

## Product datasheet for **TR311126**

### **NPC1L1 Human shRNA Plasmid Kit (Locus ID 29881)**

#### **Product data:**

Product Type:	shRNA Plasmids
Product Name:	NPC1L1 Human shRNA Plasmid Kit (Locus ID 29881)
Locus ID:	29881
Synonyms:	LDLCQ7; NPC11L1; SLC65A2
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	NPC1L1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 29881). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_001101648</a> , <a href="#">NM_001300967</a> , <a href="#">NM_013389</a> , <a href="#">NM_013389.1</a> , <a href="#">NM_013389.2</a> , <a href="#">NM_001101648.1</a> , <a href="#">NM_001300967.1</a> , <a href="#">BC117178</a> , <a href="#">BC143731</a> , <a href="#">BC143756</a> , <a href="#">NM_001300967.2</a> , <a href="#">NM_013389.3</a> , <a href="#">NM_001101648.2</a>
UniProt ID:	<a href="#">Q9UHC9</a>
Summary:	The protein encoded by this gene is a multi-pass membrane protein. It contains a conserved N-terminal Niemann-Pick C1 (NPC1) domain and a putative sterol-sensing domain (SSD) which includes a YQRL motif functioning as a plasma membrane to trans-Golgi network transport signal in other proteins. This protein takes up free cholesterol into cells through vesicular endocytosis and plays a critical role in the absorption of intestinal cholesterol. It also has the ability to transport alpha-tocopherol (vitamin E). The drug ezetimibe targets this protein and inhibits the absorption of intestinal cholesterol and alpha-tocopherol. In addition, this protein may play a critical role in regulating lipid metabolism. Polymorphic variations in this gene are associated with plasma total cholesterol and low-density lipoprotein cholesterol (LDL-C) levels and coronary heart disease (CHD) risk. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2009]



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**shRNA Design:**

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 [techsupport@origene.com](mailto:techsupport@origene.com). If you need a special design or shRNA sequence, please utilize our [custom shRNA service](#).

**Performance Guaranteed:**

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.

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 [techsupport@origene.com](mailto:techsupport@origene.com). Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).