

# SNiPACard

## Block annotations

### Block info

genomic range	chr11:117,106,280-117,163,765 <i>e!</i>
block size	57,486 bp
variant count	40 variants

### Basic features

Conservation/deleteriousness		Linked genes	
phyloP	$\mu = -0.709$ [-3.083 – 0.486]	gene(s) hit or close-by	BACE1 <i>e!</i> , BACE1-AS <i>e!</i> , CMB9-94B1.2 <i>e!</i> , PCSK7 <i>e!</i> , RNF214 <i>e!</i> , SCARNA11 <i>e!</i>
phastCons	$\mu = 0.072$ [0 – 0.446]	eQTL gene(s)	BACE1 <i>e!</i> , PCSK7 <i>e!</i> , RNF214 <i>e!</i> , RP11-109L13.1 <i>e!</i> , SIDT2 <i>e!</i> , TAGLN <i>e!</i>
GERP++	$\mu = -0.418$ [-9.68 – 1.67]	potentially regulated gene(s)	-
CADD score	$\mu = 4.405$ [0.738 – 12.24]	disease gene(s)	-

## Direct effect on regulation

### cis-eQTL

gene	transcript	probe	tissue	min(statistic) (type)	source	variant(s)
RP11-109L13.1 <i>e!</i>	?	ENSG00000254851 <i>e!</i>	sigmoid colon	1.19×10 <sup>-6</sup> (p-value)	GTEEx Portal V6 <i>!M</i>	25
RNF214 <i>e!</i>	?	ENSG00000167257 <i>e!</i>	subcutaneous adipocytes	4.10×10 <sup>-6</sup> (p-value)	GTEEx Portal V6 <i>!M</i>	9
RP11-109L13.1 <i>e!</i>	?	ENSG00000254851 <i>e!</i>	subcutaneous adipocytes	6.06×10 <sup>-6</sup> (p-value)	GTEEx Portal V6 <i>!M</i>	3
TAGLN <i>e!</i>	ENST00000525531 <i>e!</i>	ILMN_1778668 <i>e!</i>	blood	1.05×10 <sup>-7</sup> (p-value)	MuTHER consortium <i>!M</i>	10
TAGLN <i>e!</i>	ENST00000532870 <i>e!</i>					
TAGLN <i>e!</i>	ENST00000278968 <i>e!</i>					
TAGLN <i>e!</i>	ENST00000392951 <i>e!</i>					
TAGLN <i>e!</i>	ENST00000530649 <i>e!</i>					
TAGLN <i>e!</i>	ENST00000533863 <i>e!</i>					
TAGLN <i>e!</i>	ENST00000525531 <i>e!</i>	ILMN_2400935 <i>e!</i>	blood	8.90×10 <sup>-6</sup> (p-value)	Westra et al. <i>!M</i>	10
TAGLN <i>e!</i>	ENST00000529622 <i>e!</i>					
TAGLN <i>e!</i>	ENST00000278968 <i>e!</i>					
TAGLN <i>e!</i>	ENST00000530649 <i>e!</i>					
TAGLN <i>e!</i>	ENST00000529792 <i>e!</i>					
TAGLN <i>e!</i>	ENST00000532870 <i>e!</i>					
TAGLN <i>e!</i>	ENST00000392951 <i>e!</i>					
TAGLN <i>e!</i>	ENST00000533863 <i>e!</i>					
PCSK7 <i>e!</i>	ENST00000540028 <i>e!</i>	ILMN_1699545 <i>e!</i>	blood	5.70×10 <sup>-7</sup> (p-value)	Westra et al. <i>!M</i>	5
PCSK7 <i>e!</i>	ENST00000529458 <i>e!</i>					
PCSK7 <i>e!</i>	ENST00000534529 <i>e!</i>					
PCSK7 <i>e!</i>	ENST00000320934 <i>e!</i>					
PCSK7 <i>e!</i>	ENST00000527037 <i>e!</i>					
SIDT2 <i>e!</i>	ENST00000278951 <i>e!</i>	ILMN_1791912 <i>e!</i>	monocyte	5.17×10 <sup>-19</sup> (p-value)	Zeller et al. <i>!M</i>	2
SIDT2 <i>e!</i>	ENST00000532062 <i>e!</i>					
SIDT2 <i>e!</i>	ENST00000324225 <i>e!</i>					
SIDT2 <i>e!</i>	ENST00000431081 <i>e!</i>					
SIDT2 <i>e!</i>	ENST00000620360 <i>e!</i>					
TAGLN <i>e!</i>	ENST00000525531 <i>e!</i>	ILMN_1778668 <i>e!</i>	monocyte	1.08×10 <sup>-23</sup> (p-value)	Zeller et al. <i>!M</i>	3
TAGLN <i>e!</i>	ENST00000532870 <i>e!</i>					
TAGLN <i>e!</i>	ENST00000278968 <i>e!</i>					
TAGLN <i>e!</i>	ENST00000392951 <i>e!</i>					

