
11	6920	-1.87	2e-16	1e-15	50 x 13 transcription elongation factor A (SII), 3 [Source:HGNC Symbol;Acc:15833]
12	10537	-1.59	2e-16	1e-15	50 x 1 ubiquitin D [Source:HGNC Symbol;Acc:18795]
13	51316	-1.41	9e-16	9e-14	50 x 13 placenta-specific 8 [Source:HGNC Symbol;Acc:19254]
14	25840	-1.39	3e-15	9e-14	50 x 11 methyltransferase like 7A [Source:HGNC Symbol;Acc:24550]
15	3936	-1.38	4e-15	9e-14	50 x 1 lymphocyte cytosolic protein 1 (L-plastin) [Source:HGNC Symbol;Acc:15833]
16	3113	-1.37	5e-15	9e-14	50 x 1 major histocompatibility complex, class II, DP alpha 1 [Source:HGNC Symbol;Acc:15833]
17	54855	-1.37	6e-15	5e-13	49 x 1 family with sequence similarity 46, member C [Source:HGNC Symbol;Acc:15833]
18	347	-1.35	1e-14	5e-13	50 x 7 apolipoprotein D [Source:HGNC Symbol;Acc:612]
19	241	-1.34	2e-14	2e-12	50 x 1 arachidonate 5-lipoxygenase-activating protein [Source:HGNC Symbol;Acc:15833]
20	8404	-1.32	5e-14	5e-12	50 x 6 SPARC-like 1 (hevin) [Source:HGNC Symbol;Acc:11220]

## Local Geneset Analysis

Underexpression

Rank	GSZ	p-value	#in/all	Geneset
1	-23.44	NULL	12 / 15	CC MHC class II protein complex
2	-20.39	NULL	93 / 417	H.Tiss WIRTH_Immune system
3	-18.77	NULL	114 / 553	Cancer Lembcke_Colonc Inflammation
4	-17.69	NULL	61 / 312	BP immune response
5	-16.37	NULL	3 / 6	GSEA C2SANA_RESPONSE_TO_IFNG_UP
6	-15.53	NULL	14 / 16	GSEA C2RICKMAN_HEAD_AND_NECK_CANCER_D
7	-15.13	NULL	4 / 7	GSEA C2GRAHAM_CML_DIVIDING_VS_NORMAL_DIVIDING_DN
8	-14.93	NULL	2 / 4	MMML C2SCIEJ_MMML 2
9	-14.84	NULL	16 / 47	BP antigen processing and presentation
10	-14.2	NULL	9 / 16	GSEA C2FARMER_BREAST_CANCER_CLUSTER_1
11	-13.96	NULL	3 / 5	GSEA C2WONG_ENDOMETRIAL_CANCER_LATE
12	-13.95	NULL	7 / 11	GSEA C2BIOCARTA_TCYTOTOXIC_PATHWAY
13	-13.11	NULL	17 / 60	BP T cell costimulation
14	-13.06	NULL	7 / 15	GSEA C2FINAK_BREAST_CANCER_SDDP_SIGNATURE
15	-12.88	NULL	9 / 28	CC transport vesicle membrane
16	-12.62	NULL	7 / 8	Glio Donson-migration tethering and rolling-associated with LTS in HGA
17	-12.5	NULL	4 / 7	Glio Donson-cytotoxic effectors-associated with LTS in HGA
18	-12.46	NULL	54 / 265	Glio willscher_GBM_Verhaak-CL_expression_B_up
19	-12.46	NULL	54 / 265	Glio willscher_GBM_Verhaak-MES_expression_B_up
20	-12.46	NULL	54 / 265	Glio willscher_GBM_Verhaak-PNwt_expression_B_down
21	-12.46	NULL	54 / 265	Glio willscher_GBM_Verhaak-PNmut_expression_B_down
22	-12.29	NULL	6 / 12	GSEA C2BIOCARTA_CTL_PATHWAY
23	-12.12	NULL	2 / 3	GSEA C2KEGG_VIRAL_MYOCARDITIS
24	-12.1	NULL	5 / 7	GSEA C2TONKS_TARGETS_OF_RUNX1_RUNX1T1_FUSION_SUSTAINED
25	-12.05	NULL	7 / 21	CC clathrin-coated endocytic vesicle membrane
26	-12.04	NULL	6 / 14	GSEA C2WU_SILENCED_BY_METHYLATION_IN_BLADDER_CANCER
27	-11.75	NULL	4 / 8	GSEA C2GRAHAM_CML_QUIESCENT_VS_NORMAL_DIVIDING_DN
28	-11.71	NULL	6 / 11	GSEA C2BIOCARTA_THELPER_PATHWAY
29	-11.43	NULL	7 / 23	CC integral to luminal side of endoplasmic reticulum membrane
30	-11.23	NULL	34 / 162	CC external side of plasma membrane
31	-11.14	NULL	1 / 6	H.Tiss WIRTH_Bone marrow
32	-11.11	NULL	5 / 7	GSEA C2LOPEZ_MESOTELIOMA_SURVIVAL_TIME_DN
33	-11.07	NULL	7 / 12	GSEA C2ZHAN_MULTIPLE_MYELOMA_DN
34	-10.99	NULL	7 / 15	GSEA C2TONKS_TARGETS_OF_RUNX1_RUNX1T1_FUSION_GRANULOC
35	-10.92	NULL	5 / 8	GSEA C2NIELSEN_SYNOVIAL_SARCOMA_DN
36	-10.69	NULL	19 / 74	BP regulation of immune response
37	-10.6	NULL	2 / 6	GSEA C2TRAYNOR_RETT_SYNDROM_DN
38	-10.47	NULL	5 / 12	BP immunoglobulin mediated immune response
39	-10.47	NULL	4 / 8	LymphomaMASCQUE_ABC UP
40	-10.42	NULL	4 / 13	GSEA C2IRN_TRETINOIN_RESPONSE_UP

