

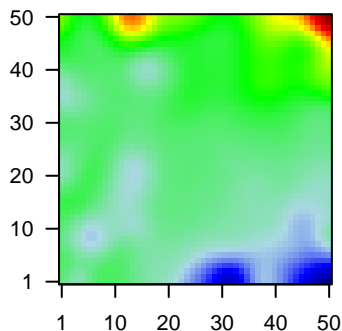
# GW\_133

## Global Summary

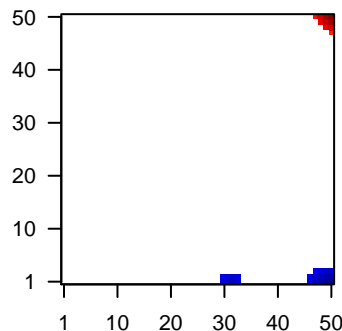
%DE = 0.15  
 # genes with fdr < 0.2 = 1819 ( 1018 + / 801 - )  
 # genes with fdr < 0.1 = 1541 ( 876 + / 665 - )  
 # genes with fdr < 0.05 = 1200 ( 702 + / 498 - )  
 # genes with fdr < 0.01 = 877 ( 533 + / 344 - )  
 # genes in genesets = 16332

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

Profile



Regulated Spots



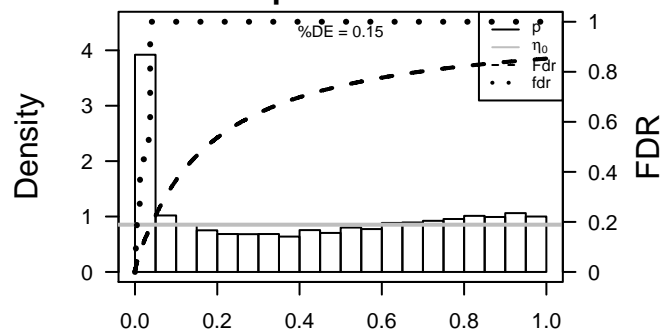
## Global Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	154664	1.35	2e-16	3e-14	50 x 50 ATP-binding cassette, sub-family A (ABC1), member 13 [Source:HGNC Symbol]
2	131	2.15	2e-16	3e-14	1 x 50 alcohol dehydrogenase 7 (class IV), mu or sigma polypeptide
3	57016	2.13	2e-16	3e-14	1 x 50 aldo-keto reductase family 1, member B10 (aldose reductase)
4	441282	2.06	2e-16	3e-14	1 x 49 aldo-keto reductase family 1, member B15 [Source:HGNC Symbol]
5	1646	1.72	2e-16	3e-14	13 x 50 aldo-keto reductase family 1, member C2 [Source:HGNC Symbol]
6	8644	2.55	2e-16	3e-14	1 x 50 aldo-keto reductase family 1, member C3 [Source:HGNC Symbol]
7	1109	3.12	2e-16	3e-14	13 x 50 aldo-keto reductase family 1, member C4 [Source:HGNC Symbol]
8	214	1.47	2e-16	3e-14	50 x 50 activated leukocyte cell adhesion molecule [Source:HGNC Symbol]
9	216	2.52	2e-16	3e-14	50 x 50 aldehyde dehydrogenase 1 family, member A1 [Source:HGNC Symbol]
10	218	2.57	2e-16	3e-14	1 x 50 aldehyde dehydrogenase 3 family, member A1 [Source:HGNC Symbol]
11	9823	1.41	2e-16	3e-14	7 x 1 armadillo repeat containing, X-linked 2 [Source:HGNC Symbol]
12	483	1.33	2e-16	3e-14	13 x 50 ATPase, Na+/K+ transporting, beta 3 polypeptide [Source:HGNC Symbol]
13	8702	1.3	2e-16	3e-14	50 x 50 UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide
14	586	1.39	2e-16	3e-14	6 x 1 branched chain amino-acid transaminase 1, cytosolic [Source:HGNC Symbol]
15	684	-1.68	2e-16	3e-14	32 x 1 bone marrow stromal cell antigen 2 [Source:HGNC Symbol;HGNC:154664]
16	64073	-1.46	2e-16	3e-14	1 x 46 chromosome 19 open reading frame 33 [Source:HGNC Symbol]
17	113802	-1.3	2e-16	3e-14	46 x 46 HEN1 methyltransferase homolog 1 (Arabidopsis) [Source:HGNC Symbol]
18	92747	2.82	2e-16	3e-14	50 x 10 BPI fold containing family B, member 1 [Source:HGNC Symbol]
19	205428	1.59	2e-16	3e-14	50 x 50 chromosome 3 open reading frame 58 [Source:HGNC Symbol]
20	29923	1.57	2e-16	3e-14	4 x 44 hypoxia inducible lipid droplet-associated [Source:HGNC Symbol]