TAGLN <i>e!</i>	ENST00000530649 <i>e!</i>						
TAGLN <i>e!</i>	ENST00000533863 <i>e!</i>						
TAGLN <i>e!</i>	ENST00000525531 <i>e!</i>	ILMN_2400935 <i>e!</i>	monocyte	6.54×10 <sup>-17</sup> (p-value)	Zeller et al.		2
TAGLN <i>e!</i>	ENST00000529622 <i>e!</i>						
TAGLN <i>e!</i>	ENST00000278968 <i>e!</i>						
TAGLN <i>e!</i>	ENST00000530649 <i>e!</i>						
TAGLN <i>e!</i>	ENST00000529792 <i>e!</i>						
TAGLN <i>e!</i>	ENST00000532870 <i>e!</i>						
TAGLN <i>e!</i>	ENST00000392951 <i>e!</i>						
TAGLN <i>e!</i>	ENST00000533863 <i>e!</i>						
BACE1 <i>e!</i>	?	ENSG00000186318 <i>e!</i>	testis	1.77×10 <sup>-7</sup> (p-value)	GTEx Portal V6		10
BACE1 <i>e!</i>	ENST00000528053 <i>e!</i>	ILMN_1797804 <i>e!</i>	liver	<2.2×10 <sup>-16</sup> (p-value)	Innocenti et al.		1
BACE1 <i>e!</i>	ENST00000392937 <i>e!</i>						
BACE1 <i>e!</i>	ENST00000313005 <i>e!</i>						

### Putative effect on regulation

#### Regulatory feature cluster

element id	variant(s)	tissue/cell	factors
ENSR00000321759 <i>e!</i> (open chromatin region)	1	endothelium (HUVEC)	H3K36me3
		embryonic stem cell (H1ESC)	H3K36me3
		lung (IMR90)	H3K36me3
		blood (K562)	DNase1
		A549	H3K36me3
ENSR00000569588 <i>e!</i> (open chromatin region)	1	embryonic stem cell (H1ESC)	H3K36me3
		lung (IMR90)	H3K36me3
ENSR00001573947 <i>e!</i> (promoter flanking region)	1	NHLF	DNase1
		embryonic stem cell (H1ESC)	DNase1
		HSMMtube	DNase1
		Osteobl	H3K27ac, H3K4me2
		blood (DND-41)	H3K36me3
		muscle (HSMM)	H3K27ac, DNase1
		monocytes (Monocytes-CD14+)	H3K36me3
		liver (HepG2)	H3K36me3
		lung (IMR90)	DNase1
		A549	H3K36me3
		nervous (NH-A)	H3K9ac, H3K4me2, H3K27ac, DNase1
		skin (NHEK)	H3K36me3
		ENSR00000569591 <i>e!</i> (promoter flanking region)	1
HSMMtube	H3K36me3, DNase1		
blood (K562)	H3K36me3		
skin (NHDF-AD)	DNase1		
muscle (HSMM)	H3K36me3, DNase1		
liver (HepG2)	H3K36me3		
blood (GM12878)	H3K36me3		
lung (IMR90)	H3K36me3, DNase1		
nervous (NH-A)	DNase1, H3K27ac		
skin (NHEK)	DNase1, H3K36me3		
NHLF	H3K36me3, DNase1		
Osteobl	H3K27ac		
blood (DND-41)	H3K36me3		
monocytes (Monocytes-CD14+)	H3K36me3		
endothelium (HUVEC)	H3K36me3, Cjun, DNase1		
A549	H3K36me3		

