

Block annotations

Block info

| | |
|---------------|---------------------------------------|
| genomic range | chr13:92,031,820-92,058,888 <i>e!</i> |
| block size | 27,069 bp |
| variant count | 13 variants |

Basic features

| Conservation/deleteriousness | | Linked genes | |
|------------------------------|---------------------------------|-------------------------------|---------------------------------------|
| phyloP | $\mu = -0.417$ [-2.725 – 1.103] | gene(s) hit or close-by | AL138714.1 <i>e!</i> , GPC5 <i>e!</i> |
| phastCons | $\mu = 0.010$ [0 – 0.12] | eQTL gene(s) | GPC5 <i>e!</i> |
| GERP++ | $\mu = -1.921$ [-8.41 – 1.94] | potentially regulated gene(s) | - |
| CADD score | $\mu = 3.144$ [0.08 – 6.815] | disease gene(s) | - |

Direct effect on regulation

cis-eQTL

| gene | transcript | probe | tissue | min(statistic) (type) | source | variant(s) |
|----------------|------------|---------------------------|-----------------------|---------------------------------|--------------------------|------------|
| GPC5 <i>e!</i> | ? | ENSG00000179399 <i>e!</i> | caudate basal ganglia | 2.25×10 ⁻⁶ (p-value) | GTEx Portal V6 <i>!m</i> | 4 |
| GPC5 <i>e!</i> | ? | ENSG00000179399 <i>e!</i> | lung | 4.24×10 ⁻⁶ (p-value) | GTEx Portal V6 <i>!m</i> | 3 |

Putative effect on regulation

Regulatory feature cluster

| element id | variant(s) | tissue/cell | factors |
|---|------------|-----------------------------|--|
| ENSR00001511261 <i>e!</i> (CTCF binding site) | 1 | embryonic stem cell (H1ESC) | Rad21, CTCF |
| | | HSMMtube | CTCF |
| | | blood (K562) | CTCF, Rad21 |
| | | muscle (HSMM) | CTCF |
| | | breast (HMEC) | CTCF |
| | | cervix (HeLa-S3) | CTCF |
| | | endothelium (HUVEC) | CTCF |
| | | liver (HepG2) | CTCF |
| | | blood (GM12878) | CTCF, Rad21 |
| | | lung (IMR90) | CTCF |
| ENSR00001511262 <i>e!</i> (promoter flanking region) | 1 | embryonic stem cell (H1ESC) | H3K36me3, Nrsf, TAF1, H3K4me2, H3K4me3, H3K27me3, DNase1 |
| | | HSMMtube | H3K27me3, DNase1 |
| | | blood (K562) | H3K4me3, DNase1, H3K27me3, H3K4me2, Nrsf, H2AZ, H3K4me1, H3K9ac, Max, Egr1 |
| | | skin (NHDF-AD) | H3K27me3 |
| | | muscle (HSMM) | H3K27me3 |
| | | liver (HepG2) | H3K4me3, H3K4me2, H3K27me3, DNase1 |
| | | blood (GM12878) | H3K4me2, H3K4me3, H2AZ, DNase1, PolII, Nrsf |
| | | lung (IMR90) | H3K27me3 |
| | | nervous (NH-A) | H3K27me3, H3K4me2 |
| | | skin (NHEK) | H3K27me3, H3K4me3, H3K4me2, DNase1 |
| | | NHLF | H3K27me3 |
| | | Osteobl | H3K27me3, H3K4me2 |
| | | blood (DND-41) | H3K27me3 |
| | | breast (HMEC) | H3K4me2, H3K4me3 |
| | | cervix (HeLa-S3) | DNase1, H3K27ac, TAF1, PolII, H3K4me3, H3K79me2, H3K4me2, Nrsf, H3K9ac |
| | | monocytes (Monocytes-CD14+) | H3K4me3, H3K27me3, H3K4me2, H3K4me1 |
| | | endothelium (HUVEC) | H3K36me3, H3K27me3, DNase1 |
| | | A549 | H3K4me3, H3K4me2, H3K27me3 |

| | | | |
|--|---|-----------------------------|---------------------|
| ENSR00001511263 <i>e!</i> (CTCF binding site) | 1 | embryonic stem cell (H1ESC) | Rad21, CTCF, DNase1 |
| | | HSMMtube | DNase1, H3K27me3 |
| | | blood (K562) | DNase1, CTCF, Rad21 |
| | | skin (NHDF-AD) | CTCF |
| | | muscle (HSMM) | CTCF |
| | | liver (HepG2) | Rad21, CTCF |
| | | blood (GM12878) | Rad21, CTCF |
| | | lung (IMR90) | CTCF |
| | | nervous (NH-A) | CTCF |
| | | skin (NHEK) | CTCF |
| | | Osteobl | CTCF |
| | | blood (DND-41) | H3K27me3, CTCF |
| | | breast (HMEC) | CTCF |
| | | cervix (HeLa-S3) | H3K79me2, CTCF |
| | | endothelium (HUVEC) | CTCF |
| | | A549 | H3K27me3, CTCF |

Variation proximal to gene

| gene | variant type | min(distance) | transcript | RefSeq id | protein | variant(s) |
|----------------------|--|---------------|---------------------------|-------------|---------------------------|------------|
| AL138714.1 <i>e!</i> | downstream gene variant, upstream gene variant | 29 | ENST00000408499 <i>e!</i> | ? ? | | 5 |
| GPC5 <i>e!</i> | upstream gene variant | 526 | ENST00000377067 <i>e!</i> | NM_004466.4 | ENSP00000366267 <i>e!</i> | 2 |

Putative effect on transcript

Intron variant

| gene | affected transcript | RefSeq id | protein | variant(s) |
|----------------|---------------------------|-------------|---------------------------|------------|
| GPC5 <i>e!</i> | ENST00000377067 <i>e!</i> | NM_004466.4 | ENSP00000366267 <i>e!</i> | 3 |