## Global Geneset Analysis

Rank	GSZ	p-value	#all	Geneset
<i>Overexpressed</i>				
1	9.84	NULL	1033	Chr Chr 2
2	9.34	NULL	534	Chr Chr 8
3	8.19	NULL	15	GSEA C2LEE_LIVER_CANCER_HEPATOBLAST
4	7.92	NULL	13	GSEA C2COLLER_MYC_TARGETS_UP
5	7.79	NULL	76	BP epidermis development
6	7.63	NULL	42	BP keratinization
7	7.56	NULL	13	GSEA C2SINGH_NFE2L2_TARGETS
8	7.36	NULL	21	CC cornified envelope
9	7.17	NULL	7	GSEA C2FREDERICK_PRKCI_TARGETS
10	7.04	NULL	16	GSEA C2ELVIDGE_HIF1A_AND_HIF2A_TARGETS_DN
11	6.94	NULL	53	BP keratinocyte differentiation
12	6.92	NULL	8	GSEA C2LIU_CD2_TARGETS_DN
13	6.82	NULL	11	GSEA C2TO_PTTG1_TARGETS_UP
14	6.66	NULL	914	Chr Chr 3
15	6.48	NULL	315	miRNA target set 559
16	6.46	NULL	918	Chr Chr 17
17	6.4	NULL	16	GSEA C2KAN_RESPONSE_TO_ARSENIC_TRIOXIDE
18	6.39	NULL	436	miRNA target set 559
19	6.39	NULL	313	miRNA target set 559
20	6.23	NULL	16	GSEA C2HUPER_BREAST_BASAL_VS_LUMINAL_UP
<i>Underexpressed</i>				
1	-13.11	NULL	51	BP type I interferon signaling pathway
2	-12.58	NULL	15	CC MHC class II protein complex
3	-11.63	NULL	23	CC integral to luminal side of endoplasmic reticulum membrane
4	-11.48	NULL	47	BP antigen processing and presentation
5	-9.89	NULL	60	BP interferon-gamma-mediated signaling pathway
6	-9.62	NULL	32	CC ER to Golgi transport vesicle membrane
7	-9.54	NULL	1720	Chr Chr 1
8	-9.42	NULL	417	H.Tiss WIRTH_Immune system
9	-9.33	NULL	52	Chr Chr HSCHR6_MHC_QBL
10	-9.33	NULL	312	BP immune response
11	-8.96	NULL	10	GSEA C2GRANDVAUX_IFN_RESPONSE_NOT_VIA_IRF3
12	-8.91	NULL	13	GSEA C2BOWIE_RESPONSE_TO_TAMOXIFEN
13	-8.8	NULL	204	BP cytokine-mediated signaling pathway
14	-8.53	NULL	16	GSEA C2MOSERLE_IFNA_RESPONSE
15	-8.1	NULL	16	GSEA C2FARMER_BREAST_CANCER_CLUSTER_1
16	-8.02	NULL	11	GSEA C2BENNETT_SYSTEMIC_LUPUS_ERYTHEMATOSUS
17	-7.74	NULL	4	MMML C2CACIEJ_MMML 47
18	-7.48	NULL	74	BP regulation of immune response
19	-7.43	NULL	6	Lymphom C2AVE_MHCII BL DN
20	-7.3	NULL	16	GSEA C2ZHANG_INTERFERON_RESPONSE

p-values



# GW\_133

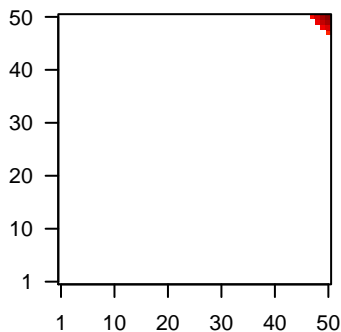
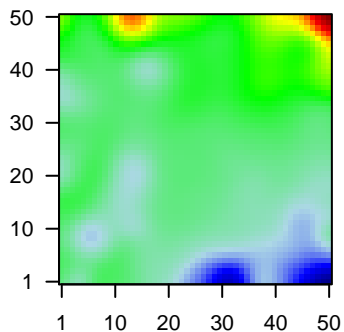
## Local Summary

