

## **Product datasheet for RC221713L3**

OTOP1 (NM 177998) Human Tagged Lenti ORF Clone

## 9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com

CN: techsupport@origene.cn

OriGene Technologies, Inc.

## Product data:

**Product Type:** Expression Plasmids

**Product Name:** OTOP1 (NM\_177998) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: OTOP1

Mammalian Cell Puromycin

Selection:

Vector:

pLenti-C-Myc-DDK-P2A-Puro (PS100092)

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

ORF Nucleotide The

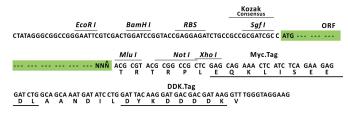
The ORF insert of this clone is exactly the same as(RC221713).

Sequence:

Restriction Sites: Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF.

**ACCN:** NM\_177998 **ORF Size:** 1836 bp





## OTOP1 (NM\_177998) Human Tagged Lenti ORF Clone - RC221713L3

**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: NM 177998.1, NP 819056.1

RefSeq Size: 1869 bp
RefSeq ORF: 1839 bp
Locus ID: 133060
UniProt ID: Q7RTM1
Cytogenetics: 4p16.3

**Protein Families:** Transmembrane

**MW:** 67.4 kDa

**Gene Summary:** This gene encodes a transmembrane protein which belongs to the otopetrin domain protein

family and is required for the formation of otoconia and otoliths, calcium carbonate biominerals within the inner ear of mammals that are required for the detection of linear acceleration and gravity. This gene modulates purinergic control of intracellular calcium in vestibular supporting cells. Naturally occurring mutations in the orthologous mouse gene are associated with nonsyndromic otoconia agenesis and a consequent balance defect. The orthologous mouse gene is also induced in white adipose tissue during obesity. The encoded protein is a component of a counterinflammatory pathway that attenuates obesity-induced

adipose tissue inflammation and plays an adaptive role in maintaining metabolic

homeostasis in obesity. [provided by RefSeq, Jul 2017]