

Product datasheet for RR212860L3V

OriGene Technologies, Inc.

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Chchd4 (NM_001013431) Rat Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: Chchd4 (NM 001013431) Rat Tagged ORF Clone Lentiviral Particle

Symbol: Chchd4

Synonyms: MGC109542

Mammalian Cell Puromycin

Selection:

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

Tag: Myc-DDK

ACCN: NM_001013431

ORF Size: 417 bp

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RR212860).

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 001013431.1</u>, <u>NP 001013449.1</u>

 RefSeq Size:
 1367 bp

 RefSeq ORF:
 420 bp

 Locus ID:
 312559

 UniProt ID:
 Q5BJN5

Cytogenetics: 4q34





Gene Summary:

Functions as chaperone and catalyzes the formation of disulfide bonds in substrate proteins, such as COX17, COX19 and MICU1. Required for the import and folding of small cysteine-containing proteins (small Tim) in the mitochondrial intermembrane space (IMS). Precursor proteins to be imported into the IMS are translocated in their reduced form into the mitochondria. The oxidized form of CHCHD4/MIA40 forms a transient intermolecular disulfide bridge with the reduced precursor protein, resulting in oxidation of the precursor protein that now contains an intramolecular disulfide bond and is able to undergo folding in the IMS. Reduced CHCHD4/MIA40 is then reoxidized by GFER/ERV1 via a disulfide relay system. Mediates formation of disulfide bond in MICU1 in the IMS, promoting formation of the MICU1-MICU2 heterodimer that regulates mitochondrial calcium uptake. [UniProtKB/Swiss-Prot Function]