

GW_047

Global Summary

%DE = 0.15
 # genes with fdr < 0.2 = 1663 (1031 + / 632 -)
 # genes with fdr < 0.1 = 1370 (897 + / 473 -)
 # genes with fdr < 0.05 = 1131 (785 + / 346 -)
 # genes with fdr < 0.01 = 843 (626 + / 217 -)
 # genes in genesets = 16332

<FC> = 0
 <shrinkage-t> = 0
 <p-value> = 0.09
 <fdr> = 0.85

Global Genelist

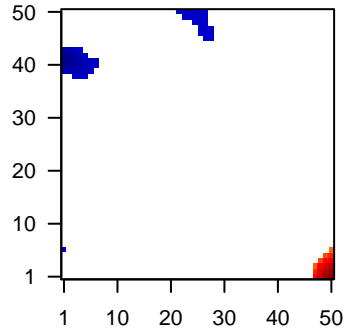
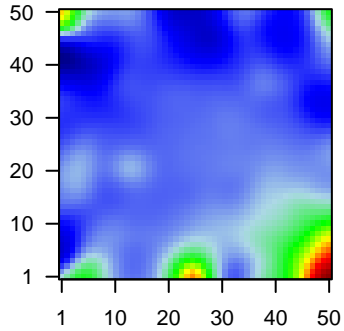
| Rank | ID | log(FC) | fdr | p-value | Description |
|------|--------|---------|-------|---------|---|
| 1 | 154664 | 1.19 | 2e-16 | 2e-14 | 50 x 50 ATP-binding cassette, sub-family A (ABC1), member 13 [Source:HGNC Symbol;Acc:154664] |
| 2 | 58 | 3.81 | 2e-16 | 2e-14 | 25 x 1 actin, alpha 1, skeletal muscle [Source:HGNC Symbol;Acc:10042] |
| 3 | 70 | 2.28 | 2e-16 | 2e-14 | 25 x 1 actin, alpha, cardiac muscle 1 [Source:HGNC Symbol;Acc:10042] |
| 4 | 57016 | 1.75 | 2e-16 | 2e-14 | 1 x 50 aldo-keto reductase family 1, member B10 (aldose reductase) [Source:HGNC Symbol;Acc:57016] |
| 5 | 441282 | 1.22 | 2e-16 | 2e-14 | 1 x 49 aldo-keto reductase family 1, member B15 [Source:HGNC Symbol;Acc:441282] |
| 6 | 8644 | 1.31 | 2e-16 | 2e-14 | 1 x 50 aldo-keto reductase family 1, member C3 [Source:HGNC Symbol;Acc:8644] |
| 7 | 1109 | 1.45 | 2e-16 | 2e-14 | 13 x 50 aldo-keto reductase family 1, member C4 [Source:HGNC Symbol;Acc:1109] |
| 8 | 216 | 1.6 | 2e-16 | 2e-14 | 50 x 50 aldehyde dehydrogenase 1 family, member A1 [Source:HGNC Symbol;Acc:216] |
| 9 | 218 | 1.14 | 2e-16 | 2e-14 | 1 x 50 aldehyde dehydrogenase 3 family, member A1 [Source:HGNC Symbol;Acc:218] |
| 10 | 144193 | 1.23 | 2e-16 | 2e-14 | 15 x 50 amidohydrolase domain containing 1 [Source:HGNC Symbol;Acc:144193] |
| 11 | 187 | 1.3 | 2e-16 | 2e-14 | 5 x 1 apelin receptor [Source:HGNC Symbol;Acc:339] |
| 12 | 347 | 1.43 | 2e-16 | 2e-14 | 50 x 7 apolipoprotein D [Source:HGNC Symbol;Acc:612] |
| 13 | 151516 | 1.5 | 2e-16 | 2e-14 | 1 x 46 aspartic peptidase, retroviral-like 1 [Source:HGNC Symbol;Acc:151516] |
| 14 | 479 | 1.37 | 2e-16 | 2e-14 | 7 x 50 ATPase, H+/K+ transporting, nongastric, alpha polypeptide [Source:HGNC Symbol;Acc:479] |
| 15 | 29113 | 3.16 | 2e-16 | 2e-14 | 2 x 47 chromosome 6 open reading frame 15 [Source:HGNC Symbol;Acc:29113] |
| 16 | 760 | -1.16 | 2e-16 | 2e-14 | 1 x 44 carbonic anhydrase II [Source:HGNC Symbol;Acc:1373] |
| 17 | 810 | 1.09 | 2e-16 | 2e-14 | 1 x 50 calmodulin-like 3 [Source:HGNC Symbol;Acc:1452] |
| 18 | 51806 | 2.3 | 2e-16 | 2e-14 | 4 x 50 calmodulin-like 5 [Source:HGNC Symbol;Acc:18180] |
| 19 | 57172 | 1.37 | 2e-16 | 2e-14 | 49 x 1 calcium/calmodulin-dependent protein kinase I gamma [Source:HGNC Symbol;Acc:57172] |
| 20 | 845 | 1.22 | 2e-16 | 2e-14 | 25 x 1 calsequestrin 2 (cardiac muscle) [Source:HGNC Symbol;Acc:845] |

