

# Product datasheet for SC319636

### LAT (NM\_001014987) Human Untagged Clone

#### **Product data:**

#### OriGene Technologies, Inc.

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Product Type:	Expression Plasmids
Product Name:	LAT (NM_001014987) Human Untagged Clone
Tag:	Tag Free
Symbol:	LAT
Synonyms:	IMD52; LAT1; pp36
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	<pre>&gt;OriGene sequence for NM_001014987.1 GGGCCTCCCTGCTGCTGCCCCGGGTCCTGGATATGGAGGCCACGGCTGCCAGCTGG CAGGTGGCTGTCCCGGCTCTTGGGGGGGGCCAGCAGACCCTTGGGGCCTAGGGGTGCAGCC AGCCTGCTCCGAGCTCCCTGCAGATGGAGAGAGCCATCCTGGTCCCGGGGCTCCAGACTG CCAGGCTCCTACGACAGCACATCCTCAGATAGTTTGATGCCACGGGCATCCAGTTCAAA CGGCCTCACACGGTTGCCCCCTGGCCACCTGCCTACCCACCTGTCACCCCCCACACGGCTCCAAC CCGAGCCAGCCAGACCTGCTCCCATCCCA</pre>



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## **O**RIGENE LAT (NM\_001014987) Human Untagged Clone – SC319636

Restriction Sites:	Please inquire
ACCN:	NM_001014987
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 <u>custsupport@origene.com</u> 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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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> <li>Centrifuge at 5,000xg for 5min.</li> <li>Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>Close the tube and incubate for 10 minutes at room temperature.</li> <li>Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
RefSeq:	NM 001014987.1, NP 001014987.1
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

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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 domaincontaining 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] Transcript Variant: This variant (2) differs in the 5' LITP and coding sequence compared to

Transcript Variant: This variant (2) differs in the 5' UTR and coding sequence compared to variant 4. The resulting isoform (b) is shorter at the N-terminus compared to isoform d.

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