

Product datasheet for RC221871L3

OriGene Technologies, Inc.

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KIAA1970 (EARS2) (NM_001083614) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: KIAA1970 (EARS2) (NM_001083614) Human Tagged Lenti ORF Clone

Tag: Myc-DDK Symbol: KIAA1970

Synonyms: COXPD12; gluRS; MSE1; mtGlnRS

Mammalian Cell Puromycin

Selection:

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

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

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC221871).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_001083614

ORF Size: 1569 bp





KIAA1970 (EARS2) (NM_001083614) Human Tagged Lenti ORF Clone - RC221871L3

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 001083614.1

RefSeq Size: 3979 bp RefSeq ORF: 1572 bp Locus ID: 124454 **UniProt ID:** Q5JPH6 16p12.2

Cytogenetics:

Protein Families: Druggable Genome

Protein Pathways: Aminoacyl-tRNA biosynthesis, Metabolic pathways, Porphyrin and chlorophyll metabolism

MW: 58.5 kDa

Gene Summary: This gene encodes a member of the class I family of aminoacyl-tRNA synthetases. These

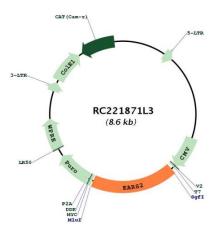
> enzymes play a critical role in protein biosynthesis by charging tRNAs with their cognate amino acids. This protein is encoded by the nuclear genome but is likely to be imported to the mitochondrion where it is thought to catalyze the ligation of glutamate to tRNA molecules.

Mutations in this gene have been associated with combined oxidative phosphorylation deficiency 12 (COXPD12). Alternative splicing results in multiple transcript variants. [provided

by RefSeq, Mar 2015]



Product images:



Circular map for RC221871L3