

# G3\_mel

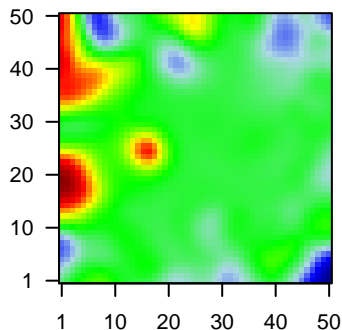
## Global Summary

%DE = 0.22  
 # genes with  $fdr < 0.2$  = 2848 ( 1678 + / 1170 - )  
 # genes with  $fdr < 0.1$  = 2338 ( 1402 + / 936 - )  
 # genes with  $fdr < 0.05$  = 1876 ( 1116 + / 760 - )  
 # genes with  $fdr < 0.01$  = 1202 ( 744 + / 458 - )

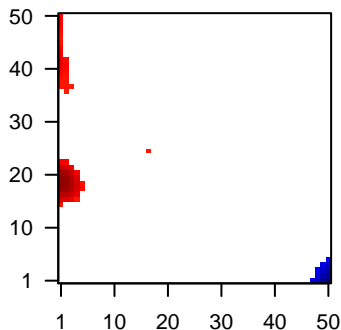
# genes in genesets = 14839

<FC> = 0  
 <shrinkage-t> = 0.02  
 <p-value> = 0.07  
 <fdr> = 0.78

Profile



Regulated Spots



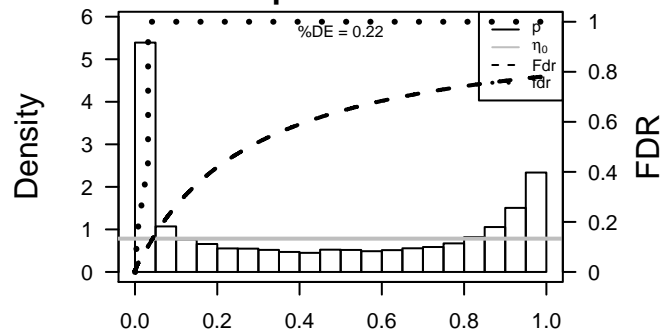
## Global Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	ACTL6A	-1.88	2e-16	1e-13	4 x 50 actin-like 6A [Source:HGNC Symbol;Acc:HGNC:24124]
2	ATPIF1	-1.14	2e-16	1e-13	50 x 47 ATPase inhibitory factor 1 [Source:HGNC Symbol;Acc:HGNC]
3	CCNDBP1	-1.68	2e-16	1e-13	1 x 21 cyclin D-type binding-protein 1 [Source:HGNC Symbol;Acc:HGNC]
4	CDKN3	-1.65	2e-16	1e-13	6 x 50 cyclin-dependent kinase inhibitor 3 [Source:HGNC Symbol;Acc:HGNC]
5	CRYAB	-1.82	2e-16	1e-13	50 x 1 crystallin, alpha B [Source:HGNC Symbol;Acc:HGNC:2389]
6	DCXR	0.79	2e-16	1e-13	5 x 37 dicarbonyl/L-xylulose reductase [Source:HGNC Symbol;Acc:HGNC]
7	DTYMK	-1.55	2e-16	1e-13	7 x 47 deoxythymidylate kinase (thymidylate kinase) [Source:HGNC Symbol;Acc:HGNC]
8	EIF1B	-1.68	2e-16	1e-13	4 x 43 eukaryotic translation initiation factor 1B [Source:HGNC Symbol;Acc:HGNC]
9	EIF2A	-1.8	2e-16	1e-13	50 x 12 eukaryotic translation initiation factor 2A, 65kDa [Source:HGNC Symbol;Acc:HGNC]
10	ENY2	-1.86	2e-16	1e-13	12 x 47 enhancer of yellow 2 homolog (Drosophila) [Source:HGNC Symbol;Acc:HGNC]
11	EXOC3	0.82	2e-16	1e-13	1 x 42 exocyst complex component 3 [Source:HGNC Symbol;Acc:HGNC]
12	GARNL3	2.01	2e-16	1e-13	1 x 4 GTPase activating Rap/RanGAP domain-like 3 [Source:HGNC Symbol;Acc:HGNC]
13	MARS	-1.44	2e-16	1e-13	43 x 47 methionyl-tRNA synthetase [Source:HGNC Symbol;Acc:HGNC]
14	MRPL22	-1.71	2e-16	1e-13	40 x 47 mitochondrial ribosomal protein L22 [Source:HGNC Symbol;Acc:HGNC]
15	MRPS12	-1.6	2e-16	1e-13	48 x 50 mitochondrial ribosomal protein S12 [Source:HGNC Symbol;Acc:HGNC]
16	NUP85	-1.56	2e-16	1e-13	1 x 50 nucleoporin 85kDa [Source:HGNC Symbol;Acc:HGNC:8734]
17	PAK1IP1	-1.65	2e-16	1e-13	7 x 44 PAK1 interacting protein 1 [Source:HGNC Symbol;Acc:HGNC]
18	PNRC2	-1.62	2e-16	1e-13	9 x 46 proline-rich nuclear receptor coactivator 2 [Source:HGNC Symbol;Acc:HGNC]
19	POP4	-1.63	2e-16	1e-13	15 x 50 processing of precursor 4, ribonuclease P/MRP subunit (S. cerevisiae)
20	PPT1	-1.19	2e-16	1e-13	34 x 46 palmitoyl-protein thioesterase 1 [Source:HGNC Symbol;Acc:HGNC]

