

## Product datasheet for RC219208

### LAMP1 (NM\_005561) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	LAMP1 (NM_005561) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	LAMP1
Synonyms:	CD107a; LAMPA; LGP120
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC219208 representing NM_005561 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGGCCCGGCAGCGCCCGGCGACCCCTGCTGCTGCTACTGCTGTTGCTGCTGCTCGGCCTCATGC  
ATTGTGCGTCAGCAGCAATGTTTATGGTGAAAAATGGCAACGGGACCGCGTGCATAATGGCCAATTCTC  
TGCTGCCTTCTCAGTGAACACGACACCAAGAGTGGCCCTAAGAACATGACCTTTGACCTGCCATCAGAT  
GCCACAGTGGTGTCAACCGCAGCTCCTGTGAAAAGAGAACACTTCTGACCCAGTCTCGTGATTGCTT  
TTGGAAGAGGACATACACTCACTCTCAATTTACGAGAAATGCAACACGTTACAGCGTCCAGCTCATGAG  
TTTTGTTTATAACTTGTGACACACACCTTTCCCAATGCGAGCTCCAAGAAATCAAGACTGTGGAA  
TCTATAACTGACATCAGGGCAGATATAGATAAAAAATACAGATGTGTTAGTGGCACCCAGGTCCACATGA  
ACAACGTGACCGTAACGCTCCATGATGCCACCATCCAGGCGTACCTTTCCAACAGCAGCTTCAGCAGGGG  
AGAGACACGCTGTGAACAAGACAGGCCTTCCCAACCACAGCGCCCTGCGCCACCCAGCCCTCGCCC  
TCACCCGTGCCAAGAGCCCTCTGTGGACAAGTACAACGTGAGCGGCACCAACGGGACCTGCCTGCTGG  
CCAGCATGGGGCTGCAGCTGAACCTCACCTATGAGAGGAAGGACAACACGACGGTGACAAGGCTTCTCAA  
CATCAACCCCAACAAGACCTCGGCCAGCGGGAGCTGCGGCGCCACCTGGTGACTCTGGAGCTGCACAGC  
GAGGGCACCCGCTCTGCTCTCCAGTTCGGGATGAATGCAAGTCTAGCCGGTTTTCTACAAGGAA  
TCCAGTTGAATACAATTCTTCTGACGCCAGAGACCTGCTTTAAAGCTGCCAACGGCTCCCTGCGGAGC  
GCTGCAGGCCACAGTCGGCAATTCTACAAGTGAACCGGAGGAGCACGTCCTGTGACGAAGGCGTTT  
TCAGTCAATATATTCAAAGTGTGGGTCCAGGCTTTCAAGGTGGAAGGTGGCCAGTTTGGCTGTGGAGG  
AGTGTCTGCTGGACGAGAACAGCATGCTGATCCCCATCGCTGTGGGTGGTGCCTGGCGGGCTGCTCT  
CATCGTCTCATCGCTACCTCGTCGGCAGGAAGAGGAGTACCGCAGGCTACCAGACTATC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



**Protein Sequence:** >RC219208 representing NM\_005561  
Red=Cloning site Green=Tags(s)

MAAPGSARRPLLLLLLLLLLGLMHCASAAMFMVKNNGTACIMANFSAAFSVNYDTKSGPKNMTFDLP  
 ATVVLNRSSCGKENTSDPSLVIAFGRGHTLTLNFTRNATRYSVQLMSFVYNLSDTHLFPNASSKEIKTVE  
 SITDIRADIDKKYRCVSGTQVHMNNVTVLHDATIQAYLSSNSFSRGETRCEQDRPSPTTAPPAPPSPSP  
 SPVPKSPSPVDKYNVSGTNGTCLLASMGLQLNLTYERKDNTTVTRLLNINPNKTSASGSCGAHLVTLLEHS  
 EGTTVLLFQFGMNASSRFFLQGIQLNTILPDARDFPAFKAANGSLRALQATVGNYSYKCNAAEEHVRVTKAF  
 SVNIFKVVWQAFKVEGGQFGSVVEECLLDENSMLIPIAVGGALAGLVLIVLIAYLVGRKRSHAGYQTI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg3815\\_c07.zip](https://cdn.origene.com/chromatograms/mg3815_c07.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_005561