%DE = 0.9  
 # metagenes = 10  
 # genes = 182  
 # genes in genesets = 181  
 # genes with  $fdr < 0.1 = 151$  ( 149 + / 2 - )  
 # genes with  $fdr < 0.05 = 150$  ( 148 + / 2 - )  
 # genes with  $fdr < 0.01 = 114$  ( 113 + / 1 - )

<r> metagenes = 0.97  
 <r> genes = 0.28  
 <FC> = 0.71  
 <shrinkage-t> = 24.8  
 <p-value> = 0  
 <fdr> = 0.3

Profile

Spot



## Local Genelist

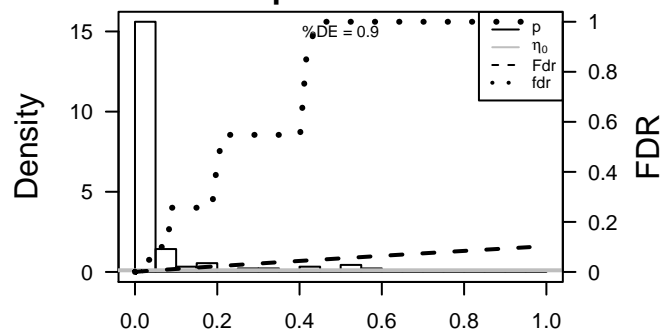
Rank	ID	log(FC)	fdr	p-value	Description
1	154664	1.35	2e-16	2e-16	50 x 50 ATP-binding cassette, sub-family A (ABC1), member 13 [Source:HGNC Symbol;Acc:20951]
2	214	1.47	2e-16	2e-16	50 x 50 activated leukocyte cell adhesion molecule [Source:HGNC Symbol;Acc:4451]
3	216	2.52	2e-16	2e-16	50 x 50 aldehyde dehydrogenase 1 family, member A1 [Source:HGNC Symbol;Acc:6421]
4	8702	1.3	2e-16	2e-16	50 x 50 UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polyploid [Source:HGNC Symbol;Acc:6436]
5	205428	1.59	2e-16	2e-16	50 x 50 chromosome 3 open reading frame 58 [Source:HGNC Symbol;Acc:8109]
6	26047	2.41	2e-16	2e-16	50 x 50 contactin associated protein-like 2 [Source:HGNC Symbol;Acc:20951]
7	1592	1.52	2e-16	2e-16	50 x 50 cytochrome P450, family 26, subfamily A, polypeptide 1 [Source:HGNC Symbol;Acc:4451]
8	10655	1.65	2e-16	2e-16	50 x 50 doublesex and mab-3 related transcription factor 2 [Source:HGNC Symbol;Acc:4451]
9	4072	1.74	2e-16	2e-16	50 x 50 epithelial cell adhesion molecule [Source:HGNC Symbol;Acc:20951]
10	150864	1.39	2e-16	2e-16	50 x 50 family with sequence similarity 117, member B [Source:HGNC Symbol;Acc:20951]
11	83888	2.37	2e-16	2e-16	50 x 50 fibroblast growth factor binding protein 2 [Source:HGNC Symbol;Acc:6421]
12	2304	1.42	2e-16	2e-16	50 x 50 forkhead box E1 (thyroid transcription factor 2) [Source:HGNC Symbol;Acc:20951]
13	94234	1.47	2e-16	2e-16	50 x 50 forkhead box Q1 [Source:HGNC Symbol;Acc:20951]
14	2719	1.84	2e-16	2e-16	50 x 50 glypican 3 [Source:HGNC Symbol;Acc:4451]
15	3866	1.33	2e-16	2e-16	50 x 50 keratin 15 [Source:HGNC Symbol;Acc:6421]
16	3880	1.89	2e-16	2e-16	50 x 49 keratin 19 [Source:HGNC Symbol;Acc:6436]
17	4780	1.33	2e-16	2e-16	50 x 50 nuclear factor, erythroid 2-like 2 [Source:HGNC Symbol;Acc:20951]
18	4915	2.12	2e-16	2e-16	50 x 50 neurotrophic tyrosine kinase, receptor, type 2 [Source:HGNC Symbol;Acc:20951]
19	4922	3.22	2e-16	2e-16	50 x 50 neurotensin [Source:HGNC Symbol;Acc:8038]
20	4953	2.15	2e-16	2e-16	50 x 50 ornithine decarboxylase 1 [Source:HGNC Symbol;Acc:8109]