Global Geneset Analysis

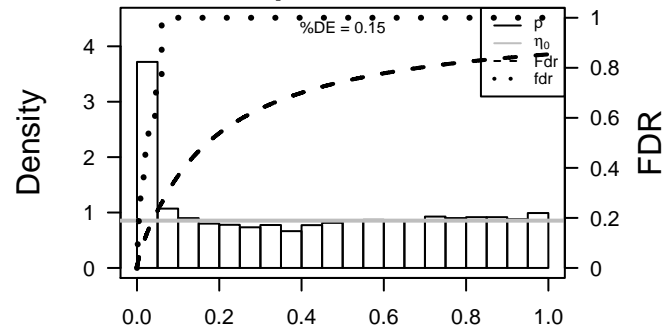
| Rank | GSZ | p-value | #all | Geneset |
|-----------------------|-------|---------|------|--|
| <i>Overexpressed</i> | | | | |
| 1 | 18.6 | NULL | 42 | BP keratinization |
| 2 | 18.51 | NULL | 36 | BP muscle filament sliding |
| 3 | 17.05 | NULL | 553 | Cancer Lembercke_Colonc Inflammation |
| 4 | 16.59 | NULL | 127 | H.Tiss WIRTH_Muscle |
| 5 | 15.09 | NULL | 16 | GSEA C2RICKMAN_HEAD_AND_NECK_CANCER_F |
| 6 | 14.66 | NULL | 21 | CC cornified envelope |
| 7 | 14.07 | NULL | 16 | H.Tiss WIRTH_Hippocampus |
| 8 | 13.72 | NULL | 44 | MF structural constituent of muscle |
| 9 | 13.16 | NULL | 12 | CC myosin filament |
| 10 | 11.84 | NULL | 312 | BP immune response |
| 11 | 11.53 | NULL | 9 | GSEA C2MILICIC_FAMILIAL_ADENOMATOUS_POLYPOSIS_DN |
| 12 | 11.47 | NULL | 53 | BP keratinocyte differentiation |
| 13 | 11.33 | NULL | 13 | CC muscle myosin complex |
| 14 | 10.6 | NULL | 417 | H.Tiss WIRTH_Immune system |
| 15 | 10.51 | NULL | 15 | CC MHC class II protein complex |
| 16 | 10.14 | NULL | 19 | BP peptide cross-linking |
| 17 | 10.11 | NULL | 37 | CC sarcomere |
| 18 | 9.92 | NULL | 84 | BP muscle contraction |
| 19 | 9.74 | NULL | 16 | GSEA C2RICKMAN_HEAD_AND_NECK_CANCER_D |
| 20 | 8.47 | NULL | 14 | CC contractile fiber |
| <i>Underexpressed</i> | | | | |
| 1 | -8.35 | NULL | 4640 | CC nucleus |
| 2 | -8.14 | NULL | 488 | miRNA target-miR-346 |
| 3 | -7.93 | NULL | 313 | miRNA target-miR-346 |
| 4 | -7.89 | NULL | 436 | miRNA target-miR-346 |
| 5 | -7.8 | NULL | 512 | miRNA target-miR-346 |
| 6 | -7.6 | NULL | 262 | miRNA target-miR-346 |
| 7 | -7.6 | NULL | 336 | miRNA target-miR-346-5p |
| 8 | -7.54 | NULL | 479 | miRNA target-miR-346 |
| 9 | -7.54 | NULL | 312 | miRNA target-miR-346 |
| 10 | -7.52 | NULL | 495 | miRNA target-miR-346 |
| 11 | -7.49 | NULL | 12 | BP hemidesmosome assembly |
| 12 | -7.39 | NULL | 494 | miRNA target-miR-346 |
| 13 | -7.34 | NULL | 319 | miRNA target-miR-346 |
| 14 | -7.23 | NULL | 464 | miRNA target-miR-346 |
| 15 | -7.21 | NULL | 336 | miRNA target-miR-346b-5p |
| 16 | -7.11 | NULL | 414 | miRNA target-miR-346 |
| 17 | -7.1 | NULL | 302 | miRNA target-miR-346 |
| 18 | -7.02 | NULL | 321 | miRNA target-miR-346a-5p |
| 19 | -6.91 | NULL | 438 | miRNA target-miR-346 |
| 20 | -6.82 | NULL | 293 | miRNA target-miR-346 |

Profile

Regulated Spots



p-values



GW_047

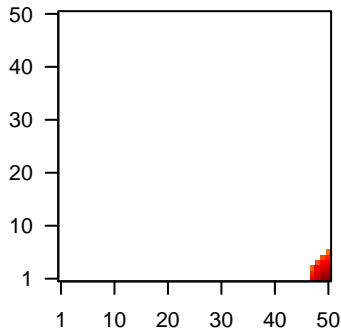
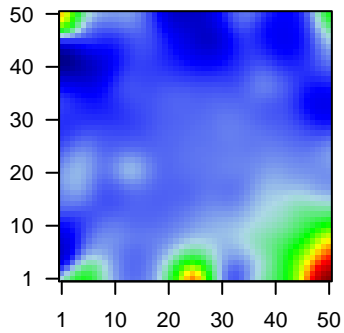
Local Summary

%DE = 0.94
 # metagenes = 18
 # genes = 307
 # genes in genesets = 305
 # genes with $fdr < 0.1$ = 252 (245 + / 7 -)
 # genes with $fdr < 0.05$ = 240 (234 + / 6 -)
 # genes with $fdr < 0.01$ = 229 (223 + / 6 -)

$\langle r \rangle$ metagenes = 0.97
 $\langle r \rangle$ genes = 0.53
 $\langle FC \rangle$ = 0.59
 $\langle \text{shrinkage-t} \rangle$ = 20.63
 $\langle p\text{-value} \rangle$ = 0
 $\langle fdr \rangle$ = 0.24

