

Product datasheet for **RG204180**

LAT (NM_001014987) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LAT (NM_001014987) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	LAT
Synonyms:	IMD52; LAT1; pp36
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG204180 representing NM_001014987 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGGAGGCCATCCTGGTCCCCTGCGTGCTGGGGCTCCTGCTGCTGCCATCCTGGCCATGTTGATGG
CACTGTGTGTGCACTGCCACAGACTGCCAGGCTCCTACGACAGCACATCCTCAGATAGTTTGTATCCAAG
GGGCATCCAGTTCAAACGGCCTCACACGGTTGCCCCCTGGCCACCTGCCTACCCACCTGTCACCTCCTAC
CCACCCCTGAGCCAGCCAGACCTGCTCCCATCCAAGATCCCCGAGCCCTTGGGGGCTCCCACCGGA
CGCCATCTCCCAGCGGATTCTGATGGTGCCAACAGTGTGGCGAGCTACGAGAACGAGGAACCAGCCTG
TGAGGATGCGGATGAGGATGAGGACGACTATCACAAACCCAGGCTACCTGGTGGTGCTTCTGACAGCACC
CCGGCCACTAGCACTGCTGCCCATCAGCTCCTGCACTCAGCACCCCTGGCATCCGAGACAGTGCCTTCT
CCATGGAGTCCATTGATGATTACGTGAACGTTCCGGAGAGCGGGGAGAGCGCAGAAGCGTCTCTGGATGG
CAGCCGGGAGTATGTGAATGTGTCCCAGGAAGTGCATCCTGGAGCGGCTAAGACTGAGCCTGCCGCCCTG
AGTTCCCAGGAGGAGGAGGAAGTGGAGGAAGAGGGGCTCCAGATTACGAGAATCTGCAGGAGCTGAAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG204180 representing NM_001014987
 Red=Cloning site Green=Tags(s)

MEEAILVPCVLGLLLLLPI LAMLALCVHCHRLPGSYDSTSSDSL YPRGIQFKRPHTVAPWPPAYPPVTSY
 PPLSQPDLLPIRSPQPLGGSHRTPSSRRDSDGANSVASYENEEPACEDADEDYHNPGYLVLVLPDST
 PATSTAAPSAPALSTPGIRDSAFSMESIDYVNVPESGESAASLDGSREYVNVSQELHPGAAKTEPAAL
 SSQEAEVEVEEGAPDYENLQELN

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001014987

ORF Size: 699 bp

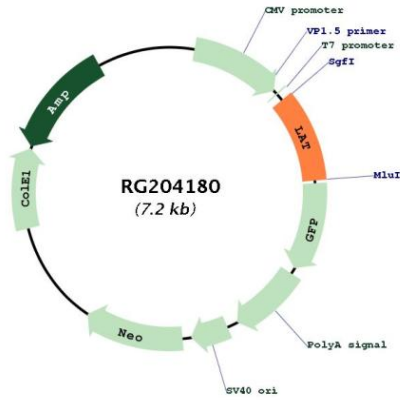
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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 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:	<ol style="list-style-type: none">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:	<u>NM_001014987.2</u>
RefSeq Size:	1680 bp
RefSeq ORF:	702 bp
Locus ID:	27040
UniProt ID:	<u>O43561</u>
Cytogenetics:	16p11.2
Protein Families:	Druggable Genome, Transmembrane
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]

Product images:



Circular map for RG204180