## Local Geneset Analysis

Overexpression

Rank	GSZ	p-value	#in/all	Geneset
1	21.85	NULL	2 / 7	GSEA C2MCCOLLUM_GELDANAMYCIN_RESISTANCE_DN
2	20.19	NULL	3 / 8	GSEA C2LIU_CDX2_TARGETS_DN
3	15.61	NULL	3 / 13	BP regulation of blood vessel size
4	13.97	NULL	5 / 15	GSEA C2KEGG_GLUTATHIONE_METABOLISM
5	13.97	NULL	2 / 7	GSEA C2FREDERICK_PRKCI_TARGETS
6	12.57	NULL	3 / 11	GSEA C2TO_PTTG1_TARGETS_UP
7	12.55	NULL	1 / 6	GSEA C2GAUSSMANN_MLL_AF4_FUSION_TARGETS_D_DN
8	12.55	NULL	1 / 6	GSEA C2KAPOSI_LIVER_CANCER_POOR_SURVIVAL_DN
9	11.72	NULL	3 / 16	GSEA C2BOYAUULT_LIVER_CANCER_SUBCLASS_G1_DN
10	11.69	NULL	1 / 4	GSEA C2MYLLYKANGAS_AMPLIFICATION_HOT_SPOT_13
11	11.22	NULL	1 / 11	Glio neurons_glio
12	11.13	NULL	2 / 12	GSEA C2MOROSSETTI_FACIOSCAPULOHUMERAL_MUSCULAR_DISTROPHY
13	10.96	NULL	2 / 9	GSEA C2REACTOME_METABOLISM_OF_AMINO_ACIDS
14	10.78	NULL	2 / 11	GSEA C2SMID_BREAST_CANCER_BASAL_UP
15	10.43	NULL	2 / 12	BP cellular aldehyde metabolic process
16	10.43	NULL	11 / 119	BP xenobiotic metabolic process
17	10.04	NULL	3 / 12	GSEA C2BROCKE_APOPTOSIS_REVERSED_BY_IL6
18	9.83	NULL	1 / 9	GSEA C2ABDULRAHMAN_KIDNEY_CANCER_VHL_DN
19	9.83	NULL	1 / 9	GSEA C2REACTOME_ETHANOL_OXIDATION
20	9.71	NULL	1 / 7	GSEA C2REACTOME_REGULATION_OF_ORNITHINE_DECARBOXYLASE
21	9.64	NULL	2 / 11	GSEA C2DANG_MYC_TARGETS_UP
22	9.35	NULL	1 / 15	MF neuropeptide hormone activity
23	9.25	NULL	2 / 10	GSEA C2CONRAD_STEM_CELL
24	9.23	NULL	1 / 10	GSEA C2MAINA_VHL_TARGETS_UP
25	9.23	NULL	1 / 10	GSEA C2FRIDMAN_SENESCENCE_DN
26	9.2	NULL	3 / 48	BP cerebral cortex development
27	9.07	NULL	6 / 25	BP glutathione derivative biosynthetic process
28	8.95	NULL	1 / 8	GSEA C2PUJANA_CHEK2_PCC_NETWORK
29	8.79	NULL	3 / 16	GSEA C2SANA_RESPONSE_TO_IFNG_DN
30	8.75	NULL	4 / 13	GSEA C2KEGG_METABOLISM_OF_XENOBIOTICS_BY_CYTOCHROME_P450
31	8.38	NULL	8 / 34	BP glutathione metabolic process
32	8.36	NULL	1 / 5	GSEA C2KERLEY_RESPONSE_TO_CISPLATIN_DN
33	8.3	NULL	1 / 11	CC axolemma
34	8.21	NULL	2 / 18	MF acyl-CoA dehydrogenase activity
35	8.17	NULL	1 / 11	GSEA C2YAMANAKA_GLIOMASTOMA_SURVIVAL_UP
36	8.09	NULL	2 / 15	GSEA C2YANG_BREAST_CANCER_ESR1_LASER_DN
37	8.04	NULL	2 / 9	GSEA C2REACTOME_GLUCURONIDATION
38	7.82	NULL	1 / 10	GSEA C2LUI_TARGETS_OF_PAX8_PPARG_FUSION
39	7.82	NULL	1 / 10	GSEA C2PUJANA_ATM_PCC_NETWORK
40	7.82	NULL	1 / 10	GSEA C2HELLER_HDAC_TARGETS_SILENCED_BY_METHYLATION_UP

p-values



# GW\_133

## Local Summary

%DE = 0.89  
 # metagenes = 8  
 # genes = 124  
 # genes in genesets = 122  
 # genes with  $fdr < 0.1$  = 102 ( 3 + / 99 - )  
 # genes with  $fdr < 0.05$  = 101 ( 3 + / 98 - )  
 # genes with  $fdr < 0.01$  = 85 ( 2 + / 83 - )