Profile

Spot



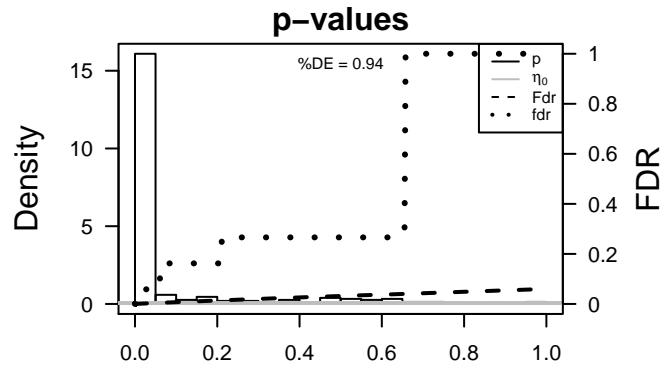
Local Genelist

| Rank | ID | log(FC) | fdr | p-value | Description |
|------|-------|---------|-------|---------|--|
| 1 | 57172 | 1.37 | 2e-16 | 1e-16 | 49 x 1 calcium/calmodulin-dependent protein kinase IG [Source:HGNC Symbol;Acc:1633] |
| 2 | 6363 | 2.66 | 2e-16 | 1e-16 | 50 x 1 chemokine (C-C motif) ligand 19 [Source:HGNC Symbol;Acc:1633] |
| 3 | 6366 | 1.25 | 2e-16 | 1e-16 | 50 x 2 chemokine (C-C motif) ligand 21 [Source:HGNC Symbol;Acc:1633] |
| 4 | 1236 | 1.5 | 2e-16 | 1e-16 | 50 x 1 chemokine (C-C motif) receptor 7 [Source:HGNC Symbol;Acc:1633] |
| 5 | 930 | 1.85 | 2e-16 | 1e-16 | 49 x 1 CD19 molecule [Source:HGNC Symbol;Acc:1633] |
| 6 | 939 | 1.13 | 2e-16 | 1e-16 | 49 x 1 CD27 molecule [Source:HGNC Symbol;Acc:11922] |
| 7 | 962 | 1.49 | 2e-16 | 1e-16 | 50 x 1 CD48 molecule [Source:HGNC Symbol;Acc:1683] |
| 8 | 1043 | 1.26 | 2e-16 | 1e-16 | 50 x 1 CD52 molecule [Source:HGNC Symbol;Acc:1804] |
| 9 | 974 | 1.2 | 2e-16 | 1e-16 | 48 x 1 CD79b molecule, immunoglobulin-associated beta [Source:HGNC Symbol;Acc:1633] |
| 10 | 11151 | 1.15 | 2e-16 | 1e-16 | 50 x 1 coronin, actin binding protein, 1A [Source:HGNC Symbol;Acc:242] |
| 11 | 51755 | 1.22 | 2e-16 | 1e-16 | 49 x 1 cyclin-dependent kinase 12 [Source:HGNC Symbol;Acc:242] |
| 12 | 10563 | 2.09 | 2e-16 | 1e-16 | 50 x 1 chemokine (C-X-C motif) ligand 13 [Source:HGNC Symbol;Acc:1633] |
| 13 | 2532 | 2.09 | 2e-16 | 1e-16 | 50 x 5 Duffy blood group, atypical chemokine receptor [Source:HGNC Symbol;Acc:1633] |
| 14 | 9214 | 1.4 | 2e-16 | 1e-16 | 49 x 1 Fas apoptotic inhibitory molecule 3 [Source:HGNC Symbol;Acc:1633] |
| 15 | 54855 | 1.62 | 2e-16 | 1e-16 | 49 x 1 family with sequence similarity 46, member C [Source:HGNC Symbol;Acc:1633] |
| 16 | 84824 | 1.55 | 2e-16 | 1e-16 | 49 x 1 Fc receptor-like A [Source:HGNC Symbol;Acc:18504] |
| 17 | 9535 | 1.2 | 2e-16 | 1e-16 | 50 x 1 glia maturation factor, gamma [Source:HGNC Symbol;Acc:43] |
| 18 | 3385 | 1.25 | 2e-16 | 1e-16 | 50 x 1 intercellular adhesion molecule 3 [Source:HGNC Symbol;Acc:1633] |
| 19 | 3512 | 1.76 | 2e-16 | 1e-16 | 50 x 1 immunoglobulin J polypeptide, linker protein for immunoglobulin J [Source:HGNC Symbol;Acc:1633] |
| 20 | 3543 | 1.5 | 2e-16 | 1e-16 | 49 x 1 immunoglobulin lambda-like polypeptide 1 [Source:HGNC Symbol;Acc:1633] |

Local Geneset Analysis

Overexpression

| Rank | GSZ | p-value | #in/all | Geneset |
|------|-------|---------|----------|--|
| 1 | 28.98 | NULL | 4 / 9 | GSEA C2MILICIC_FAMILIAL_ADENOMATOUS_POLYPOSIS_DN |
| 2 | 27.08 | NULL | 89 / 417 | H.Tiss WIRTH_Immune system |
| 3 | 25.84 | NULL | 99 / 553 | Cancer Lembcke_Colonc Inflammation |
| 4 | 20.11 | NULL | 9 / 16 | GSEA C2FARMER_BREAST_CANCER_CLUSTER_1 |
| 5 | 18.39 | NULL | 6 / 8 | Glio Donson-migration tethering and rolling-associated with LTS in HGA |
| 6 | 17.28 | NULL | 5 / 12 | BP dendritic cell chemotaxis |
| 7 | 16.54 | NULL | 3 / 7 | GSEA C2GRAHAM_CML_DIVIDING_VS_NORMAL_DIVIDING_DN |
| 8 | 16.45 | NULL | 12 / 15 | CC MHC class II protein complex |
| 9 | 16.42 | NULL | 5 / 17 | BP positive regulation of neutrophil chemotaxis |
| 10 | 16.04 | NULL | 51 / 312 | BP immune response |
| 11 | 15.18 | NULL | 6 / 15 | GSEA C2FINAK_BREAST_CANCER_SDDP_SIGNATURE |
| 12 | 13.79 | NULL | 5 / 10 | GSEA C2FLECHNER_BIOPSY_KIDNEY_TRANSPLANT_REJECTED_VS_ACCEPTED |
| 13 | 13.66 | NULL | 6 / 11 | GSEA C2BIOCARTA_TCYTOTOXIC_PATHWAY |
| 14 | 13.66 | NULL | 3 / 5 | GSEA C2WONG_ENDOMETRIAL_CANCER_LATE |
| 15 | 13.55 | NULL | 5 / 15 | Glio Donson-chemokines/cytokines-associated with LTS in HGA |
| 16 | 13.31 | NULL | 18 / 74 | BP regulation of immune response |
| 17 | 13.04 | NULL | 7 / 12 | GSEA C2ZHAN_MULTIPLE_MYELOMA_DN |
| 18 | 12.99 | NULL | 2 / 10 | BP positive regulation of chemotaxis |
| 19 | 12.8 | NULL | 26 / 162 | CC external side of plasma membrane |
| 20 | 12.7 | NULL | 4 / 13 | BP lymph node development |
| 21 | 12.67 | NULL | 45 / 265 | Glio willscher_GBM_Verhaak-CL_expression_B_up |
| 22 | 12.67 | NULL | 45 / 265 | Glio willscher_GBM_Verhaak-MES_expression_B_up |
| 23 | 12.67 | NULL | 45 / 265 | Glio willscher_GBM_Verhaak-PNwt_expression_B_down |
| 24 | 12.67 | NULL | 45 / 265 | Glio willscher_GBM_Verhaak-PNwt_expression_B_down |
| 25 | 12.63 | NULL | 5 / 10 | GSEA C2LEE_DIFFERENTIATING_T_LYMPHOCYTE |
| 26 | 12.47 | NULL | 3 / 11 | GSEA C2TARTE_PLASMA_CELL_VS_B_LYMPHOCYTE_DN |
| 27 | 12.33 | NULL | 5 / 11 | GSEA C2BIOCARTA_THELPER_PATHWAY |
| 28 | 12.32 | NULL | 3 / 16 | GSEA C2GRAHAM_CML_QUIESCENT_VS_CML_DIVIDING_UP |
| 29 | 12.17 | NULL | 14 / 60 | BP T cell costimulation |
| 30 | 12.1 | NULL | 8 / 43 | MF chemokine activity |
| 31 | 12.08 | NULL | 7 / 28 | BP B cell receptor signaling pathway |
| 32 | 11.88 | NULL | 3 / 16 | GSEA C2RICKMAN_HEAD_AND_NECK_CANCER_DN |
| 33 | 11.87 | NULL | 5 / 12 | GSEA C2BIOCARTA_CTL_PATHWAY |
| 34 | 11.7 | NULL | 2 / 12 | BP positive regulation of receptor-mediated endocytosis |
| 35 | 11.64 | NULL | 4 / 27 | BP release of sequestered calcium ion into cytosol |
| 36 | 11.59 | NULL | 3 / 22 | BP positive regulation of phosphatidylinositol 3-kinase activity |
| 37 | 11.27 | NULL | 23 / 204 | BP cell surface receptor signaling pathway |
| 38 | 11.07 | NULL | 4 / 13 | BP positive regulation of endocytosis |
| 39 | 10.99 | NULL | 6 / 13 | Cancer GENTLES_modul18 |
| 40 | 10.91 | NULL | 5 / 11 | BP positive regulation of B cell differentiation |



