

## Product datasheet for MR202998

### Lat (NM\_010689) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Lat (NM_010689) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Lat
Synonyms:	p36-38; pp36
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR202998 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAAGCAGACGCCTTGAGCCCGGTGGGGCTGGGCCTCCTGCTGCTGCCCTTCTTGGTACGCTCCTGG  
CTGCCCTGTGCGTGCGCTGCCGTGAGTTGCCAGTCTCCTATGACAGCACTCCACAGAGAGTTTGTACCC  
AAGAAGCATCCTCATCAAGCCACCTCAAATAACCGTCCCCGAACACCTGCTGTTTCTACCTCTAGTC  
ACTTCTTCCCACCCCTGAGGCAGCCAGACCTGCTCCCCATCCCGAGATCCCACAGCCCTTGGGGTT  
CCCATCGGATGCCATCTCCAGCAGAATTCAGATGATGCCAACAGTGTGGCAAGCTACGAGAACCAGGA  
GCCAGCCTGTAAGAATGTGGATGCAGATGAGGATGAAGACGACTATCCCAACGGCTACCTAGTGGTCTG  
CCTGACAGTAGTCTGCTGCCGTCCCTGTTGTCTCCTCTGCTCCTGTGCCTAGCAACCCTGACCTTGGAG  
ACAGTGCCTTCTCTGTGGAGTCGTGTGAAGATTACGTGAATGTTCTGAGAGTGAGGAGAGCGCAGAGGC  
GTCTCTGGATGGGAGCCGGGAGTATGTGAATGTGTCCCCAGAGCAGCAGCCAGTGACCAGGGCTGAGCTG  
GCCTCTGTGAACCTCCAGGAGGTGGAAGACGAAGGAGAAGAGGAAGGGGTGGATGGAGAGGAAGCTCCCG  
ACTATGAGAATCTACAGGAGCTTAAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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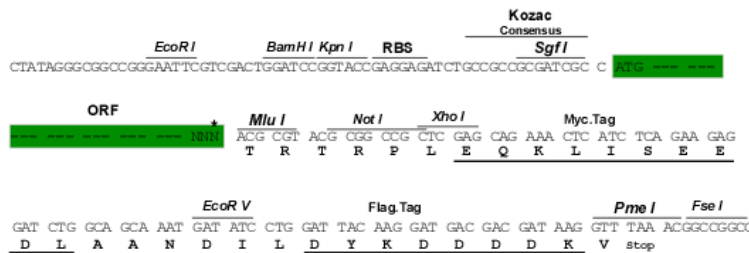
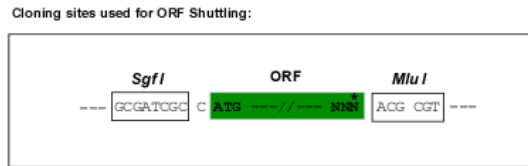
**Protein Sequence:** >MR202998 protein sequence  
 Red=Cloning site Green=Tags(s)

MEADALSPVGLGLLLLPFLVTLAALCVRCRELPVSYDSTSTESLYPRSILIKPPQITVPRTPAVSYPLV  
 TSFPPLRQPDLLPIPRSPQPLGGSHRMPSSQQNSDDANSVASYENQEPACKNVDADDEDYDYPNGYLVVL  
 PDSSPAAPVSSAPVPSNPDLGDSAFSVESCEDYVNVPESEESAEASLDGSREYVNVSPQQPVTRAEI  
 ASVNSQVEVEDEGEEGVGDGEEAPDYENLQELN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



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

**ACCN:** NM\_010689

**ORF Size:** 729 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.

**RefSeq:** [NM\\_010689.2](#), [NP\\_034819.1](#)

**RefSeq Size:** 1260 bp

**RefSeq ORF:** 729 bp

**Locus ID:** 16797

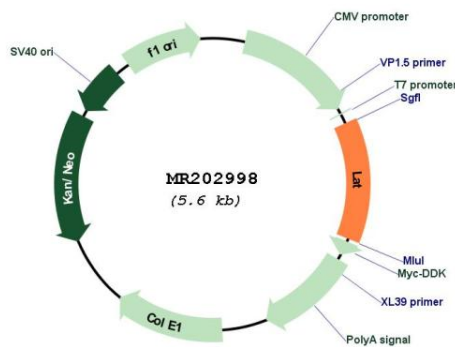
**UniProt ID:** [O54957](#)

**Cytogenetics:** 7 F3

**MW:** 26 kDa

**Gene Summary:** Required for TCR (T-cell antigen receptor)- and pre-TCR-mediated signaling, both in mature T-cells and during their development. Involved in FCGR3 (low affinity immunoglobulin gamma Fc region receptor III)-mediated signaling in natural killer cells and FCER1 (high affinity immunoglobulin epsilon receptor)-mediated signaling in mast cells. Couples activation of these receptors and their associated kinases with distal intracellular events such as mobilization of intracellular calcium stores, PKC activation, MAPK activation or cytoskeletal reorganization through the recruitment of PLCG1, GRB2, GRAP2, and other signaling molecules.[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR202998