

Product datasheet for RC221713L3V

OriGene Technologies, Inc.

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OTOP1 (NM_177998) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: OTOP1 (NM 177998) Human Tagged ORF Clone Lentiviral Particle

Symbol: OTOP1

Mammalian Cell Puromycin

Selection:

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

Tag: Myc-DDK

ACCN: NM_177998

ORF Size: 1836 bp

ORF Nucleotide

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

OTI Disclaimer:

Sequence:

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.

RefSeq: <u>NM 177998.1</u>, <u>NP 819056.1</u>

 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]