

Product datasheet for **MR222878L2V**

Lamp2 (NM_001017959) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

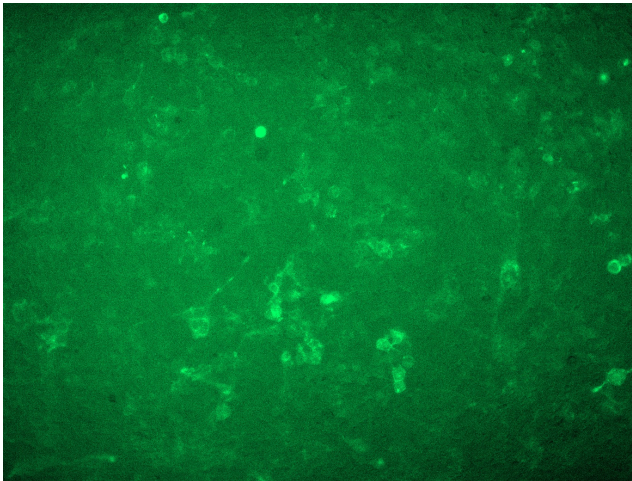
Product Type:	Lentiviral Particles
Product Name:	Lamp2 (NM_001017959) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Lamp2
Synonyms:	CD107b; Lamp-2; Lamp-2a; Lamp-2b; Lamp-2c; Lamp II; LGP-B; Mac3
Mammalian Cell Selection:	None
Vector:	pLenti-C-mGFP (PS100071)
Tag:	mGFP
ACCN:	NM_001017959
ORF Size:	1245 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR222878).
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.
RefSeq:	NM_001017959.1
RefSeq Size:	1768 bp
RefSeq ORF:	1248 bp
Locus ID:	16784
UniProt ID:	P17047
Cytogenetics:	X 22.67 cM



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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-life (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]

Product images:

[MR222878L2] was used to prepare Lentiviral particles using [TR30037] packaging kit. HEK293T cells were transduced with MR222878L2V particle to overexpress human Lamp2-mGFP fusion protein.