GW_047

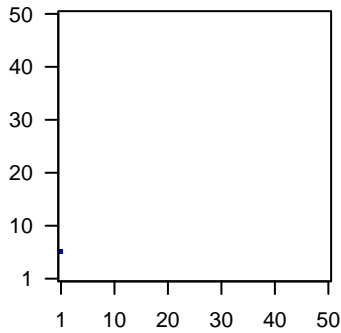
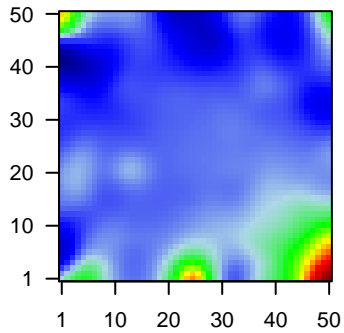
Local Summary

%DE = 0.86
 # metagenes = 1
 # genes = 27
 # genes in genesets = 27
 # genes with $fdr < 0.1$ = 19 (2 + / 17 -)
 # genes with $fdr < 0.05$ = 14 (1 + / 13 -)
 # genes with $fdr < 0.01$ = 9 (1 + / 8 -)

<r> metagenes = NA
 <r> genes = 0.38
 <FC> = -0.27
 <shrinkage-t> = -9.51
 <p-value> = 0
 <fdr> = 0.53

Profile

Spot



Local Genelist

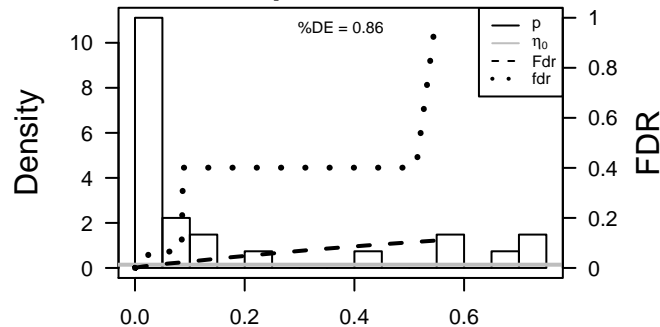
| Rank | ID | log(FC) | fdr | p-value | Description |
|------|--------|---------|-------|---------|--|
| 1 | 768 | -1.04 | 2e-14 | 2e-07 | 1 x 6 carbonic anhydrase IX [Source:HGNC Symbol;Acc:1383] |
| 2 | 24147 | -0.74 | 6e-08 | 8e-05 | 1 x 6 four jointed box 1 (Drosophila) [Source:HGNC Symbol;Acc:17 |
| 3 | 8614 | -0.56 | 3e-05 | 8e-05 | 1 x 6 stanniocalcin 2 [Source:HGNC Symbol;Acc:11374] |
| 4 | 1594 | -0.56 | 4e-05 | 2e-04 | 1 x 6 cytochrome P450, family 27, subfamily B, polypeptide 1 [Sour |
| 5 | 4000 | -0.52 | 1e-04 | 2e-04 | 1 x 6 lamin A/C [Source:HGNC Symbol;Acc:6636] |
| 6 | 351 | -0.51 | 2e-04 | 2e-04 | 1 x 6 amyloid beta (A4) precursor protein [Source:HGNC Symbol;A |
| 7 | 114793 | -0.5 | 2e-04 | 1e-03 | 1 x 6 formin-like 2 [Source:HGNC Symbol;Acc:18267] |
| 8 | 595 | 0.43 | 6e-04 | 1e-03 | 1 x 6 cyclin D1 [Source:HGNC Symbol;Acc:1582] |
| 9 | 11014 | -0.46 | 7e-04 | 8e-03 | 1 x 6 KDEL (Lys-Asp-Glu-Leu) endoplasmic reticulum protein ret |
| 10 | 4651 | -0.4 | 3e-03 | 1e-02 | 1 x 6 myosin X [Source:HGNC Symbol;Acc:7593] |
| 11 | 3675 | -0.37 | 6e-03 | 3e-02 | 1 x 6 integrin, alpha 3 (antigen CD49C, alpha 3 subunit of VLA-3 n |
| 12 | 1021 | -0.32 | 2e-02 | 3e-02 | 1 x 6 cyclin-dependent kinase 6 [Source:HGNC Symbol;Acc:1777] |
| 13 | 4627 | -0.28 | 2e-02 | 3e-02 | 1 x 6 myosin, heavy chain 9, non-muscle [Source:HGNC Symbol;# |
| 14 | 6624 | -0.27 | 3e-02 | 3e-02 | 1 x 6 fascin homolog 1, actin-bundling protein (Strongylocentrotus |
| 15 | 5829 | -0.29 | 3e-02 | 7e-02 | 1 x 6 paxillin [Source:HGNC Symbol;Acc:9718] |
| 16 | 84230 | -0.26 | 6e-02 | 7e-02 | 1 x 6 leucine rich repeat containing 8 family, member C [Source:HC |
| 17 | 3486 | 0.24 | 8e-02 | 7e-02 | 1 x 6 insulin-like growth factor binding protein 3 [Source:HGNC Sy |
| 18 | 5228 | -0.23 | 8e-02 | 7e-02 | 1 x 6 placental growth factor [Source:HGNC Symbol;Acc:8893] |
| 19 | 57048 | -0.21 | 1e-01 | 7e-02 | 1 x 6 TMEM256-PLSCR3 readthrough (NMD candidate) [Source:† |
| 20 | 51776 | -0.21 | 1e-01 | 4e-01 | 1 x 6 Mitogen-activated protein kinase kinase kinase MLT [Source |