#### Variation proximal to gene

gene	variant type	min(distance)	transcript	RefSeq id	protein	variant(s)
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gene	variant type	mmqdistance/	transcript	refseq id	protein	variant(s)
BACE1 <i>e!</i>	downstream gene variant	1515	ENST00000528053 <i>e!</i>	? <i>e!</i>	ENSP00000431848 <i>e!</i>	1
BACE1 <i>e!</i>	downstream gene variant	3651	ENST00000510630 <i>e!</i>	NM_001207049.1 <i>e!</i>	ENSP00000422461 <i>e!</i>	1
BACE1 <i>e!</i>	downstream gene variant	3699	ENST00000513780 <i>e!</i>	NM_138972.3 <i>e!</i>	ENSP00000424536 <i>e!</i>	1
BACE1 <i>e!</i>	downstream gene variant	3882	ENST00000392937 <i>e!</i>	NM_001207048.1 <i>e!</i>	ENSP00000475405 <i>e!</i>	1
BACE1 <i>e!</i>	downstream gene variant	822	ENST00000514464 <i>e!</i>	? <i>e!</i>	? <i>e!</i>	1
BACE1 <i>e!</i>	downstream gene variant, upstream gene variant	1052	ENST00000509916 <i>e!</i>	? <i>e!</i>	? <i>e!</i>	2
BACE1 <i>e!</i>	downstream gene variant	3699	ENST00000445823 <i>e!</i>	NM_138971.3 <i>e!</i>	ENSP00000403685 <i>e!</i>	1
BACE1 <i>e!</i>	downstream gene variant	22	ENST00000504995 <i>e!</i>	? <i>e!</i>	ENSP00000434486 <i>e!</i>	1
BACE1 <i>e!</i>	downstream gene variant	3699	ENST00000428381 <i>e!</i>	NM_138973.3 <i>e!</i>	ENSP00000402228 <i>e!</i>	1
BACE1 <i>e!</i>	downstream gene variant	4798	ENST00000530824 <i>e!</i>	? <i>e!</i>	? <i>e!</i>	1
BACE1 <i>e!</i>	downstream gene variant	3383	ENST00000313005 <i>e!</i>	NM_012104.4 <i>e!</i>	ENSP00000318585 <i>e!</i>	1
CMB9-94B1.2 <i>e!</i>	downstream gene variant	3956	ENST00000613535 <i>e!</i>	? <i>e!</i>	? <i>e!</i>	1
PCSK7 <i>e!</i>	upstream gene variant	3039	ENST00000320934 <i>e!</i>	NM_004716.2 <i>e!</i>	ENSP00000325917 <i>e!</i>	3
PCSK7 <i>e!</i>	upstream gene variant	3469	ENST00000540028 <i>e!</i>	? <i>e!</i>	ENSP00000441944 <i>e!</i>	3
PCSK7 <i>e!</i>	upstream gene variant	3039	ENST00000530269 <i>e!</i>	? <i>e!</i>	ENSP00000433252 <i>e!</i>	3
PCSK7 <i>e!</i>	upstream gene variant	3696	ENST00000524507 <i>e!</i>	? <i>e!</i>	ENSP00000433841 <i>e!</i>	2
PCSK7 <i>e!</i>	upstream gene variant	3490	ENST00000532301 <i>e!</i>	? <i>e!</i>	ENSP00000436459 <i>e!</i>	3
RNF214 <i>e!</i>	downstream gene variant	148	ENST00000531452 <i>e!</i>	NM_001077239.1 <i>e!</i>	ENSP00000431643 <i>e!</i>	1
RNF214 <i>e!</i>	upstream gene variant, downstream gene variant	590	ENST00000534709 <i>e!</i>	? <i>e!</i>	? <i>e!</i>	2
RNF214 <i>e!</i>	downstream gene variant	150	ENST00000300650 <i>e!</i>	NM_207343.3 <i>e!</i>	ENSP00000300650 <i>e!</i>	1
RNF214 <i>e!</i>	downstream gene variant	672	ENST00000531287 <i>e!</i>	NM_001278249.1 <i>e!</i>	ENSP00000435361 <i>e!</i>	1
RNF214 <i>e!</i>	upstream gene variant, downstream gene variant	2632	ENST00000524917 <i>e!</i>	? <i>e!</i>	? <i>e!</i>	2
RNF214 <i>e!</i>	downstream gene variant	1996	ENST00000529869 <i>e!</i>	? <i>e!</i>	? <i>e!</i>	2
SCARNA11 <i>e!</i>	upstream gene variant, downstream gene variant	93	ENST00000517183 <i>e!</i>	? <i>e!</i>	? <i>e!</i>	18

