

Product datasheet for **RG217908**

LAT (NM_001014988) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LAT (NM_001014988) 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:	>RG217908 representing NM_001014988 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGGAGGCCATCCTGGTCCCCTGCGTGCTGGGGCTCCTGCTGCTGCCATCCTGGCCATGTTGATGG
CACTGTGTGTGCACTGCCACAGACTGCCAGGCTCCTACGACAGCACATCCTCAGATAGTTTGTATCCAAG
GGGCATCCAGTTCAAACGGCCTCACACGGTTGCCCCCTGGCCACCTGCCTACCCACCTGTCACCTCCTAC
CCACCCCTGAGCCAGCCAGACCTGCTCCCCATCCCATCCCCGAGCCCTTGGGGCTCCCACCGGACGC
CATCTTCCGGCGGGATTCTGATGGTGCCAACAGTGTGGCGAGCTACGAGAACGAGGAACCAGCCTGTGA
GGATGCGGATGAGGATGAGGACGACTATACAACCCAGGCTACCTGGTGGTGCTTCTGACAGCACCCCG
GCCACTAGCACTGCTGCCCATCAGCTCCTGCACTCAGCACCCCTGGCATCCGAGACAGTGCCTTCTCCA
TGGAGTCCATTGATGATTACGTGAACGTTCCGGAGAGCGGGGAGAGCGCAGAAGCGTCTCTGGATGGCAG
CCGGGAGTATGTGAATGTGTCCAGGAAGTGCATCCTGGAGCGGCTAAGACTGAGCCTGCCGCCCTGAGT
TCCAGGAGGCAGAGGAAGTGGAGGAAGAGGGGCTCCAGATTACGAGAATCTGCAGGAGCTGAAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG217908 representing NM_001014988
Red=Cloning site Green=Tags(s)

MEEAILVPCVLGLLLLPILAMLALCVHCHRLPGSYDSTSSDSL YPRGIQFKRPHTVAPWPPAYPPVTSY
 PPLSQPDLLPIPSQPQLGGSHRTPSSRRRSDGANSVASYENEEPACEDADEDEDDYHNPGLVLPDSTP
 ATSTAAPSAPALSTPGIRDSAFSMESIDYVNVPESGESAEASLDGSREYVNVSQLHPGAAKTEPAALS
 SQEAEVEEEEGAPDYENLQELN

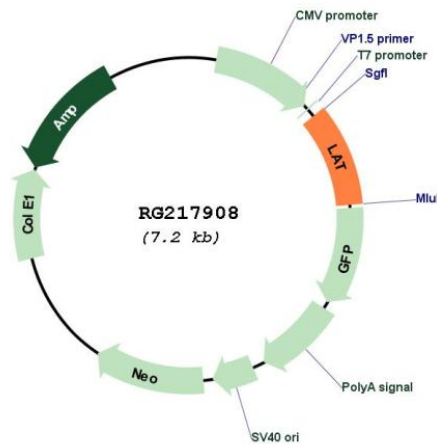
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001014988

ORF Size: 696 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:	<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:	NM_001014988.2
RefSeq Size:	1677 bp
RefSeq ORF:	699 bp
Locus ID:	27040
UniProt ID:	O43561
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]