<r> metagenes = 0.99

<r> genes = 0.44

<FC> = -0.6

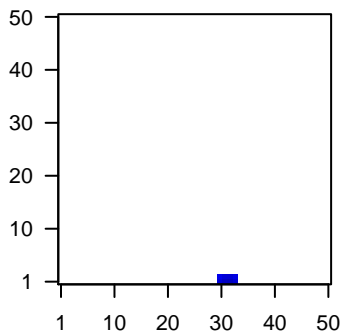
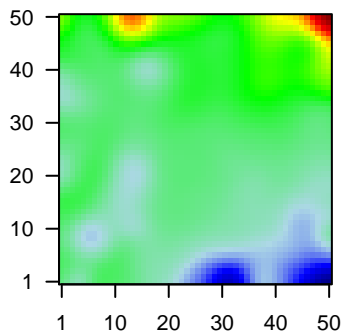
<shrinkage-t> = -21.25

<p-value> = 0

<fdr> = 0.28

Profile

Spot



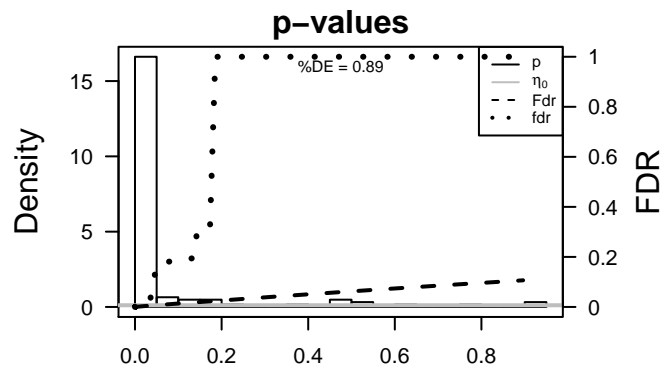
## Local Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	684	-1.68	2e-16	4e-16	32 x 1 bone marrow stromal cell antigen 2 [Source:HGNC Symbol;A
2	10866	-1.48	2e-16	4e-16	32 x 1 HLA complex P5 (non-protein coding) [Source:HGNC Symbc
3	3106	-1.61	2e-16	4e-16	32 x 1 major histocompatibility complex, class I, B [Source:HGNC S
4	3134	-1.4	2e-16	4e-16	32 x 1 major histocompatibility complex, class I, F [Source:HGNC S
5	9636	-1.4	2e-16	4e-16	32 x 1 ISG15 ubiquitin-like modifier [Source:HGNC Symbol;Acc:40E
6	3959	-1.47	2e-16	4e-16	32 x 1 lectin, galactoside-binding, soluble, 3 binding protein [Source
7	4599	-1.44	2e-16	4e-16	32 x 1 myxovirus (influenza virus) resistance 1, interferon-inducible
8	6890	-1.31	2e-16	4e-16	32 x 1 transporter 1, ATP-binding cassette, sub-family B (MDR/TAP
9	10561	-1.27	4e-16	9e-15	32 x 1 interferon-induced protein 44 [Source:HGNC Symbol;Acc:16
10	51296	-1.28	4e-16	9e-15	32 x 1 solute carrier family 15 (oligopeptide transporter), member 3 ]
11	3136	-1.26	1e-15	1e-13	32 x 1
12	10581	-1.12	9e-15	2e-13	32 x 1 interferon induced transmembrane protein 2 [Source:HGNC S
13	3627	-1.2	2e-14	2e-12	32 x 1 chemokine (C-X-C motif) ligand 10 [Source:HGNC Symbol;#
14	79156	-1.15	2e-13	2e-12	31 x 1 pleckstrin homology domain containing, family F (with FYVE c
15	1591	1.15	2e-13	1e-11	33 x 2 cytochrome P450, family 24, subfamily A, polypeptide 1 [Sou
16	6773	-1.12	1e-12	2e-11	32 x 1 signal transducer and activator of transcription 2, 113kDa [So
17	10410	-1.01	2e-12	3e-11	32 x 1 interferon induced transmembrane protein 3 [Source:HGNC S
18	55008	-1.07	9e-12	3e-11	32 x 1 HECT and RLD domain containing E3 ubiquitin protein ligase
19	10964	-1.07	9e-12	3e-11	32 x 1 interferon-induced protein 44-like [Source:HGNC Symbol;Ac
20	2537	-1.06	1e-11	3e-11	32 x 1 interferon, alpha-inducible protein 6 [Source:HGNC Symbol;#