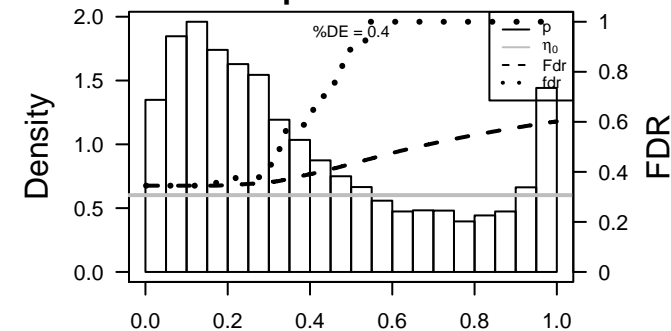
## Global Geneset Analysis

Rank	GSZ	p-value	#all	Geneset
<i>Overexpressed</i>				
1	6.59	0.001	925	GSEA C2KRIGE_RESPONSE_TO_TOSEDOSTAT_24HR_DN
2	5.66	0.002	834	GSEA C2LEE_BMP2_TARGETS_DN
3	5.62	0.002	831	GSEA C2KRIGE_RESPONSE_TO_TOSEDOSTAT_6HR_DN
4	4.63	0.005	278	GSEA C2MANALO_HYPOXIA_DN
5	4.34	0.006	78	GSEA C2SCHUHMACHER_MYC_TARGETS_UP
6	4.33	0.006	335	GSEA C2WANG_RESPONSE_TO_GSK3_INHIBITOR_SB216763_DN
7	4.22	0.006	43	GSEA C2ZHAN_MULTIPLE_MYELOMA_CD2_DN
8	4.14	0.007	325	GSEA C2PENG_GlutAMINE_DEPRIVATION_DN
9	4.11	0.007	212	GSEA C2DUTERTRE ESTRADIOL_RESPONSE_6HR_UP
10	3.97	0.008	83	GSEA C2L_DCP2_BOUND_MRNA
11	3.91	0.008	15	GSEA C2REACTOME_DESTABILIZATION_OF_MRNA_BY_KSRP
12	3.9	0.008	476	GSEA C2VANOVA_HEMATOPOIESIS_LATE_PROGENITOR
13	3.89	0.008	338	GSEA C2AIRKEE_TERT_TARGETS_UP
14	3.86	0.008	14	CC exocyst
15	3.83	0.009	756	GSEA C2VEL_MYCN_TARGETS_WITH_E_BOX
16	3.83	0.009	57	HM HALLMARK_MYC_TARGETS_V2
17	3.81	0.009	39	miRNA target-miR-518f*
18	3.74	0.009	562	GSEA C2CAIRO_HEPATOBLASTOMA_CLASSES_UP
19	3.73	0.009	79	GSEA C2ACOSTA_PROLIFERATION_INDEPENDENT_MYC_TARGETS_UP
20	3.73	0.009	68	GSEA C2CHEBOTAEV_GR_TARGETS_UP
<i>Underexpressed</i>				
1	-4.62	0.005	22	BP negative regulation of endothelial cell proliferation
2	-3.94	0.008	1394	GSEA C2ZWANG_TRANSIENTLY_UP_BY_1ST_EGF_PULSE_ONLY
3	-3.92	0.008	16	MF extracellular matrix binding
4	-3.79	0.009	104	GSEA C2AIHO_COLORECTAL_CANCER_SERRATED_UP