Local Geneset Analysis

Underexpression

| Rank | GSZ | p-value | #in/all | Geneset |
|------|--------|---------|---------|--|
| 1 | -28.26 | NULL | 1 / 3 | GSEA C2VICENT_METASTASIS_DN |
| 2 | -26.68 | NULL | 1 / 5 | GSEA C2CHEN_HOXA5_TARGETS_GHR_DN |
| 3 | -22.17 | NULL | 2 / 12 | miRNA target set 3129 |
| 4 | -21.99 | NULL | 2 / 13 | BP response to vitamin D |
| 5 | -21.79 | NULL | 1 / 4 | miRNA target-106b |
| 6 | -21 | NULL | 3 / 13 | GSEA C2MAHADEVAN_GIST_MORPHOLOGICAL_SWITCH |
| 7 | -19.44 | NULL | 2 / 16 | BP decidualization |
| 8 | -19.39 | NULL | 1 / 2 | miRNA target-124a |
| 9 | -18.76 | NULL | 2 / 17 | BP calcium ion homeostasis |
| 10 | -18.53 | NULL | 1 / 5 | GSEA C2CSA-213 |
| 11 | -18.09 | NULL | 1 / 9 | GSEA C2KANG_GIST_WITH_PDGFRA_UP |
| 12 | -18.09 | NULL | 1 / 9 | miRNA target-127 |
| 13 | -18.04 | NULL | 1 / 16 | CC microvillus membrane |
| 14 | -17.75 | NULL | 1 / 6 | GSEA C2REACTOME_STEROID_HORMONES |
| 15 | -17.4 | NULL | 1 / 17 | BP morphogenesis of an epithelium |
| 16 | -15.47 | NULL | 2 / 11 | MF actin-dependent ATPase activity |
| 17 | -15.15 | NULL | 3 / 79 | BP cellular response to hypoxia |
| 18 | -14.98 | NULL | 1 / 22 | BP bicarbonate transport |
| 19 | -14.98 | NULL | 1 / 22 | BP response to testosterone |
| 20 | -14.89 | NULL | 1 / 8 | GSEA C2SMID_BREAST_CANCER_RELAPSE_IN_LIVER_DN |
| 21 | -14.25 | NULL | 1 / 24 | BP regulation of transcription from RNA polymerase II promoter in resp |
| 22 | -13.92 | NULL | 1 / 25 | BP one-carbon metabolic process |
| 23 | -13.8 | NULL | 2 / 27 | miRNA target set 3129-3p |
| 24 | -13.41 | NULL | 1 / 4 | miRNA targetc |
| 25 | -13.41 | NULL | 1 / 4 | miRNA targetg |
| 26 | -13.41 | NULL | 1 / 4 | miRNA target-34b |
| 27 | -12.76 | NULL | 1 / 10 | BP positive regulation of keratinocyte differentiation |
| 28 | -12.19 | NULL | 1 / 11 | BP negative regulation of multicellular organism growth |
| 29 | -11.98 | NULL | 1 / 10 | BP mitotic nuclear envelope reassembly |
| 30 | -11.75 | NULL | 1 / 10 | BP ionotropic glutamate receptor signaling pathway |
| 31 | -11.75 | NULL | 1 / 10 | BP positive regulation of peptidase activity |
| 32 | -11.75 | NULL | 1 / 10 | GSEA C2BIOCARTA_P35ALZHEIMERS_PATHWAY |
| 33 | -11.4 | NULL | 1 / 12 | BP regulation of bone mineralization |
| 34 | -11.29 | NULL | 1 / 11 | BP nuclear envelope organization |
| 35 | -11.29 | NULL | 1 / 11 | GSEA C2MOREAUX_B_LYMPHOCYTE_MATURATION_BY_TACI_UP |
| 36 | -11.29 | NULL | 1 / 11 | GSEA C2BIOCARTA_HIVNEF_PATHWAY |
| 37 | -11.07 | NULL | 1 / 11 | BP cellular copper ion homeostasis |
| 38 | -11.07 | NULL | 1 / 11 | GSEA C2AKL_HTLV1_INFECTION_UP |
| 39 | -11.07 | NULL | 1 / 11 | GSEA C2PARK_APL_PATHOGENESIS_DN |
| 40 | -11.07 | NULL | 1 / 11 | GSEA C2BIOCARTA_PLATELETAPP_PATHWAY |

p-values



GW_047

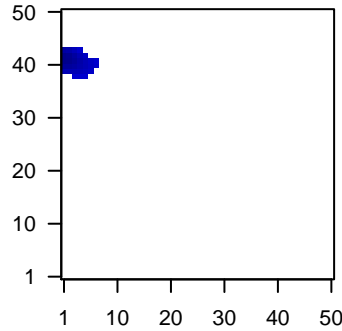
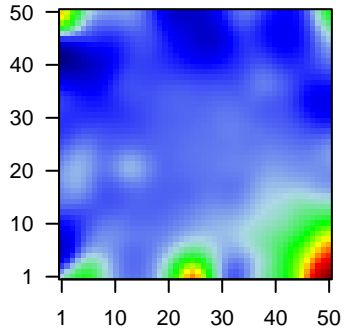
Local Summary

%DE = 0.68
 # metagenes = 32
 # genes = 297
 # genes in genesets = 291
 # genes with fdr < 0.1 = 132 (7 + / 125 -)
 # genes with fdr < 0.05 = 118 (7 + / 111 -)
 # genes with fdr < 0.01 = 71 (3 + / 68 -)

<r> metagenes = 0.97
 <r> genes = 0.31
 <FC> = -0.26
 <shrinkage-t> = -9.19
 <p-value> = 0.01
 <fdr> = 0.59