## Local Geneset Analysis

Underexpression

Rank	GSZ	p-value	#in/all	Geneset
1	-52.21	NULL	29 / 51	BP type I interferon signaling pathway
2	-42.28	NULL	6 / 6	Lymphocyte activation-induced chemokine BL DN
3	-42.2	NULL	12 / 16	GSEA C2MOSERLE_IFNA_RESPONSE
4	-42	NULL	9 / 10	GSEA C2BOWIE_RESPONSE_TO_EXTRACELLULAR_MATRIX
5	-41.32	NULL	8 / 11	GSEA C2BENNETT_SYSTEMIC_LUPUS_ERYTHEMATOSUS
6	-38.79	NULL	10 / 13	GSEA C2BOWIE_RESPONSE_TO_TAMOXIFEN
7	-38.05	NULL	8 / 10	GSEA C2GRANDVAUX_IFN_RESPONSE_NOT_VIA_IRF3
8	-37.86	NULL	11 / 16	GSEA C2ENAV_INTERFERON_SIGNATURE_IN_CANCER
9	-37.39	NULL	11 / 16	GSEA C2ZHANG_INTERFERON_RESPONSE
10	-35.97	NULL	3 / 4	GSEA C2KRASNOSELSKAYA_ILF3_TARGETS_UP
11	-35.94	NULL	7 / 10	CC MHC class I protein complex
12	-35.77	NULL	6 / 8	GSEA C2ROETH_TERT_TARGETS_UP
13	-33.85	NULL	3 / 5	GSEA C2KIM_LRRC3B_TARGETS
14	-33.16	NULL	2 / 2	MMML C2SCIEJ_MMML 27
15	-31.53	NULL	31 / 123	BP defense response to virus
16	-31.33	NULL	13 / 31	BP negative regulation of viral genome replication
17	-30.49	NULL	8 / 18	BP positive regulation of T cell mediated cytotoxicity
18	-30.43	NULL	10 / 16	GSEA C2JROSEVIC_RESPONSE_TO_IMIQUIMOD
19	-28.89	NULL	34 / 204	BP cytokine-mediated signaling pathway
20	-28.6	NULL	27 / 109	BP response to virus
21	-27.04	NULL	7 / 18	MF peptide antigen binding
22	-26.78	NULL	6 / 14	GSEA C2RADAIEVA_RESPONSE_TO_IFNA1_UP
23	-25.15	NULL	7 / 16	GSEA C2MAHADEVAN_RESPONSE_TO_MP470_UP
24	-24.26	NULL	16 / 60	BP interferon-gamma-mediated signaling pathway
25	-22.84	NULL	6 / 16	GSEA C2XU_HGF_TARGETS_INDUCED_BY_AKT1_6HR
26	-22.28	NULL	5 / 16	GSEA C2FARMER_BREAST_CANCER_CLUSTER_1
27	-21.87	NULL	4 / 12	GSEA C2ZHU_CMV_8_HR_UP
28	-21.81	NULL	3 / 13	GSEA C2TSAI_RESPONSE_TO_RADIATION_THERAPY
29	-21.67	NULL	5 / 18	BP response to interferon-gamma
30	-21.36	NULL	5 / 16	GSEA C2ZHANG_ANTIVIRAL_RESPONSE_TO_RIBAVIRIN_UP
31	-21.23	NULL	6 / 12	GSEA C2TSAI_DNAJB4_TARGETS_UP
32	-21.2	NULL	3 / 9	GSEA C2DER_IFN_ALPHA_RESPONSE_UP
33	-21.2	NULL	3 / 9	GSEA C2DER_IFN_GAMMA_RESPONSE_UP
34	-21.18	NULL	4 / 15	GSEA C2BECKER_TAMOXIFEN_RESISTANCE_UP
35	-21.12	NULL	6 / 14	GSEA C2XU_AKT1_TARGETS_6HR
36	-20.89	NULL	3 / 4	MMML C2SCIEJ_MMML 47
37	-20.06	NULL	4 / 10	GSEA C2DAUER_STAT3_TARGETS_DN
38	-19.99	NULL	31 / 274	Lymphocyte activation-induced chemokine IL21 DN
39	-19.63	NULL	4 / 16	GSEA C2SEITZ_NEOPLASTIC_TRANSFORMATION_BY_8P_DELETION
40	-19.56	NULL	46 / 572	Disease GUDJ_poriasis up



