

Product datasheet for MC210751

Lamtor5 (NM_026774) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Lamtor5 (NM_026774) Mouse Untagged Clone

Tag: Tag Free Symbol: Lamtor5

Synonyms: 1110003H18Rik; Hbxip; XIP

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Cell Selection: Neomycin

Fully Sequenced ORF: >MC210751 representing NM_026774

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGCCTTTTCGTAAAGAGCGCGGACGCGGCGCCGCGCTGAATTTCGTCCCTCTGGAGACGCCGTCCAGGC
GCCCGCCTCGGTCAAGTCACGTGATCGAGGTTTTGCGGTGAAGGAGGAAGTGTTTTGCTGCGGGGTCCTGG
CCTGGGGCGGACAGCCTGCGGGATGGAGGCGACTTTGGAGCAGCATTTTGGAGGACACAATGAAGAATCCA
TCCATTGTTGGAGTCCTATGCACAGATTCACAAGGACTTAATCTGGGCTGCCGTGGTACCCTGTCGGATG
AGCACGCTGGAGTCATATCTGTTCTAGCCCAGCAGCAGCTAGCCTAACCTCTGACCCCACCGACATCCC
TGTGGTATGTTTAGAATCAGATAATGGGAACATTATGATCCAGAAACACGATGGCATCACAGTGGCTGTG

CACAAAATGGCCTCTTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul ACCN: NM_026774

Insert Size: 438 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).



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The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube Components:

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 026774.2, NP 081050.2

RefSeq Size: 905 bp RefSeq ORF: 438 bp 68576 Locus ID: **UniProt ID:** Q9D1L9 Cytogenetics: 3 F2.3

Gene Summary: As part of the Ragulator complex it is involved in amino acid sensing and activation of

> mTORC1, a signaling complex promoting cell growth in response to growth factors, energy levels, and amino acids. Activated by amino acids through a mechanism involving the lysosomal V-ATPase, the Ragulator functions as a guanine nucleotide exchange factor

activating the small GTPases Rag. Activated Ragulator and Rag GTPases function as a scaffold recruiting mTORC1 to lysosomes where it is in turn activated. When complexed to BIRC5,

interferes with apoptosome assembly, preventing recruitment of pro-caspase-9 to oligomerized APAF1, thereby selectively suppressing apoptosis initiated via the mitochondrial/cytochrome c pathway (By similarity).[UniProtKB/Swiss-Prot Function]