Profile

Spot



Local Genelist

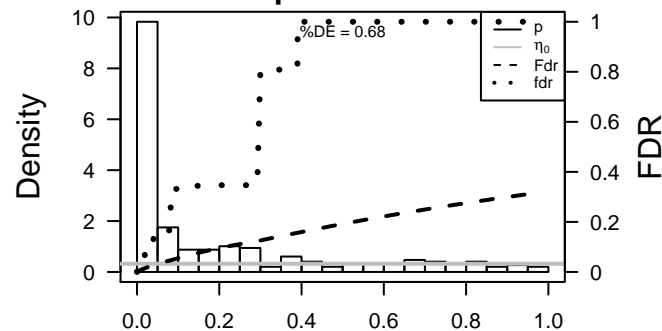
| Rank | ID | log(FC) | fdr | p-value | Description |
|------|--------|---------|-------|---------|---|
| 1 | 1308 | -2.02 | 2e-16 | 3e-15 | 1 x 43 collagen, type XVII, alpha 1 [Source:HGNC Symbol;Acc:2194 |
| 2 | 2152 | -1.23 | 2e-16 | 3e-15 | 1 x 43 coagulation factor III (thromboplastin, tissue factor) [Source:H |
| 3 | 55214 | -1.36 | 2e-16 | 3e-15 | 1 x 42 leprecan-like 1 [Source:HGNC Symbol;Acc:19317] |
| 4 | 10397 | -1.28 | 2e-16 | 3e-15 | 1 x 42 N-myc downstream regulated 1 [Source:HGNC Symbol;Acc: |
| 5 | 5744 | -1.2 | 2e-16 | 3e-15 | 1 x 43 parathyroid hormone-like hormone [Source:HGNC Symbol;A |
| 6 | 6513 | -1.18 | 2e-16 | 3e-15 | 1 x 43 solute carrier family 2 (facilitated glucose transporter), membr |
| 7 | 780854 | -1.15 | 2e-16 | 3e-15 | 2 x 39 small nucleolar RNA, C/D box 3D [Source:HGNC Symbol;Acc |
| 8 | 306 | -1.07 | 2e-15 | 4e-11 | 4 x 42 annexin A3 [Source:HGNC Symbol;Acc:541] |
| 9 | 1001 | -0.98 | 4e-13 | 2e-10 | 1 x 43 cadherin 3, type 1, P-cadherin (placental) [Source:HGNC Sy |
| 10 | 3552 | -0.95 | 2e-12 | 4e-09 | 1 x 43 interleukin 1, alpha [Source:HGNC Symbol;Acc:5991] |
| 11 | 26499 | -0.89 | 6e-11 | 4e-09 | 1 x 42 pleckstrin 2 [Source:HGNC Symbol;Acc:19238] |
| 12 | 664 | -0.88 | 9e-11 | 2e-08 | 2 x 43 BCL2/adenovirus E1B 19kDa interacting protein 3 [Source:HK |
| 13 | 4015 | -0.85 | 3e-10 | 6e-08 | 1 x 41 lysyl oxidase [Source:HGNC Symbol;Acc:6664] |
| 14 | 148304 | -0.83 | 1e-09 | 1e-06 | 1 x 41 chromosome 1 open reading frame 74 [Source:HGNC Symbc |
| 15 | 135398 | -0.76 | 2e-08 | 1e-06 | 1 x 40 chromosome 6 open reading frame 141 [Source:HGNC Symbc |
| 16 | 84632 | -0.74 | 5e-08 | 1e-06 | 1 x 41 actin filament associated protein 1-like 2 [Source:HGNC Syrr |
| 17 | 25819 | -0.73 | 6e-08 | 1e-06 | 1 x 41 CCR4 carbon catabolite repression 4-like (S. cerevisiae) [So |
| 18 | 205 | -0.73 | 7e-08 | 1e-06 | 2 x 42 adenylate kinase 4 [Source:HGNC Symbol;Acc:363] |
| 19 | 7162 | -0.73 | 8e-08 | 1e-06 | 1 x 42 trophoblast glycoprotein [Source:HGNC Symbol;Acc:12004] |
| 20 | 55236 | -0.73 | 9e-08 | 1e-05 | 4 x 41 ubiquitin-like modifier activating enzyme 6 [Source:HGNC Sy |