5	-3.76	0.009	285	BP organelle organization
6	-3.71	0.010	9	Colon CaBrazinska_D_Mesenchymal_UP
7	-3.67	0.010	96	BP mitochondrial translation
8	-3.63	0.010	45	GSEA C2BOYVAULT_LIVER_CANCER_SUBCLASS_G123_UP
9	-3.61	0.010	212	LymphomaENZ_Stromal signature 1
10	-3.58	0.011	83	BP mitochondrial translational elongation
11	-3.58	0.011	14	GSEA C2MARIADASON_RESPONSE_TO_BUTYRATE_CURCUMIN_SULFINYLUREA
12	-3.56	0.011	503	GSEA C2MARTINEZ_RB1_AND_TP53_TARGETS_UP
13	-3.5	0.011	83	BP muscle contraction
14	-3.48	0.012	40	GSEA C2DORN_ADENOVIRUS_INFECTION_24HR_DN
15	-3.48	0.012	38	GSEA C2DELPUCH_FOXO3_TARGETS_DN
16	-3.46	0.012	5	Colon CaBrazinska_C_CIMP-H-like_UP
17	-3.44	0.012	155	GSEA C2SMIRNOV_RESPONSE_TO_IR_6HR_UP
18	-3.42	0.012	138	CC microtubule cytoskeleton
19	-3.42	0.012	51	GSEA C2HU_GENOTOXIN_ACTION_DIRECT_VS_INDIRECT_24HR
20	-3.38	0.013	39	GSEA C2PID_AURORA_B_PATHWAY

p-values



p-values



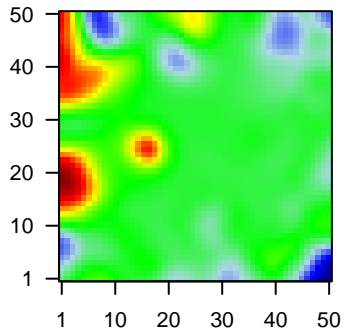
# G3\_mel

## Local Summary

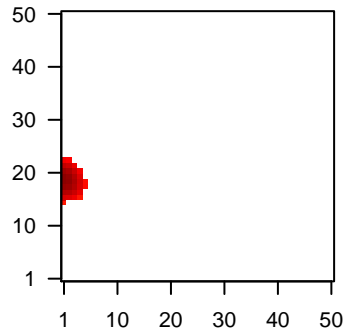
%DE = 0.73  
 # metagenes = 32  
 # genes = 358  
 # genes in genesets = 356  
  
 # genes with  $fdr < 0.1$  = 177 ( 150 + / 27 - )  
 # genes with  $fdr < 0.05$  = 171 ( 145 + / 26 - )  
 # genes with  $fdr < 0.01$  = 107 ( 92 + / 15 - )

$\langle r \rangle$  metagenes = 0.86  
 $\langle r \rangle$  genes = 0.11  
  
 $\langle FC \rangle$  = 0.29  
 $\langle \text{shrinkage-t} \rangle$  = 4.97  
 $\langle p\text{-value} \rangle$  = 0.01  
 $\langle fdr \rangle$  = 0.54

