

## Product datasheet for TL501501

## OriGene Technologies, Inc.

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## Npc1 Mouse shRNA Plasmid (Locus ID 18145)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Npc1 Mouse shRNA Plasmid (Locus ID 18145)

**Locus ID:** 18145

**Synonyms:** A430089E03Rik; C85354; D18Ertd139e; D18Ertd723e; lcsd; nmf164; spm

Vector: pGFP-C-shLenti (TR30023)

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

**Mammalian Cell** 

Puromycin

Selection:

Format: Lentiviral plasmids

**Components:** Npc1 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 18145).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: <u>BC052437, BC054539, NM 008720, NM 008720.1, NM 008720.2</u>

UniProt ID: 035604

**Summary:** Intracellular cholesterol transporter which acts in concert with NPC2 and plays an important

role in the egress of cholesterol from the endosomal/lysosomal compartment

(PubMed:21896731, PubMed:22048958, PubMed:27551080). Unesterified cholesterol that has been released from LDLs in the lumen of the late endosomes/lysosomes is transferred by NPC2 to the cholesterol-binding pocket in the N-terminal domain of NPC1. Cholesterol binds to NPC1 with the hydroxyl group buried in the binding pocket (By similarity). May play a role in vesicular trafficking in glia, a process that may be crucial for maintaining the structural and

functional integrity of nerve terminals (Probable).[UniProtKB/Swiss-Prot Function]

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 <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.





## 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. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).