

## Product datasheet for RC220597L3V

## OriGene Technologies, Inc.

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## NPC1L1 (NM\_013389) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

Product Type: Lentiviral Particles

**Product Name:** NPC1L1 (NM\_013389) Human Tagged ORF Clone Lentiviral Particle

Symbol: NPC1L1

Synonyms: LDLCQ7; NPC11L1; SLC65A2

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

Tag: Myc-DDK
ACCN: NM 013389

ORF Size: 4077 bp

**ORF Nucleotide** 

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Sequence:
OTI Disclaimer:

The ORF insert of this clone is exactly the same as(RC220597).

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This

clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**RefSeg:** NM 013389.2

RefSeq Size: 5066 bp

RefSeq ORF: 4080 bp

Locus ID: 29881

UniProt ID: Q9UHC9

Cytogenetics: 7p13

**Protein Families:** Druggable Genome, Transmembrane

**MW:** 149.2 kDa







## **Gene 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]