

## Product datasheet for MR227247

### Lat2 (NM\_020044) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Lat2 (NM\_020044) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Lat2  
**Synonyms:** AW125574; LAB; NTAL; Wbscr5; Wbscr15; WSCR5  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >MR227247 representing NM\_020044  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGAGTCCCGAGCTGGAGCTGCTGTGGCCGGTGTGGGATTATTGCTGCTGCTGTTGGGGCCACAGCCT  
 GGCTGTGTGTCCACTGCTCCCGTCCAGGAGTGAAGAGAAATGAGAAAATCTACGAGCAGAGGAACCGGCA  
 AGAAAATGCACAGAGCTCAGCTCGGGCTCAGACATACTCCCTGGCCAGGCAGGTGTGCCAGGACCCAG  
 ATGGACACAGCTCAAACAAGTCATTTGAAAGGAAGAACAAGATGCTGTTCTCCACCTTGAGGGTCTGT  
 AGTCCCTTAGGTACCAGAACTTCTACAAAGGAAGTAACCAGGAGCCTGATGCTGCCTATGTAGACCCAT  
 CCCTACAAACTACTACAAGGGATGTTTCCAGAAGCCCTCAGAAGACGACGATTCCAACCTCTACGAG  
 AATGTGCTCGTCTGCAAGCCAGCACCCCGAGTCAGGTGTGAGGACTTTGAGGATTACCAGAAGCTCAG  
 TATCCATCCATCAGTGGCGAGAGTCCAAGAGGACTATGGGTGCACCAATGTCCCTATCAGGAAGCCAGA  
 TGAGGAGCCAGACTATGTGAATGGGGATGTGGCCGCAGCAGAGAACATC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR227247 representing NM\_020044  
 Red=Cloning site Green=Tags(s)

MSAELELLWPVSGLLLLLLGATAWLCVHCSRPGVKRNEKIYEQRNRQENAQSAAAQYTSLARQVWPGPQ  
 MDTAPNKSFERKNKMLFSLLEGPESPRYQNFYKGSNQEPDAAAYVDPIPTNYYNWGCQKPSSEDDDSNSYE  
 NVLVCKPSTPESGVEDFEDYQNSVSIHQWRESKRTMGAPMSLSGSPDEEPDYVNGDVAAAENI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

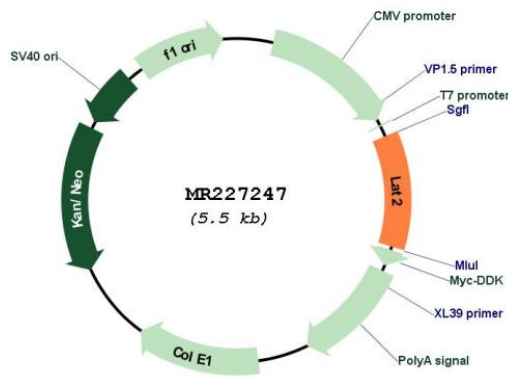


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Cloning Scheme:



Plasmid Map:



ACCN: NM\_020044

ORF Size: 609 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_020044.3](#), [NP\\_064428.1](#)

**RefSeq Size:** 1523 bp

**RefSeq ORF:** 612 bp

**Locus ID:** 56743

**UniProt ID:** [Q9JHL0](#)

**Cytogenetics:** 5 G2

**MW:** 23.3 kDa

**Gene Summary:** Involved in FCER1 (high affinity immunoglobulin epsilon receptor)-mediated signaling in mast cells. May also be involved in BCR (B-cell antigen receptor)-mediated signaling in B-cells and FCGR1 (high affinity immunoglobulin gamma Fc receptor I)-mediated signaling in myeloid cells. Couples activation of these receptors and their associated kinases with distal intracellular events through the recruitment of GRB2.[UniProtKB/Swiss-Prot Function]