Local Geneset Analysis

Underexpression

| Rank | GSZ | p-value | #in/all | Geneset |
|------|--------|---------|---------|--|
| 1 | -17.33 | NULL | 3 / 12 | BP hemidesmosome assembly |
| 2 | -14.54 | NULL | 3 / 15 | GSEA C2PRAMOONJAGO_SOX4_TARGETS_UP |
| 3 | -14.03 | NULL | 3 / 16 | GSEA C2ELVIDGE_HIF1A_TARGETS_DN |
| 4 | -13.58 | NULL | 3 / 16 | GSEA C2ELVIDGE_HIF1A_AND_HIF2A_TARGETS_DN |
| 5 | -13.27 | NULL | 3 / 16 | GSEA C2LEONARD_HYPOXIA |
| 6 | -12.23 | NULL | 2 / 16 | GSEA C2JZONYI_RESPONSE_TO_LEUKOTRIENE_AND_THROMBIN |
| 7 | -12.14 | NULL | 1 / 5 | GSEA C2KYNG_ENVIRONMENTAL_STRESS_RESPONSE_NOT_BY_4NC |
| 8 | -11.02 | NULL | 2 / 16 | GSEA C2WATTEL_AUTONOMOUS_THYROID_ADENOMA_UP |
| 9 | -10.97 | NULL | 1 / 6 | GSEA C2KYNG_ENVIRONMENTAL_STRESS_RESPONSE_NOT_BY_UV |
| 10 | -10.66 | NULL | 4 / 32 | CC cell-cell adhesion junction |
| 11 | -10.66 | NULL | 3 / 9 | GSEA C2WANG_RESPONSE_TO_PACLITAXEL_VIA_MAPK8_UP |
| 12 | -10.52 | NULL | 2 / 14 | GSEA C2MAINA_VHL_TARGETS_DN |
| 13 | -10.24 | NULL | 1 / 5 | GSEA C2RODRIGUES_DCC_TARGETS_UP |
| 14 | -9.77 | NULL | 2 / 16 | GSEA C2HARRIS_HYPOXIA |
| 15 | -9.7 | NULL | 1 / 6 | GSEA C2MAINA_HYPOXIA_VHL_TARGETS_UP |
| 16 | -9.37 | NULL | 2 / 16 | GSEA C2ELVIDGE_HYPOXIA_BY_DMOG_UP |
| 17 | -9.37 | NULL | 2 / 16 | GSEA C2HUPER_BREAST_BASAL_VS_LUMINAL_UP |
| 18 | -9.35 | NULL | 1 / 4 | GSEA C2BUDHU_LIVER_CANCER_METASTASIS_DN |
| 19 | -9.3 | NULL | 6 / 83 | CC basement membrane |
| 20 | -9.22 | NULL | 3 / 15 | GSEA C2FARMER_BREAST_CANCER_CLUSTER_3 |
| 21 | -9.21 | NULL | 3 / 15 | GSEA C2BROWNE_HCMV_INFECTION_2HR_DN |
| 22 | -8.9 | NULL | 3 / 16 | GSEA C2FARMER_BREAST_CANCER_CLUSTER_4 |
| 23 | -8.8 | NULL | 2 / 8 | GSEA C2MILICIC_FAMILIAL_ADENOMATOUS_POLYPOSIIS_UP |
| 24 | -8.75 | NULL | 3 / 13 | GSEA C2WANG_METHYLATED_IN_BREAST_CANCER |
| 25 | -8.75 | NULL | 1 / 9 | GSEA C2KYNG_ENVIRONMENTAL_STRESS_RESPONSE_NOT_BY_GAM |
| 26 | -8.75 | NULL | 1 / 9 | GSEA C2KYNG_DNA_DAMAGE_UP |
| 27 | -8.75 | NULL | 1 / 9 | GSEA C2KYNG_ENVIRONMENTAL_STRESS_RESPONSE_UP |
| 28 | -8.65 | NULL | 1 / 7 | GSEA C2BEGUM_TARGETS_OF_PAX3_FOXO1_FUSION_AND_PAX3 |
| 29 | -8.63 | NULL | 2 / 8 | GSEA C2REACTOME_FACILITATIVE_NA_INDEPENDENT_GLUCOSE_TR |
| 30 | -8.57 | NULL | 8 / 76 | BP epidermis development |
| 31 | -8.44 | NULL | 4 / 22 | MF cadherin binding |
| 32 | -8.44 | NULL | 2 / 11 | GSEA C2BIOCARTA_VITCB_PATHWAY |
| 33 | -8.33 | NULL | 2 / 13 | H.Tiss WIRTH_Thymus |
| 34 | -8.25 | NULL | 1 / 10 | GSEA C2RUGO_ENVIRONMENTAL_STRESS_RESPONSE_UP |
| 35 | -8.25 | NULL | 1 / 10 | GSEA C2KYNG_ENVIRONMENTAL_STRESS_RESPONSE_NOT_BY_GAM |
| 36 | -8.25 | NULL | 1 / 10 | GSEA C2PARK_TRETINOIN_RESPONSE |
| 37 | -8.18 | NULL | 2 / 15 | BP response to osmotic stress |
| 38 | -7.9 | NULL | 2 / 5 | GSEA C2FERRARI_RESPONSE_TO_FENRETINIDE_DN |
| 39 | -7.84 | NULL | 2 / 15 | GSEA C2NAGASHIMA_NRG1_SIGNALING_DN |
| 40 | -7.82 | NULL | 1 / 11 | BP response to metal ion |

p-values



GW_047

Local Summary

%DE = 0.64
 # metagenes = 22
 # genes = 321
 # genes in genesets = 318

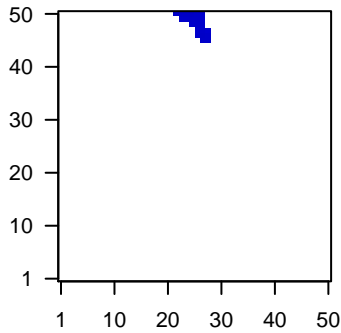
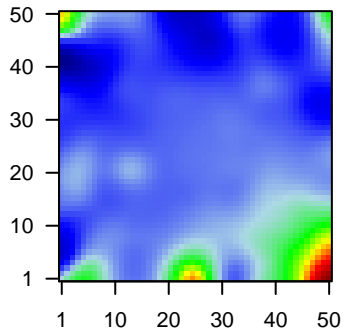
genes with $fdr < 0.1 = 128$ (8 + / 120 -)
 # genes with $fdr < 0.05 = 71$ (2 + / 69 -)
 # genes with $fdr < 0.01 = 26$ (1 + / 25 -)

$\langle r \rangle$ metagenes = 0.94
 $\langle r \rangle$ genes = 0.25

$\langle FC \rangle = -0.2$
 $\langle \text{shrinkage-t} \rangle = -6.96$
 $\langle p\text{-value} \rangle = 0.04$
 $\langle fdr \rangle = 0.72$

Profile

Spot



Local Genelist

| Rank | ID | log(FC) | fdr | p-value | Description |
|------|-----------|---------|-------|---------|--|
| 1 | 8553 | -0.77 | 6e-10 | 3e-08 | 22 x 50 basic helix-loop-helix family, member e40 [Source:HGNC Sy |
| 2 | 5366 | -0.84 | 6e-10 | 6e-08 | 22 x 50 phorbol-12-myristate-13-acetate-induced protein 1 [Source |
| 3 | 2354 | -0.81 | 2e-09 | 6e-08 | 22 x 50 FBJ murine osteosarcoma viral oncogene homolog B [Source |
| 4 | 6675 | -0.82 | 2e-09 | 1e-07 | 28 x 45 UDP-N-acetylglucosamine pyrophosphorylase 1 [Source:HC |
| 5 | 23645 | -0.81 | 3e-09 | 1e-07 | 22 x 50 protein phosphatase 1, regulatory subunit 15A [Source:HGNC |
| 6 | 57404 | 0.8 | 4e-09 | 5e-07 | 28 x 47 cytochrome P450, family 20, subfamily A, polypeptide 1 [Sou |
| 7 | 3725 | -0.78 | 8e-09 | 3e-05 | 22 x 50 jun proto-oncogene [Source:HGNC Symbol;Acc:6204] |
| 8 | 25998 | -0.68 | 5e-07 | 3e-05 | 28 x 45 inhibitor of Bruton agammaglobulinemia tyrosine kinase [Sou |
| 9 | 100008589 | -0.67 | 7e-07 | 3e-05 | 23 x 50 RNA, 28S ribosomal 5 [Source:HGNC Symbol;Acc:37659] |
| 10 | 150094 | -0.67 | 9e-07 | 2e-04 | 22 x 50 salt-inducible kinase 1 [Source:HGNC Symbol;Acc:11142] |
| 11 | 56929 | -0.62 | 4e-06 | 2e-04 | 22 x 50 fem-1 homolog c (C. elegans) [Source:HGNC Symbol;Acc:16 |
| 12 | 5782 | -0.62 | 5e-06 | 6e-04 | 25 x 50 protein tyrosine phosphatase, non-receptor type 12 [Source:l |
| 13 | 467 | -0.59 | 1e-05 | 6e-04 | 22 x 50 activating transcription factor 3 [Source:HGNC Symbol;Acc:71 |
| 14 | 4609 | -0.57 | 2e-05 | 6e-04 | 22 x 50 v-myc avian myelocytomatosis viral oncogene homolog [Sou |
| 15 | 1958 | -0.57 | 2e-05 | 6e-04 | 22 x 50 early growth response 1 [Source:HGNC Symbol;Acc:3238] |
| 16 | 10492 | -0.57 | 3e-05 | 1e-03 | 26 x 50 synaptotagmin binding, cytoplasmic RNA interacting protein [|
| 17 | 1316 | -0.55 | 5e-05 | 1e-03 | 22 x 50 Kruppel-like factor 6 [Source:HGNC Symbol;Acc:2235] |
| 18 | 1647 | -0.55 | 6e-05 | 1e-03 | 22 x 50 growth arrest and DNA-damage-inducible, alpha [Source:HC |
| 19 | 58487 | -0.54 | 6e-05 | 2e-03 | 26 x 48 CREB/ATF bZIP transcription factor [Source:HGNC Symbol;A |
| 20 | 51014 | -0.53 | 1e-04 | 2e-03 | 26 x 50 transmembrane emp24 protein transport domain containing 7 |

