

## Product datasheet for **TR310567**

### PC1/3 (PCSK1) Human shRNA Plasmid Kit (Locus ID 5122)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	PC1/3 (PCSK1) Human shRNA Plasmid Kit (Locus ID 5122)
Locus ID:	5122
Synonyms:	BMIQ12; NEC1; PC1; PC3; SPC3
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	PCSK1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 5122). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_000439</a> , <a href="#">NM_001177875</a> , <a href="#">NM_001177876</a> , <a href="#">NM_000439.1</a> , <a href="#">NM_000439.2</a> , <a href="#">NM_000439.3</a> , <a href="#">NM_000439.4</a> , <a href="#">NM_001177876.1</a> , <a href="#">NM_001177875.1</a> , <a href="#">BC031211</a> , <a href="#">BC130295</a> , <a href="#">BC136486</a> , <a href="#">NM_000439.5</a> , <a href="#">NM_001177875.2</a>
UniProt ID:	<a href="#">P29120</a>
Summary:	This gene encodes a member of the subtilisin-like proprotein convertase family, which includes proteases that process protein and peptide precursors trafficking through regulated or constitutive branches of the secretory pathway. The encoded protein undergoes an initial autocatalytic processing event in the ER to generate a heterodimer which exits the ER and sorts to subcellular compartments where a second autocatalytic even takes place and the catalytic activity is acquired. The protease is packaged into and activated in dense core secretory granules and expressed in the neuroendocrine system and brain. This gene encodes one of the seven basic amino acid-specific members which cleave their substrates at single or paired basic residues. It functions in the proteolytic activation of polypeptide hormones and neuropeptides precursors. Mutations in this gene have been associated with susceptibility to obesity and proprotein convertase 1/3 deficiency. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene [provided by RefSeq, Jan 2014]


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<b>shRNA Design:</b>	These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact <a href="mailto:techsupport@origene.com">techsupport@origene.com</a> . If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a> .
<b>Performance Guaranteed:</b>	<p>OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.</p> <p>For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at <a href="mailto:techsupport@origene.com">techsupport@origene.com</a>. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).</p>