Profile



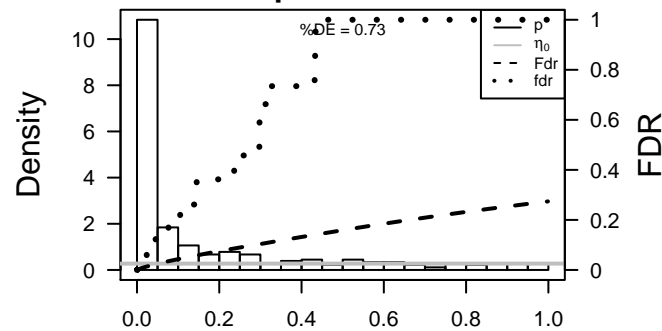
Spot



## Local Genelist

Rank	ID	log(FC)	p-value	fdr	Description
1	CCNDBP1	-1.68	2e-16	2e-14	1 x 21 cyclin D-type binding-protein 1 [Source:HGNC Symbol;Acc:U08001]
2	PIGY	0.68	2e-10	1e-08	1 x 20 phosphatidylinositol glycan anchor biosynthesis, class Y [Source:HGNC Symbol;Acc:U08001]
3	RCN1	0.73	2e-10	2e-08	1 x 23 reticulocalbin 1, EF-hand calcium binding domain [Source:HGNC Symbol;Acc:U08001]
4	ANKRD13A	1.45	4e-10	5e-07	1 x 16 ankyrin repeat domain 13A [Source:HGNC Symbol;Acc:U08001]
5	TACO1	1.34	7e-09	5e-07	2 x 19 translational activator of mitochondrially encoded cytochrome c oxidase subunit I [Source:HGNC Symbol;Acc:U08001]
6	OSTM1	0.56	1e-08	7e-07	1 x 17 osteopetrosis associated transmembrane protein 1 [Source:HGNC Symbol;Acc:U08001]
7	PTGES2	1.3	2e-08	2e-06	1 x 17 prostaglandin E synthase 2 [Source:HGNC Symbol;Acc:U08001]
8	ZNF511	1.27	5e-08	2e-06	1 x 21 zinc finger protein 511 [Source:HGNC Symbol;Acc:U08001]
9	PMF1-BGLAP	1.26	6e-08	3e-06	3 x 16 PMF1-BGLAP readthrough [Source:HGNC Symbol;Acc:U08001]
10	PTDSS2	1.24	1e-07	3e-06	1 x 19 phosphatidylserine synthase 2 [Source:HGNC Symbol;Acc:U08001]
11	LMLN	1.23	1e-07	7e-06	1 x 20 leishmanolysin-like (metallopeptidase M8 family) [Source:HGNC Symbol;Acc:U08001]
12	AGPAT2	1.18	4e-07	7e-06	1 x 21 1-acylglycerol-3-phosphate O-acyltransferase 2 [Source:HGNC Symbol;Acc:U08001]
13	SIRT3	1.18	4e-07	7e-06	4 x 16 sirtuin 3 [Source:HGNC Symbol;Acc:U08001]
14	STARD3	1.18	4e-07	7e-06	1 x 15 STAR-related lipid transfer (START) domain containing 3 [Source:HGNC Symbol;Acc:U08001]
15	CUL4A	1.18	4e-07	1e-05	1 x 23 cullin 4A [Source:HGNC Symbol;Acc:U08001]
16	EGLN2	1.15	7e-07	1e-05	1 x 23 egl-9 family hypoxia-inducible factor 2 [Source:HGNC Symbol;Acc:U08001]
17	NCALD	-1.13	8e-07	1e-05	1 x 15 neurocalcin delta [Source:HGNC Symbol;Acc:U08001]
18	EVA1A	1.14	9e-07	1e-05	2 x 17 eva-1 homolog A (C. elegans) [Source:HGNC Symbol;Acc:U08001]
19	DCAKD	1.14	9e-07	3e-05	3 x 19 dephospho-CoA kinase domain containing [Source:HGNC Symbol;Acc:U08001]
20	MDH1B	1.12	1e-06	3e-05	4 x 19 malate dehydrogenase 1B, NAD (soluble) [Source:HGNC Symbol;Acc:U08001]