**ORF Size:** 1251 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\\_005561.3](#), [NP\\_005552.3](#)

**RefSeq Size:** 2560 bp

**RefSeq ORF:** 1254 bp

**Locus ID:** 3916

**UniProt ID:** [P11279](#)

**Cytogenetics:** 13q34

**Domains:** Lamp

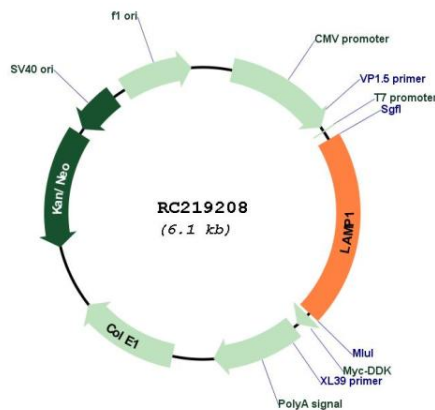
**Protein Families:** ES Cell Differentiation/IPS, Transmembrane

**Protein Pathways:** Lysosome

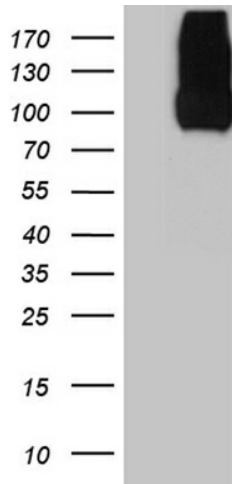
**MW:** 44.88 kDa

**Gene Summary:** The protein encoded by this gene is a member of a family of membrane glycoproteins. This glycoprotein provides selectins with carbohydrate ligands. It may also play a role in tumor cell metastasis. [provided by RefSeq, Jul 2008]

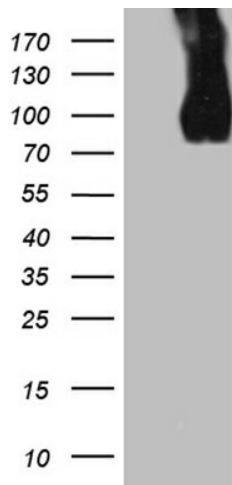
**Product images:**



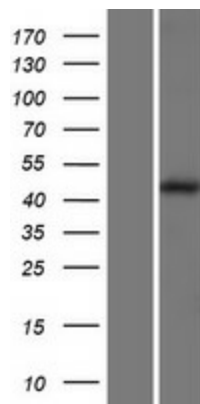
Circular map for RC219208



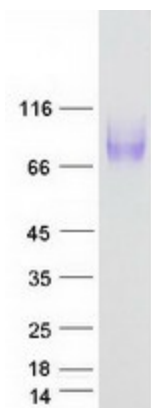
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY LAMP1 (Cat# RC219208, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-LAMP1 (Cat# [TA811973]). Positive lysates [LY417223] (100ug) and [LC417223] (20ug) can be purchased separately from OriGene.



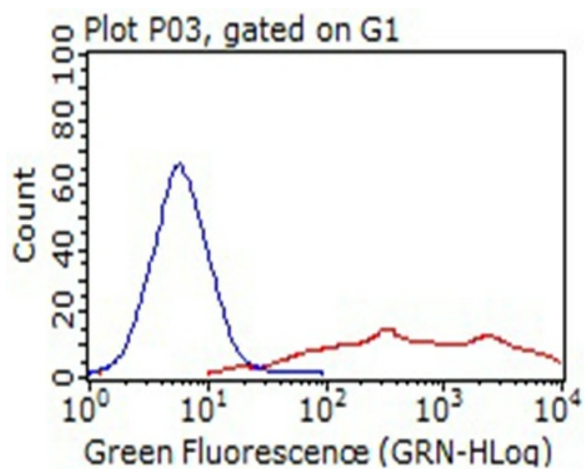
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY LAMP1 (RC219208, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-LAMP1 ([TA811974]). Positive lysates [LY417223] (100ug) and [LC417223] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY417223]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219208 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified LAMP1 protein (Cat# [TP319208]). The protein was produced from HEK293T cells transfected with LAMP1 cDNA clone (Cat# RC219208) using MegaTran 2.0 (Cat# [TT210002]).



HEK293T cells transfected with either RC219208 overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-LAMP1 antibody ([TA811974]), and then analyzed by flow cytometry (1:100).