

## **Product datasheet for RG212439**

## LAT (NM\_014387) Human Tagged ORF Clone

## **Product data:**

**Product Type:** Expression Plasmids

Product Name: LAT (NM\_014387) Human Tagged ORF Clone

Tag: TurboGFP

Symbol: LAT

Synonyms: IMD52; LAT1; pp36

Mammalian Cell Neomycin

Selection:

**Vector:** pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG212439 representing NM\_014387

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

GGGGGCTCCAGATTACGAGAATCTGCAGGAGCTGAAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG212439 representing NM\_014387

Red=Cloning site Green=Tags(s)

MEATAASWQVAVPVLGGASRPLGPRGAASLLRAPLQMEEAILVPCVLGLLLLPILAMLMALCVHCHRLPG SYDSTSSDSLYPRGIQFKRPHTVAPWPPAYPPVTSYPPLSQPDLLPIPRSPQPLGGSHRTPSSRRDSDGA NSVASYENEEPACEDADEDEDDYHNPGYLVVLPDSTPATSTAAPSAPALSTPGIRDSAFSMESIDDYVNV PESGESAEASLDGSREYVNVSQELHPGAAKTEPAALSSQEAEEVEEEGAPDYENLQELN

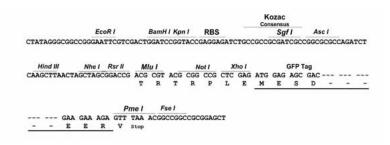
TRTRPLE - GFP Tag - V

**Restriction Sites:** 

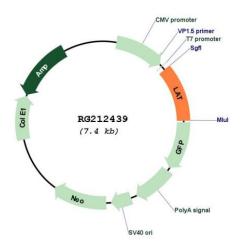
Sgfl-Mlul

**Cloning Scheme:** 





## Plasmid Map:



**ACCN:** NM\_014387

ORF Size: 807 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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> 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. <u>More info</u>

**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:

Cytogenetics:

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 014387.3, NP 055202.1

 RefSeq Size:
 1767 bp

 RefSeq ORF:
 789 bp

 Locus ID:
 27040

 UniProt ID:
 043561

**Protein Families:** Druggable Genome, Transmembrane

16p11.2

Protein Pathways: Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Natural killer cell

mediated cytotoxicity, T cell receptor signaling pathway

**Gene Summary:** The protein encoded by this gene is phosphorylated by ZAP-70/Syk protein tyrosine kinases

following activation of the T-cell antigen receptor (TCR) signal transduction pathway. This transmembrane protein localizes to lipid rafts and acts as a docking site for SH2 domain-containing proteins. Upon phosphorylation, this protein recruits multiple adaptor proteins and downstream signaling molecules into multimolecular signaling complexes located near the site of TCR engagement. Alternative splicing results in multiple transcript variants

encoding different isoforms. [provided by RefSeq, Jul 2008]