### Putative effect on transcript

#### Intron variant (splice region)

gene	affected transcript	RefSeq id	protein	variant(s)
BACE1 <i>e!</i>	ENST00000313005 <i>e!</i>	NM_012104.4	ENSP00000318585 <i>e!</i>	1
BACE1 <i>e!</i>	ENST00000392937 <i>e!</i>	NM_001207048.1	ENSP00000475405 <i>e!</i>	1
BACE1 <i>e!</i>	ENST00000513780 <i>e!</i>	NM_138972.3	ENSP00000424536 <i>e!</i>	1
BACE1 <i>e!</i>	ENST00000428381 <i>e!</i>	NM_138973.3	ENSP00000402228 <i>e!</i>	1
BACE1 <i>e!</i>	ENST00000510915 <i>e!</i>	? <i>e!</i>	ENSP00000475171 <i>e!</i>	1
BACE1 <i>e!</i>	ENST00000445823 <i>e!</i>	NM_138971.3	ENSP00000403685 <i>e!</i>	1
BACE1 <i>e!</i>	ENST00000530824 <i>e!</i>	? <i>e!</i>	? <i>e!</i>	1
BACE1 <i>e!</i>	ENST00000510630 <i>e!</i>	NM_001207049.1	ENSP00000422461 <i>e!</i>	1
BACE1 <i>e!</i>	ENST00000528053 <i>e!</i>	? <i>e!</i>	ENSP00000431848 <i>e!</i>	1

#### Intron variant

gene	affected transcript	RefSeq id	protein	variant(s)
BACE1-AS <i>e!</i>	ENST00000614401 <i>e!</i>	? <i>e!</i>	? <i>e!</i>	1

RNF214 <i>e!</i>	ENST00000524917 <i>e!</i>	?	?	1
RNF214 <i>e!</i>	ENST00000529869 <i>e!</i>	?	?	6
RNF214 <i>e!</i>	ENST00000530849 <i>e!</i>	?	ENSP00000432903 <i>e!</i>	38
RNF214 <i>e!</i>	ENST00000531287 <i>e!</i>	NM_001278249.1	ENSP00000435361 <i>e!</i>	38
RNF214 <i>e!</i>	ENST00000300650 <i>e!</i>	NM_207343.3	ENSP00000300650 <i>e!</i>	38
RNF214 <i>e!</i>	ENST00000534428 <i>e!</i>	?	ENSP00000434186 <i>e!</i>	5
RNF214 <i>e!</i>	ENST00000531452 <i>e!</i>	NM_001077239.1	ENSP00000431643 <i>e!</i>	38

### 3'-UTR variant

gene	affected transcript	RefSeq id	protein	variant(s)
BACE1 <i>e!</i>	ENST00000313005 <i>e!</i>	NM_012104.4	ENSP00000318585 <i>e!</i>	1
BACE1 <i>e!</i>	ENST00000392937 <i>e!</i>	NM_001207048.1	ENSP00000475405 <i>e!</i>	1
RNF214 <i>e!</i>	ENST00000530849 <i>e!</i>	?	ENSP00000432903 <i>e!</i>	1

### Non-coding exon variant

gene	affected transcript	RefSeq id	variant(s)
BACE1-AS <i>e!</i>	ENST00000618857 <i>e!</i>	?	1
RNF214 <i>e!</i>	ENST00000534709 <i>e!</i>	?	1

