**OriGene Technologies, Inc.**
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

# Product datasheet for MC227585

## Lamp2 (NM_001290485) Mouse Untagged Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | Lamp2 (NM_001290485) Mouse Untagged Clone |
| **Tag:** | Tag Free |
| **Symbol:** | Lamp2 |
| **Synonyms:** | CD107b; Lamp-2; Lamp-2a; Lamp-2b; Lamp-2c; Lamp II; LGP-B; Mac3 |
| **Mammalian Cell Selection:** | Neomycin |
| **Vector:** | pCMV6-Entry (PS100001) |
| **E. coli Selection:** | Kanamycin (25 ug/mL) |

**Fully Sequenced ORF:**

```
>MC227585 representing NM_001290485
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTGCCTCTCTCCGGTTAAAGGCGCAAAGCTCATCCTGATCTTTCTGTTCCTAGGAGCCGTTCAGTCCA
ATGCATTGATAGTTAATTTGACAGATTCAAAGGGTACTTGCCTTTATGCAGAATGGGAGATGAATTTCAC
AATAACATATGAAACTACAAACCAAACCAATAAAACTATAACCATTGCAGTACCTGACAAGGCGACACAC
GATGGAAGCAGTTGTGGGGATGACCGGAATAGTGCCAAAATAATGATACAATTTGGATTCGCTGTCTCTT
GGGCTGTGAATTTTACCAAGGAAGCATCTCATTATTCAATTCATGACATCGTGCTTTCCTACAACACTAG
TGATAGCACAGTATTTCCTGGTGCTGTAGCTAAAGGAGTTCATACTGTTAAAAATCCTGAGAATTTCAAA
GTTCCATTGGATGTCATCTTTAAGTGCAATAGTGTTTTAACTTACAACCTGACTCCTGTCGTTCAGAAAT
ATTGGGGTATTCACCTGCAAGCTTTTGTCCAAAATGGTACAGTGAGTAAAAATGAACAAGTGTGTGAAGA
AGACCAAACTCCCACCACTGTGGCACCCATCATTCACACCACTGCCCCGTCGACTACAACTACACTCACT
CCAACTTCAACACCCACTCCAACTCCAACTCCAACTCCAACCGTTGGAAACTACAGCATTAGAAATGGCA
ATACTACCTGTCTGCTGGCTACCATGGGGCTGCAGCTGAACATCACTGAGGAGAAGGTGCCTTTCATTTT
TAACATCAACCCTGCCACAACCAACTTCACCGGCAGCTGTCAACCTCAAAGTGCTCAACTTAGGCTGAAC
AACAGCCAAATTAAGTATCTTGACTTTATCTTTGCTGTGAAAAATGAAAAACGGTTCTATCTGAAGGAAG
TGAATGTCTACATGTATTTGGCTAATGGCTCAGCTTTCAACATTTCCAACAAGAACCTTAGCTTCTGGGA
TGCCCCTCTGGGAAGTTCTTATATGTGCAACAAAGAGCAGGTGCTTTCTGTGTCTAGAGCGTTTCAGATC
AACACCTTTAACCTAAAGGTGCAACCTTTTAATGTGACAAAAGGACAGTATTCTACAGCTGAGGAATGTG
CTGCTGACTCTGACCTCAACTTTCTTATTCCTGTTGCAGTGGGTGTGGCCTTGGGCTTCCTTATAATTGC
TGTGTTTATATCTTACATGATTGGAAGACGGAAAAGTCGTACTGGTTATCAGTCTGTCTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA
```

View online »

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2024 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

| | |
|---|---|
| **Restriction Sites:** | SgfI-MluI |
| **ACCN:** | NM_001290485 |
| **Insert Size:** | 1251 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). |
| **OTI Annotation:** | Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag. |
| **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.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.<br>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_001290485.1, NP_001277414.1 |
| **RefSeq Size:** | 2206 bp |
| **RefSeq ORF:** | 1251 bp |
| **Locus ID:** | 16784 |
| **Cytogenetics:** | X 22.67 cM |
| **Gene Summary:** | Plays an important role in chaperone-mediated autophagy, a process that mediates lysosomal degradation of proteins in response to various stresses and as part of the normal turnover of proteins with a long biological half-live (PubMed:10972293). Functions by binding target proteins, such as GAPDH and MLLT11, and targeting them for lysosomal degradation (By similarity). Required for the fusion of autophagosomes with lysosomes during autophagy (PubMed:27628032). Cells that lack LAMP2 express normal levels of VAMP8, but fail to accumulate STX17 on autophagosomes, which is the most likely explanation for the lack of fusion between autophagosomes and lysosomes (PubMed:27628032). Required for normal degradation of the contents of autophagosomes (PubMed:10972293, PubMed:12221139). Plays a role in lysosomal protein degradation in response to starvation (PubMed:27628032). Required for efficient MHCII-mediated presentation of exogenous antigens via its function in lysosomal protein degradation; antigenic peptides generated by proteases in the endosomal/lysosomal compartment are captured by nascent MHCII subunits. Is not required for efficient MHCII-mediated presentation of endogenous antigens (By similarity). [UniProtKB/Swiss-Prot Function] |

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2024 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US