

Product datasheet for **MR222729**

ligp1 (NM_021792) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	ligp1
Synonyms:	2900074L10Rik; AI046432; AW111922; Ifgga1; ligp; Irga6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence: >MR222729 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGTGAGCTGTTCTCTTACCTAAGAGTGATGAGAATAATGATTGCCCTCCAGCTTTACTGGTTATT
TTAAGAAATTTAATACGGGAAGAAAAATCATTTCTCAAGAGATCCTCAATTTGATTGAATTAAGGATGAG
AAAAGGGAATATTCAGTTGACAACTCTGCAATCAGTGATGCATTAAGAAATCGATAGTAGTGCTC
AATGTTGCTGTACCGGGGAGACGGGATCAGGGAAGTCCAGCTTCATCAATACCCTGAGAGGCATTGGGA
ATGAAGAAGAAGGTGCAGCTAAACTGGGGTGGTGGAGGTAACCATGGAAAGACATCCATACAAACACCC
CAATATACCAATGTGGTTTTTTGGGACCTGCCTGGGATTGGAAGCACAAATTTCCACCAAAACACTTAC
CTGGAGAAATGAAGTTCTATGAGTACGATTTCTTATTATTATTCGGCCACACGCTTCAAGAAAAATG
ATATAGACATTGCCAAAGCAATCAGCATGATGAAGAAGGAATTTACTTCGTGAGAACCAAGGTGGACTC
TGACATAACAAATGAAGCAGATGGCAAACCTCAAACCTTTGACAAAGAAAAGGTCTGCAGGACATCCGC
CTTAAGTGTGTAACACCTTTAGGGAGAATGGCATTGCTGAGCCACCAATCTTCTGCTCTTAACAAAA
ATGTTTGTCACTATGACTTCCCGCTCCTGATGGACAAGCTGATAAGTGACCTCCCTATCTACAAGAGACA
CAATTTTATGGTCTCCTTACCAATATCACAGATTCAGTCATTGAAAGAAGCGGCAATTTCTGAAGCAG
AGGATTTGGCTGGAAGGATTTGCTGCTGACCTAGTGAATATCATCCCTTCTCTGACCTTTCTCTTGAGCA
GTGATTTGGAGACTCTGAAGAAAAGCATGAAATTTACCGCACTGTGTTTGGAGTGGATGAAACATCTTT
GCAGAGATTAGCTAGGGACTGGGAAATAGAGGTGGATCAGGTGGAGGCCATGATAAATCTCCTGCTGTG
TTCAAACCTACAGATGAAGAAACAATACAAGAAAGGCTTTCAAGATATATTCAGGAGTTCTGTTTGGCTA
ATGGGTACTTACTTCTAAAAATAGTTTTCTAAAGAAATATTTTACCTGAAATATTATTTCTTCTGACAT
GGTGACTGAGGATGCTAAACTCTTCTTAAAGAGATATGTTTAAAGAAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence:

>MR222729 protein sequence
 Red=Cloning site Green=Tags(s)

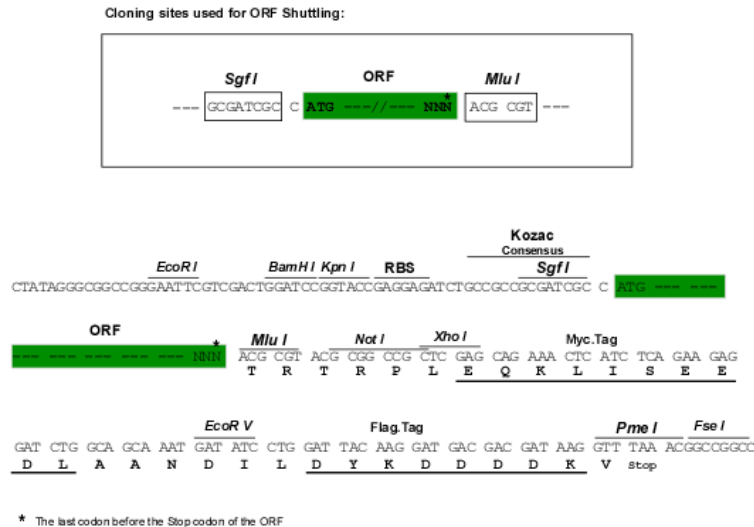
MGQLFSSPKSDENNDLPSSFTGYFKKFNTGRKIIISQEILNLIELMRKGNIQLTNSAISDALKEIDSSVL
 NYAVTGETGSGKSSFINTLRGIGNEEEGAAGTGVVEVTMERHPYKHPNIPNVVFDLPDGPSTNFPNTY
 LEKMKFYEYDFIIISATRFKKNDIDIAKISMMKKEFYFVRTKVDSDITNEADGKPQTFDKEKVLQDIR
 LNCVNTFRENGIAEPPIFLLSNKNVCHYDFPVLMDKLISDLPIYKRHNFMVSLPNITDSVIEKKRQFLKQ
 RIWLEGFAADLVNIIPSLTFLDSDLETLLKSMKFYRTVFGVDETSLQRLARDWEIEVDQVEAMIKSPAV
 FKPTDEETIQERLSRYIQEFCLANGYLLPKNSFLKEIFYLKYFVFLDMVTEDAKTLLKEICLRN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN:

NM_021792

ORF Size:

1239 bp

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_021792.5](#)

RefSeq Size: 2966 bp

RefSeq ORF: 1242 bp

Locus ID: 60440

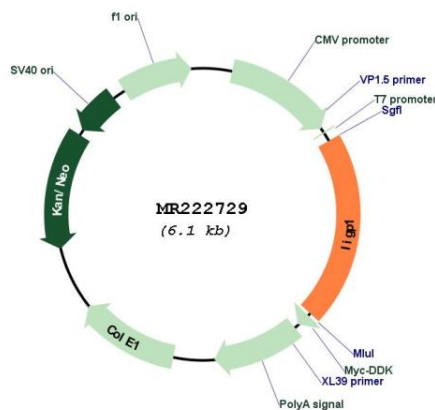
UniProt ID: [Q9QZ85](#)

Cytogenetics: 18 D3

MW: 47.6 kDa

Gene Summary: GTPase with low activity. Has higher affinity for GDP than for GTP. Plays a role in resistance to intracellular pathogens. Required for disruption of the parasitophorous vacuole formed following T.gondii infection and subsequent killing of the parasite. Mediates resistance to C.trachomatis infection by targeting bacterial inclusions to autophagosomes for subsequent lysosomal destruction.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR222729