# GW\_133

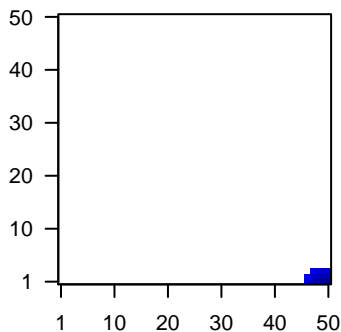
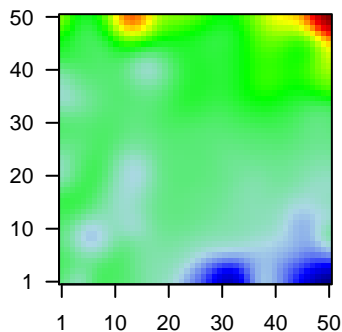
## Local Summary

%DE = 0.88  
 # metagenes = 14  
 # genes = 247  
 # genes in genesets = 245  
 # genes with  $fdr < 0.1$  = 197 ( 11 + / 186 - )  
 # genes with  $fdr < 0.05$  = 175 ( 11 + / 164 - )  
 # genes with  $fdr < 0.01$  = 152 ( 7 + / 145 - )

$\langle r \rangle$  metagenes = 0.99  
 $\langle r \rangle$  genes = 0.62  
 $\langle FC \rangle = -0.48$   
 $\langle \text{shrinkage-t} \rangle = -16.66$   
 $\langle p\text{-value} \rangle = 0$   
 $\langle fdr \rangle = 0.34$

Profile

Spot



## Local Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	2634	-1.31	2e-16	1e-15	47 x 1 guanylate binding protein 2, interferon-inducible [Source:HGNC]
2	3108	-1.38	2e-16	1e-15	50 x 1 major histocompatibility complex, class II, DM alpha [Source:HGNC]
3	3109	-1.6	2e-16	1e-15	50 x 1 major histocompatibility complex, class II, DM beta [Source:HGNC]
4	3113	-1.56	2e-16	1e-15	50 x 1 major histocompatibility complex, class II, DP alpha 1 [Source:HGNC]
5	3122	-1.65	2e-16	1e-15	50 x 1 major histocompatibility complex, class II, DR alpha [Source:HGNC]
6	972	-1.27	7e-16	9e-15	50 x 1 CD74 molecule, major histocompatibility complex, class II inv.
7	5880	-1.26	9e-16	9e-15	50 x 1 ras-related C3 botulinum toxin substrate 2 (rho family, small GTP-binding protein)
8	3936	-1.25	1e-15	2e-12	50 x 1 lymphocyte cytosolic protein 1 (L-plastin) [Source:HGNC Symbol;Acc:10248]
9	7318	-1.17	9e-14	2e-12	48 x 1 ubiquitin-like modifier activating enzyme 7 [Source:HGNC Symbol;Acc:10248]
10	4283	-1.16	1e-13	2e-12	49 x 1 chemokine (C-X-C motif) ligand 9 [Source:HGNC Symbol;Acc:10248]
11	348	-1.16	2e-13	4e-12	50 x 1 apolipoprotein E [Source:HGNC Symbol;Acc:613]
12	713	-1.14	4e-13	4e-12	50 x 1 complement component 1, q subcomponent, B chain [Source:HGNC]
13	115361	-1.13	5e-13	3e-11	48 x 1 guanylate binding protein 4 [Source:HGNC Symbol;Acc:2048]
14	3120	-1.11	1e-12	5e-11	47 x 1 major histocompatibility complex, class II, DQ beta 2 [Source:HGNC]
15	23180	-1.09	3e-12	5e-10	50 x 1 raftlin, lipid raft linker 1 [Source:HGNC Symbol;Acc:30278]
16	3128	-1.05	2e-11	5e-10	50 x 1 major histocompatibility complex, class II, DR beta 6 (pseudo)
17	919	-1.03	6e-11	5e-10	50 x 1 CD247 molecule [Source:HGNC Symbol;Acc:1677]
18	341	-1.02	7e-11	5e-10	50 x 1 apolipoprotein C-I [Source:HGNC Symbol;Acc:607]
19	10550	-1.02	7e-11	5e-10	50 x 3 ADP-ribosylation-like factor 6 interacting protein 5 [Source:HGNC]
20	241	-1.02	9e-11	5e-10	50 x 1 arachidonate 5-lipoxygenase-activating protein [Source:HGNC]