Local Geneset Analysis

Underexpression

| Rank | GSZ | p-value | #in/all | Geneset |
|------|--------|---------|----------|--|
| 1 | -23.43 | NULL | 8 / 16 | GSEA C2NAGASHIMA_EGF_SIGNALING_UP |
| 2 | -20.36 | NULL | 5 / 10 | GSEA C2CHASSOT_SKIN_WOUND |
| 3 | -19.34 | NULL | 6 / 16 | GSEA C2AMIT_SERUM_RESPONSE_40_MCF10A |
| 4 | -17.73 | NULL | 4 / 14 | GSEA C2TIAN_TNF_SIGNALING_NOT_VIA_NFKB |
| 5 | -17.2 | NULL | 6 / 15 | GSEA C2AMIT_EGF_RESPONSE_40_HEL4 |
| 6 | -16.23 | NULL | 5 / 24 | TF Tissue/AQUERIZAS_Trachea |
| 7 | -15.64 | NULL | 6 / 16 | TF Tissue/AQUERIZAS_Pancreas |
| 8 | -15.59 | NULL | 5 / 16 | GSEA C2AMIT_EGF_RESPONSE_40_MCF10A |
| 9 | -15.21 | NULL | 3 / 11 | GSEA C2AMIT_EGF_RESPONSE_20_HEL4 |
| 10 | -13.72 | NULL | 3 / 12 | GSEA C2GENTILE_UV_HIGH_DOSE_UP |
| 11 | -13.58 | NULL | 5 / 16 | GSEA C2AZONYI_RESPONSE_TO_LEUKOTRIENE_AND_THROMBIN |
| 12 | -12.83 | NULL | 4 / 16 | GSEA C2AMIT_EGF_RESPONSE_60_MCF10A |
| 13 | -12.82 | NULL | 3 / 12 | GSEA C2SESTO_RESPONSE_TO_UV_C3 |
| 14 | -12.65 | NULL | 3 / 14 | GSEA C2HAZARD_UV_RESPONSE_CLUSTER_G2 |
| 15 | -12.2 | NULL | 3 / 16 | GSEA C2CROONQUIST_STROMAL_STIMULATION_UP |
| 16 | -12.18 | NULL | 6 / 16 | GSEA C2AMIT_DELAYED_EARLY_GENES |
| 17 | -12.15 | NULL | 4 / 16 | GSEA C2BIOCARTA_ETS_PATHWAY |
| 18 | -11.98 | NULL | 3 / 15 | GSEA C2KRIGE_AMINO_ACID_DEPRIVATION |
| 19 | -11.83 | NULL | 33 / 262 | miRNA target set BP |
| 20 | -11.7 | NULL | 7 / 62 | TF Tissue/AQUERIZAS_Lung |
| 21 | -11.62 | NULL | 3 / 15 | GSEA C2INGA_TP53_TARGETS |
| 22 | -11.54 | NULL | 2 / 8 | GSEA C2EMELYANOV_GR_TARGETS_DN |
| 23 | -11.33 | NULL | 19 / 172 | miRNA target set BP |
| 24 | -11.07 | NULL | 4 / 14 | BP response to light stimulus |
| 25 | -11.05 | NULL | 12 / 90 | miRNA target set BP |
| 26 | -10.99 | NULL | 3 / 16 | GSEA C2GENTILE_UV_RESPONSE_CLUSTER_D4 |
| 27 | -10.98 | NULL | 3 / 16 | GSEA C2AMIT_EGF_RESPONSE_60_HEL4 |
| 28 | -10.84 | NULL | 3 / 10 | GSEA C2REACTOME_ACTIVATION_OF_THE_AP1_FAMILY_OF_TRANSC |
| 29 | -10.82 | NULL | 6 / 39 | BP response to cAMP |
| 30 | -10.79 | NULL | 3 / 16 | GSEA C2MAHADEVAN_RESPONSE_TO_MP470_DN |
| 31 | -10.66 | NULL | 3 / 10 | GSEA C2BIOCARTA_CDMAC_PATHWAY |
| 32 | -10.64 | NULL | 4 / 16 | GSEA C2SCIAN_INVERSED_TARGETS_OF_TP53_AND_TP73_DN |
| 33 | -10.53 | NULL | 3 / 12 | GSEA C2BIOCARTA_CCR5_PATHWAY |
| 34 | -10.05 | NULL | 5 / 39 | TF Tissue/AQUERIZAS_Thyroid |
| 35 | -10.01 | NULL | 4 / 23 | BP negative regulation of fibroblast proliferation |
| 36 | -10 | NULL | 20 / 155 | miRNA target set BP |
| 37 | -9.95 | NULL | 1 / 2 | GSEA C2MYLLYKANGAS_AMPLIFICATION_HOT_SPOT_14 |
| 38 | -9.95 | NULL | 2 / 15 | GSEA C2FRAMONJAGO_SOX4_TARGETS_UP |
| 39 | -9.89 | NULL | 2 / 9 | GSEA C2SUTIERREZ_WALDENSTROEMS_MACROGLOBULINEMIA_1_D |
| 40 | -9.82 | NULL | 29 / 284 | miRNA target set BP |

p-values