p-values



# G3\_mel

## Local Summary

%DE = 0.95  
 # metagenes = 1  
 # genes = 25  
 # genes in genesets = 24  
  
 # genes with  $fdr < 0.1 = 22$  ( 22 + / 0 - )  
 # genes with  $fdr < 0.05 = 22$  ( 22 + / 0 - )  
 # genes with  $fdr < 0.01 = 20$  ( 20 + / 0 - )

<r> metagenes = NA

<r> genes = 0.57

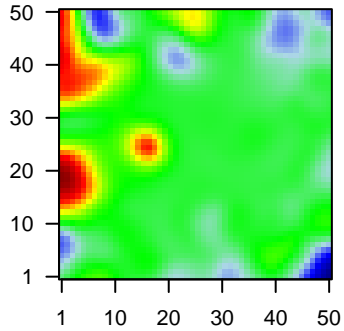
<FC> = 1.01

<shrinkage-t> = 15.29

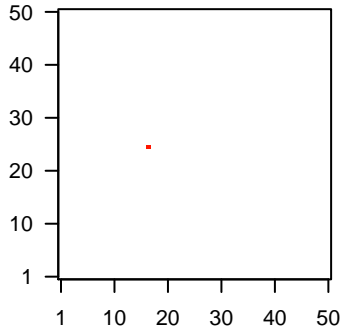
<p-value> = 0

<fdr> = 0.16

### Profile



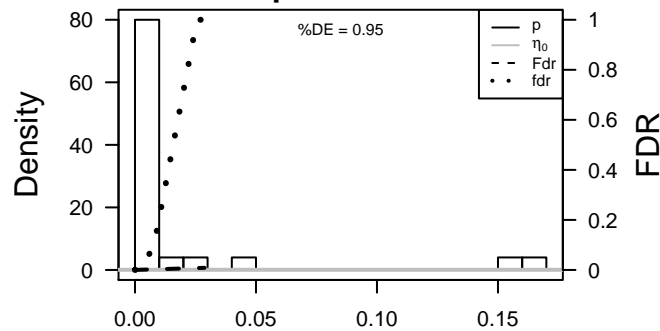
### Spot



## Local Genelist

Rank	ID	log(FC)	fdr	p-value	Description
1	ZNF688	1.75	4e-14	5e-13	17 x 25 zinc finger protein 688 [Source:HGNC Symbol;Acc:HGNC:30
2	CTSS	1.68	5e-13	2e-12	17 x 25 cathepsin S [Source:HGNC Symbol;Acc:HGNC:2545]
3	CD101	1.63	2e-12	6e-12	17 x 25 CD101 molecule [Source:HGNC Symbol;Acc:HGNC:5949]
4	KCTD14	1.59	7e-12	1e-10	17 x 25 potassium channel tetramerization domain containing 14 [So
5	DHDH	1.5	1e-10	3e-09	17 x 25 dihydrodiol dehydrogenase (dimeric) [Source:HGNC Symbol;
6	HOXD13	1.38	3e-09	4e-08	17 x 25 homeobox D13 [Source:HGNC Symbol;Acc:HGNC:5136]
7	CLDN2	1.26	6e-08	4e-08	17 x 25 claudin 2 [Source:HGNC Symbol;Acc:HGNC:2041]
8	TESC	1.25	7e-08	8e-08	17 x 25 tescalcin [Source:HGNC Symbol;Acc:HGNC:26065]
9	CECR2	1.22	1e-07	2e-07	17 x 25 cat eye syndrome chromosome region, candidate 2 [Source:†
10	ERF	1.18	4e-07	2e-07	17 x 25 Ets2 repressor factor [Source:HGNC Symbol;Acc:HGNC:344
11	HOXC10	1.17	5e-07	1e-05	17 x 25 homeobox C10 [Source:HGNC Symbol;Acc:HGNC:5122]
12	GNB1L	1.03	9e-06	1e-05	17 x 25 guanine nucleotide binding protein (G protein), beta polypepti
13	HIST2H2AB	0.99	2e-05	9e-05	17 x 25 histone cluster 2, H2ab [Source:HGNC Symbol;Acc:HGNC:2†
14	LRRN4CL	0.91	9e-05	1e-04	17 x 25 LRRN4 C-terminal like [Source:HGNC Symbol;Acc:HGNC:3†
15	EMR2	0.86	2e-04	1e-04	17 x 25
16	IL1R2	0.84	3e-04	9e-04	17 x 25 interleukin 1 receptor, type II [Source:HGNC Symbol;Acc:HGI
17	KCTD11	0.74	1e-03	9e-04	17 x 25 potassium channel tetramerization domain containing 11 [So
18	LRRC3	0.72	2e-03	2e-03	17 x 25 leucine rich repeat containing 3 [Source:HGNC Symbol;Acc:†
19	SSC4D	0.67	4e-03	4e-03	17 x 25 scavenger receptor cysteine rich family, 4 domains [Source:H
20	CNTD2	0.61	9e-03	4e-03	17 x 25 cyclin N-terminal domain containing 2 [Source:HGNC Symbc

