

Product datasheet for MR224022L3

Larp1 (NM_028451) Mouse Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Larp1 (NM_028451) Mouse Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Larp1

Synonyms: 1810024J12Rik; 3110040D16Rik; Larp; mKIAA0731

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(MR224022).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





 $[\]ensuremath{^*}$ The last codon before the Stop codon of the ORF.

ACCN: NM_028451

ORF Size: 3216 bp



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Larp1 (NM_028451) Mouse Tagged Lenti ORF Clone - MR224022L3

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: <u>NM 028451.1</u>, <u>NP 082727.1</u>

RefSeq Size: 6617 bp
RefSeq ORF: 3219 bp
Locus ID: 73158
UniProt ID: Q6ZQ58
Cytogenetics: 11 B1.3

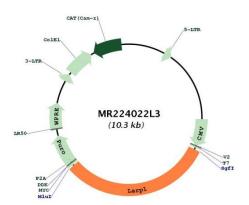
Gene Summary: RNA-binding protein that regulates the translation of specific target mRNA species

downstream of the mTORC1 complex, in function of growth signals and nutrient availability. Interacts on the one hand with the 3' poly-A tails that are present in all mRNA molecules, and on the other hand with the 7-methylguanosine cap structure of mRNAs containing a 5' terminal oligopyrimidine (5'TOP) motif, which is present in mRNAs encoding ribosomal proteins and several components of the translation machinery. The interaction with the 5' end of mRNAs containing a 5'TOP motif leads to translational repression by preventing the binding of EIF4G1. When mTORC1 is activated, LARP1 is phosphorylated and dissociates from the 5' untranslated region (UTR) of mRNA. Does not prevent binding of EIF4G1 to mRNAs that lack a 5'TOP motif. Interacts with the free 40S ribosome subunit and with ribosomes, both monosomes and polysomes. Under normal nutrient availability, interacts primarily with the 3' untranslated region (UTR) of mRNAs encoding ribosomal proteins and increases protein synthesis. Associates with actively translating ribosomes and stimulates translation of mRNAs containing a 5'TOP motif, thereby regulating protein synthesis, and as a consequence, cell growth and proliferation. Stabilizes mRNAs species with a 5'TOP motif, which is required to

prevent apoptosis.[UniProtKB/Swiss-Prot Function]



Product images:



Circular map for MR224022L3