

# SNiPacard

## Block annotations

### Block info

genomic range	chr1:160,834,616-160,899,100 <i>e!</i>
block size	64,485 bp
variant count	5 variants

### Basic features

Conservation/deleteriousness		Linked genes	
phyloP	$\mu = 0.163$ [-0.178 – 0.435]	gene(s) hit or close-by	CD244 <i>e!</i> , ITLN1 <i>e!</i> , RP11-312J18.6 <i>e!</i> , RP11-544M22.1 <i>e!</i>
phastCons	$\mu = 0.032$ [0 – 0.099]	eQTL gene(s)	-
GERP++	$\mu = 0.255$ [-0.854 – 1.97]	potentially regulated gene(s)	ARHGAP30 <i>e!</i> , FCER1G <i>e!</i> , ITLN1 <i>e!</i> , MPZ <i>e!</i> , MPZ <i>e!</i> , NIT1 <i>e!</i> , PPOX <i>e!</i> , RP11-312J18.3 <i>e!</i> , RP11-404F10.2 <i>e!</i> , SLAMF1 <i>e!</i> , SLAMF7 <i>e!</i> , TOMM40L <i>e!</i> , USF1 <i>e!</i> , USP21 <i>e!</i>
CADD score	$\mu = 3.439$ [1.402 – 9.687]	disease gene(s)	USF1 <i>e!</i> , MPZ <i>e!</i> , PPOX <i>e!</i>

## Trait annotations

### Disease gene annotation

gene	trait	source DB	source entry/link
USF1 <i>e!</i>	HYPERLIPIDEMIA, FAMILIAL COMBINED	OMIM	MIM:144250 <i>OMIM</i> <sup>®</sup>
USF1 <i>e!</i>	HYPERLIPIDEMIA, COMBINED, 1	OMIM	MIM:602491 <i>OMIM</i> <sup>®</sup>
MPZ <i>e!</i>	ADIE PUPIL	OMIM	MIM:103100 <i>OMIM</i> <sup>®</sup>
MPZ <i>e!</i>	ROUSSY-LEVY HEREDITARY AREFLEXIC DYSTASIA	OMIM	MIM:180800 <i>OMIM</i> <sup>®</sup>
MPZ <i>e!</i>	CHARCOT-MARIE-TOOTH DISEASE, DEMYELINATING, TYPE 1B	OMIM	MIM:118200 <i>OMIM</i> <sup>®</sup>
MPZ <i>e!</i>	NEUROPATHY, CONGENITAL HYPOMYELINATING OR AMYELINATING, [...]	OMIM	MIM:605253 <i>OMIM</i> <sup>®</sup>
MPZ <i>e!</i>	CHARCOT-MARIE-TOOTH DISEASE, AXONAL, TYPE 2I	OMIM	MIM:607677 <i>OMIM</i> <sup>®</sup>
MPZ <i>e!</i>	CHARCOT-MARIE-TOOTH DISEASE, AXONAL, TYPE 2J	OMIM	MIM:607736 <i>OMIM</i> <sup>®</sup>
MPZ <i>e!</i>	CHARCOT-MARIE-TOOTH DISEASE, DOMINANT INTERMEDIATE D	OMIM	MIM:607791 <i>OMIM</i> <sup>®</sup>
MPZ <i>e!</i>	HYPERTROPHIC NEUROPATHY OF DEJERINE-SOTTAS	OMIM	MIM:145900 <i>OMIM</i> <sup>®</sup>
PPOX <i>e!</i>	PORPHYRIA VARIEGATA	OMIM	MIM:176200 <i>OMIM</i> <sup>®</sup>
MPZ <i>e!</i>	Autosomal dominant Charcot-Marie-Tooth disease type 2J	OrphaNet	OrphaNet:99943 <i>orphanet</i>
MPZ <i>e!</i>	Autosomal dominant intermediate Charcot-Marie-Tooth disease type D	OrphaNet	OrphaNet:100046 <i>orphanet</i>
MPZ <i>e!</i>	Autosomal dominant intermediate Charcot-Marie-Tooth disease with neuropathic pain	OrphaNet	OrphaNet:324585 <i>orphanet</i>
MPZ <i>e!</i>	ROUSSY-LEVY SYNDROME	OrphaNet	OrphaNet:3115 <i>orphanet</i>
MPZ <i>e!</i>	Charcot-Marie-Tooth disease type 1B	OrphaNet	OrphaNet:101082 <i>orphanet</i>
MPZ <i>e!</i>	Dejerine-Sottas syndrome	OrphaNet	OrphaNet:64748 <i>orphanet</i>
MPZ <i>e!</i>	Autosomal dominant Charcot-Marie-Tooth disease type 2I	OrphaNet	OrphaNet:99942 <i>orphanet</i>
PPOX <i>e!</i>	PORPHYRIA VARIEGATA	OrphaNet	OrphaNet:79473 <i>orphanet</i>