### p-values



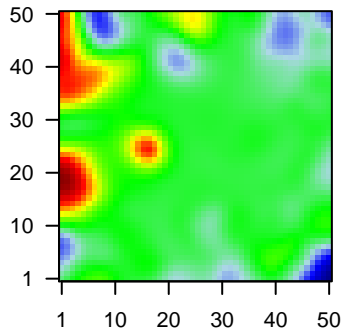
# G3\_mel

## Local Summary

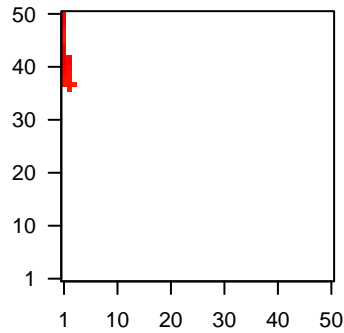
%DE = 0.77  
 # metagenes = 22  
 # genes = 471  
 # genes in genesets = 468  
  
 # genes with  $fdr < 0.1$  = 283 ( 219 + / 64 - )  
 # genes with  $fdr < 0.05$  = 233 ( 182 + / 51 - )  
 # genes with  $fdr < 0.01$  = 177 ( 136 + / 41 - )

$\langle r \rangle$  metagenes = 0.82  
 $\langle r \rangle$  genes = 0.14  
  
 $\langle FC \rangle$  = 0.26  
 $\langle \text{shrinkage-t} \rangle$  = 4.53  
 $\langle p\text{-value} \rangle$  = 0  
 $\langle fdr \rangle$  = 0.48

