

Product datasheet for MR222875L4V

OriGene Technologies, Inc.

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Lamp2 (NM 010685) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: Lamp2 (NM_010685) Mouse Tagged ORF Clone Lentiviral Particle

Symbol: Lamp2

CD107b; Lamp-2; Lamp-2a; Lamp-2b; Lamp-2c; Lamp II; LGP-B; Mac3 Synonyms:

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

mGFP Tag:

NM 010685 ACCN: **ORF Size:** 1245 bp

ORF Nucleotide

The ORF insert of this clone is exactly the same as(MR222875).

OTI Disclaimer:

Sequence:

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.

RefSeq: NM 010685.3, NP 034815.2

RefSeq Size: 3603 bp RefSeq ORF: 1248 bp Locus ID: 16784 **UniProt ID:** P17047

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]