

## Product datasheet for RC209700L2V

## OriGene Technologies, Inc.

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## C9orf72 (NM\_018325) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

**Product Name:** C9orf72 (NM\_018325) Human Tagged ORF Clone Lentiviral Particle

Symbol: C9orf72

Synonyms: ALSFTD; DENND9; DENNL72; FTDALS; FTDALS1

Mammalian Cell

Selection:

None

**Vector:** pLenti-C-mGFP (PS100071)

Tag: mGFP

**ACCN:** NM\_018325 **ORF Size:** 1443 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC209700).

Sequence:
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.

**RefSeg:** NM 018325.1

 RefSeq Size:
 3244 bp

 RefSeq ORF:
 1446 bp

 Locus ID:
 203228

 UniProt ID:
 Q96LT7

 Cytogenetics:
 9p21.2

 MW:
 54.3 kDa







## **Gene Summary:**

The protein encoded by this gene plays an important role in the regulation of endosomal trafficking, and has been shown to interact with Rab proteins that are involved in autophagy and endocytic transport. Expansion of a GGGGCC repeat from 2-22 copies to 700-1600 copies in the intronic sequence between alternate 5' exons in transcripts from this gene is associated with 9p-linked ALS (amyotrophic lateral sclerosis) and FTD (frontotemporal dementia) (PMID: 21944778, 21944779). Studies suggest that hexanucleotide expansions could result in the selective stabilization of repeat-containing pre-mRNA, and the accumulation of insoluble dipeptide repeat protein aggregates that could be pathogenic in FTD-ALS patients (PMID: 23393093). Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2016]