Profile



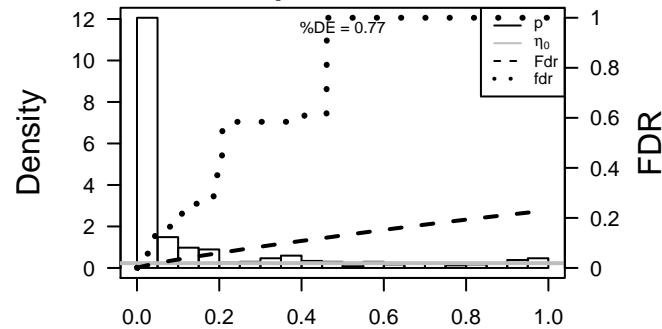
Spot



## Local Genelist

Rank	ID	log(FC)	p-value	fdr	Description
1	EXOC3	0.82	2e-16	1e-14	1 x 42 exocyst complex component 3 [Source:HGNC Symbol;Acc:Hi
2	NUP85	-1.56	2e-16	1e-14	1 x 50 nucleoporin 85kDa [Source:HGNC Symbol;Acc:HGNC:8734]
3	GOT1	-1.36	6e-15	1e-12	1 x 39 glutamic-oxaloacetic transaminase 1, soluble [Source:HGNC
4	MYH10	-0.88	2e-14	1e-10	1 x 44 myosin, heavy chain 10, non-muscle [Source:HGNC Symbol
5	RNASEH2B	1.65	1e-12	4e-10	1 x 50 ribonuclease H2, subunit B [Source:HGNC Symbol;Acc:HGNC
6	KNTC1	1.58	5e-12	1e-09	1 x 50 kinetochore associated 1 [Source:HGNC Symbol;Acc:HGNC:
7	PAFAH1B3	-1.38	2e-11	2e-08	1 x 43 platelet-activating factor acetylhydrolase 1b, catalytic subunit
8	DDX55	1.45	5e-10	2e-08	1 x 44 DEAD (Asp-Glu-Ala-Asp) box polypeptide 55 [Source:HGNC
9	CTSL	0.63	5e-10	2e-08	2 x 40 cathepsin L [Source:HGNC Symbol;Acc:HGNC:2537]
10	MBP	0.58	7e-10	2e-08	1 x 42 myelin basic protein [Source:HGNC Symbol;Acc:HGNC:6925]
11	PDE6D	-1.3	8e-10	3e-08	1 x 44 phosphodiesterase 6D, cGMP-specific, rod, delta [Source:HC
12	LGALS3	1.25	1e-09	2e-07	1 x 43 lectin, galactoside-binding, soluble, 3 [Source:HGNC Symbol
13	METTL9	0.86	4e-09	2e-07	1 x 43 methyltransferase like 9 [Source:HGNC Symbol;Acc:HGNC:2
14	SEPSECS	1.36	4e-09	2e-07	1 x 37 Sep (O-phosphoserine) tRNA:Sec (selenocysteine) tRNA syr
15	CA14	-1.08	8e-09	2e-07	1 x 46 carbonic anhydrase XIV [Source:HGNC Symbol;Acc:HGNC:1
16	ANO2	1.33	9e-09	4e-07	1 x 42 anoctamin 2, calcium activated chloride channel [Source:HGNC
17	ST3GAL1	1.31	2e-08	4e-07	1 x 40 ST3 beta-galactoside alpha-2,3-sialyltransferase 1 [Source:
18	MUC7	1.31	2e-08	4e-07	1 x 46 mucin 7, secreted [Source:HGNC Symbol;Acc:HGNC:7518]
19	TRMT1	1.3	2e-08	4e-07	1 x 40 tRNA methyltransferase 1 homolog (S. cerevisiae) [Source:Hi
20	CDC47	1.3	2e-08	6e-07	1 x 49 cell division cycle associated 7 [Source:HGNC Symbol;Acc:H

p-values



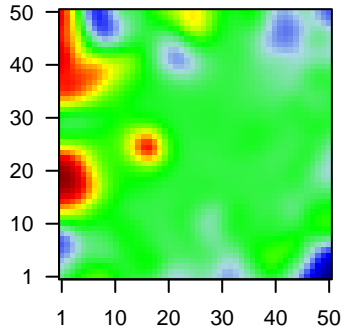
# G3\_mel

## Local Summary

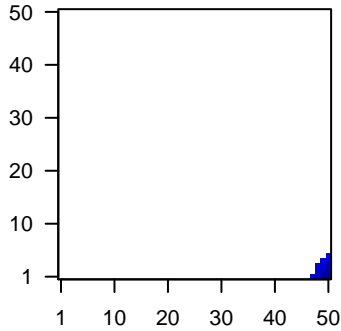
%DE = 0.72  
 # metagenes = 13  
 # genes = 256  
 # genes in genesets = 256  
  
 # genes with  $fdr < 0.1$  = 107 ( 18 + / 89 - )  
 # genes with  $fdr < 0.05$  = 95 ( 17 + / 78 - )  
 # genes with  $fdr < 0.01$  = 44 ( 8 + / 36 - )

