

## DESCRIPTION

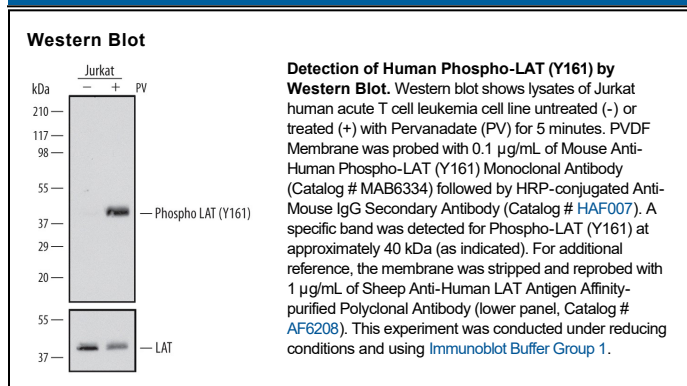
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Phospho-LAT (Y161) in Western blots.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 627945
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Phosphopeptide containing the human LAT Y161 site Accession # O43561
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.1 µg/mL	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

LAT (Linker for Activation of T cells) is a type III transmembrane lipid raft protein that serves as a scaffold for signaling molecules. Isoforms of 262 (36 kDa) and 233, called long and short, respectively, differ by inclusion/exclusion of aa 114-142; a 269 aa isoform lacks this region, but includes alternate N-terminal sequence. Upon T-cell antigen receptor activation, LAT is multiply phosphorylated by ZAP-70/Syk protein tyrosine kinases, creating docking sites for SH2 domain-containing proteins. Phospholipase C-γ docks at Y161, which is pY132 in the short form of LAT. Mutation of this site results in a Th2 autoimmune lymphoproliferative disorder in mice.