

## **Product datasheet for RC220643L3**

#### OriGene Technologies, Inc.

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### NPC1L1 (NM\_001101648) Human Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: NPC1L1 (NM\_001101648) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: NPC1L1

Synonyms: LDLCQ7; NPC11L1; SLC65A2

Mammalian Cell Puromycin

Selection:

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

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC220643).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





st The last codon before the Stop codon of the ORF.

**ACCN:** NM\_001101648

ORF Size: 3996 bp





#### NPC1L1 (NM\_001101648) Human Tagged Lenti ORF Clone - RC220643L3

**OTI Disclaimer:** 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.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:** 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 001101648.1</u>, <u>NP 001095118.1</u>

RefSeq Size: 4985 bp
RefSeq ORF: 3999 bp
Locus ID: 29881
UniProt ID: Q9UHC9
Cytogenetics: 7p13

**Protein Families:** Druggable Genome, Transmembrane

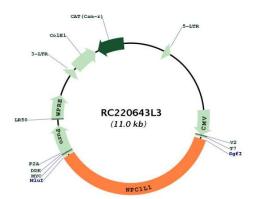
**MW:** 145.76 kDa

**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]



# **Product images:**



Circular map for RC220643L3