$\langle r \rangle$  metagenes = 0.98  
 $\langle r \rangle$  genes = 0.2  
 $\langle FC \rangle$  = -0.27  
 $\langle \text{shrinkage-t} \rangle$  = -4.45  
 $\langle p\text{-value} \rangle$  = 0.02  
 $\langle fdr \rangle$  = 0.63

Profile



Spot



## Local Genelist

Rank	ID	log(FC)	p-value	fdr	Description
1	CRYAB	-1.82	2e-16	8e-15	50 x 1 crystallin, alpha B [Source:HGNC Symbol;Acc:HGNC:2389]
2	SPARC	-1.27	2e-16	8e-15	50 x 2 secreted protein, acidic, cysteine-rich (osteonectin) [Source:HGNC Symbol;Acc:HGNC:2389]
3	PLK2	-1.32	2e-14	2e-11	50 x 1 polo-like kinase 2 [Source:HGNC Symbol;Acc:HGNC:19699]
4	SATB1	1.68	5e-13	2e-11	50 x 1 SATB homeobox 1 [Source:HGNC Symbol;Acc:HGNC:10541]
5	FABP3	-1.44	5e-13	4e-11	50 x 1 fatty acid binding protein 3, muscle and heart [Source:HGNC Symbol;Acc:HGNC:2389]
6	SNAP23	-1.31	1e-12	1e-05	50 x 1 synaptosomal-associated protein, 23kDa [Source:HGNC Symbol;Acc:HGNC:2389]
7	PCYOX1	-1.16	3e-07	1e-05	49 x 4 prenylcysteine oxidase 1 [Source:HGNC Symbol;Acc:HGNC:2389]
8	FAM98A	-1.16	3e-07	3e-05	49 x 1 family with sequence similarity 98, member A [Source:HGNC Symbol;Acc:HGNC:2389]
9	LMCD1	1.14	9e-07	3e-05	47 x 1 LIM and cysteine-rich domains 1 [Source:HGNC Symbol;Acc:HGNC:2389]
10	RAB31	-1.09	2e-06	3e-05	50 x 3 RAB31, member RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:2389]
11	CTHRC1	1.1	2e-06	3e-05	49 x 1 collagen triple helix repeat containing 1 [Source:HGNC Symbol;Acc:HGNC:2389]
12	PLSCR4	1.09	2e-06	3e-05	49 x 1 phospholipid scramblase 4 [Source:HGNC Symbol;Acc:HGNC:2389]
13	PTPRM	-1.08	3e-06	1e-04	50 x 1 protein tyrosine phosphatase, receptor type, M [Source:HGNC Symbol;Acc:HGNC:2389]
14	MT2A	-1.06	4e-06	4e-04	50 x 3 metallothionein 2A [Source:HGNC Symbol;Acc:HGNC:7406]
15	FAM46A	-1.02	1e-05	4e-04	47 x 1 family with sequence similarity 46, member A [Source:HGNC Symbol;Acc:HGNC:2389]
16	MAP4K4	-1	2e-05	8e-04	50 x 5 mitogen-activated protein kinase kinase kinase kinase 4 [Source:HGNC Symbol;Acc:HGNC:2389]
17	STAM	-0.87	3e-05	8e-04	50 x 3 signal transducing adaptor molecule (SH3 domain and ITAM) [Source:HGNC Symbol;Acc:HGNC:2389]
18	TM7SF3	-0.95	4e-05	8e-04	50 x 5 transmembrane 7 superfamily member 3 [Source:HGNC Symbol;Acc:HGNC:2389]
19	TMEM67	0.94	5e-05	2e-03	50 x 1 transmembrane protein 67 [Source:HGNC Symbol;Acc:HGNC:2389]
20	FSTL1	-0.92	7e-05	2e-03	50 x 1 follistatin-like 1 [Source:HGNC Symbol;Acc:HGNC:3972]

p-values