## Putative effect on regulation

### ENCODE promoter-associated distal DHS (Enhancer)

SNiPA enhancer id	variant(s)	associated SNiPA promoter id	associated gene(s)
ENCE00000040974 <i>e!</i>	1	ENCP00000005175	NIT1 <i>e!</i>
		ENCP00000005210	MPZ <i>e!</i> MPZ <i>e!</i>
		ENCP00000005140	RP11-404F10.2 <i>e!</i>
		ENCP00000005151	ITLN1 <i>e!</i>
		ENCP00000005186	PPOX <i>e!</i>

		ENCP00000005149	RP11-312J18.3 <i>e!</i>
		ENCP00000005138	SLAMF1 <i>e!</i>
		ENCP00000005204	TOMM40L <i>e!</i>
		ENCP00000005169	ARHGAP30 <i>e!</i>
		ENCP00000005163	USF1 <i>e!</i>
		ENCP00000005143	SLAMF7 <i>e!</i>
		ENCP00000005168	ARHGAP30 <i>e!</i>
		ENCP00000005142	SLAMF7 <i>e!</i>
		ENCP00000005201	FCER1G <i>e!</i>
		ENCP00000005185	PPOX <i>e!</i>
ENCE00000041210 <i>e!</i>	1	ENCP00000005182	USP21 <i>e!</i>

### Regulatory feature cluster

element id	variant(s)	tissue/cell	factors
ENSR00001587177 <i>e!</i> (open chromatin region)	1	blood (K562)	H3K27me3

### Variation proximal to gene

gene	variant type	min(distance)	transcript	RefSeq id	protein	variant(s)
CD244 <i>e!</i>	upstream gene variant	2126	ENST00000492063 <i>e!</i>	?	ENSP00000432636 <i>e!</i>	1
CD244 <i>e!</i>	upstream gene variant	2126	ENST00000322302 <i>e!</i>	NM_001166664.1	ENSP00000313619 <i>e!</i>	1
CD244 <i>e!</i>	upstream gene variant	2066	ENST00000368033 <i>e!</i>	NM_001166663.1	ENSP00000357012 <i>e!</i>	1
CD244 <i>e!</i>	upstream gene variant	1971	ENST00000368034 <i>e!</i>	NM_016382.3	ENSP00000357013 <i>e!</i>	1
ITLN1 <i>e!</i>	downstream gene variant	693	ENST00000326245 <i>e!</i>	NM_017625.2	ENSP00000323587 <i>e!</i>	1
ITLN1 <i>e!</i>	downstream gene variant	3466	ENST00000487531 <i>e!</i>	?	?	1
RP11-312J18.6 <i>e!</i>	downstream gene variant	2429	ENST00000427339 <i>e!</i>	?	?	1
RP11-544M22.1 <i>e!</i>	upstream gene variant	3155	ENST00000356006 <i>e!</i>	?	?	1