## Local Geneset Analysis

Underexpression

Rank	GSZ	p-value	#in/all	Geneset
1	-45.21	NULL	12 / 15	CC MHC class II protein complex
2	-28.33	NULL	89 / 417	H.Tiss WIRTH_Immune system
3	-27.18	NULL	14 / 47	BP antigen processing and presentation
4	-23.58	NULL	7 / 21	CC clathrin-coated endocytic vesicle membrane
5	-22.43	NULL	7 / 23	CC integral to luminal side of endoplasmic reticulum membrane
6	-21.35	NULL	3 / 6	GSEA C2SANA_RESPONSE_TO_IFNG_UP
7	-20.42	NULL	89 / 553	Cancer Lembcke_Coloniac Inflammation
8	-20.29	NULL	16 / 60	BP T cell costimulation
9	-20.13	NULL	7 / 28	CC transport vesicle membrane
10	-19.98	NULL	50 / 312	BP immune response
11	-19.97	NULL	7 / 11	GSEA C2BIOCARTA_TCYTOTOXIC_PATHWAY
12	-19.84	NULL	2 / 3	GSEA C2KEGG_VIRAL_MYOCARDITIS
13	-18.7	NULL	7 / 32	CC ER to Golgi transport vesicle membrane
14	-18.42	NULL	7 / 15	GSEA C2FINAK_BREAST_CANCER_SDDP_SIGNATURE
15	-17.8	NULL	7 / 35	CC trans-Golgi network membrane
16	-17.23	NULL	6 / 12	GSEA C2BIOCARTA_CTL_PATHWAY
17	-17.04	NULL	6 / 11	GSEA C2BIOCARTA_THELPER_PATHWAY
18	-16.74	NULL	2 / 6	GSEA C2LUI_THYROID_CANCER_CLUSTER_4
19	-16.7	NULL	2 / 4	GSEA C2KEGG_LEISHMANIA_INFECTION
20	-16.59	NULL	13 / 87	BP antigen processing and presentation of exogenous peptide antigen
21	-16.3	NULL	5 / 12	BP immunoglobulin mediated immune response
22	-16.06	NULL	15 / 84	BP T cell receptor signaling pathway
23	-15.74	NULL	1 / 2	GSEA C2KEGG_INTESTINAL_IMMUNE_NETWORK_FOR_IIGA_PRODUC
24	-15.74	NULL	1 / 2	GSEA C2KEGG_AUTOIMMUNE_THYROID_DISEASE
25	-15.74	NULL	1 / 2	GSEA C2KEGG_SYSTEMIC_LUPUS_ERYTHEMATOSUS
26	-15.68	NULL	9 / 16	GSEA C2FARMER_BREAST_CANCER_CLUSTER_1
27	-15.42	NULL	8 / 52	Chr HSCR6_MHC_QBL
28	-15.28	NULL	7 / 46	CC endocytic vesicle membrane
29	-14.79	NULL	2 / 4	GSEA C2REACTOME_CLASSICAL_ANTIBODY_MEDIATED_COMPLEMEN
30	-14.79	NULL	4 / 7	Glio Donson-cytotoxic effectors-associated with LTS in HGA
31	-14.77	NULL	2 / 5	GSEA C2WEST_ADRENOCORTICAL_CARCINOMA_VS_ADENOMA_DN
32	-14.55	NULL	11 / 60	BP interferon-gamma-mediated signaling pathway
33	-14.5	NULL	17 / 74	BP regulation of immune response
34	-13.56	NULL	2 / 3	MMML C6SICIEJ_MMML_7
35	-13.48	NULL	3 / 8	GSEA C2LINDSTEDT_DENDRITIC_CELL_MATURATION_D
36	-13.31	NULL	7 / 13	Cancer GENTLES_modul18
37	-12.98	NULL	5 / 12	GSEA C2ZHAN_MULTIPLE_MYELOMA_DN
38	-12.91	NULL	4 / 8	GSEA C2NIELSEN_SYNOVIAL_SARCOMA_DN
39	-12.85	NULL	5 / 13	GSEA C2BIOCARTA_IL17_PATHWAY
40	-12.7	NULL	4 / 10	GSEA C2FLECHNER_BIOPSY_KIDNEY_TRANSPLANT_REJECTED_VS_

p-values

