

Product datasheet

Anti-LAT (phospho Y200) antibody [EP983(2)Y] ab68139

Recombinant RabMAb

[7 References](#) [3 Images](#)

Overview

Product name	Anti-LAT (phospho Y200) antibody [EP983(2)Y]
Description	Rabbit monoclonal [EP983(2)Y] to LAT (phospho Y200)
Host species	Rabbit
Specificity	The antibody only detects LAT phosphorylated on Tyrosine 200 of long isoform and Tyrosine 171 of short isoform.
Tested applications	Suitable for: WB, ICC/IF, Flow Cyt (Intra) Unsuitable for: Flow Cyt, IHC-P or IP
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Jurkat cells treated with 1mM pervanadate. ICC/IF: Jurkat cells. Flow Cyt (Intra): Jurkat cells.
General notes	<p>This product has switched from a hybridoma to recombinant production method on 31st May 2023.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 0.05% BSA, 40% Glycerol (glycerin, glycerine), 59% PBS
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EP983(2)Y
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab68139 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

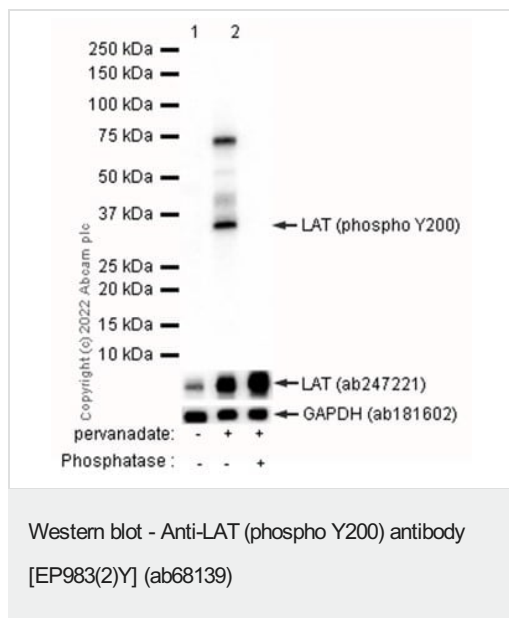
Application	Abreviews	Notes
WB		1/10000. Predicted molecular weight: 35 kDa.
ICC/IF		1/250.
Flow Cyt (Intra)		1/2000.

Application notes Is unsuitable for Flow Cyt, IHC-P or IP.

Target

Function	Required for TCR (T-cell antigen receptor)- and pre-TCR-mediated signaling, both in mature T-cells and during their development. Involved in FCGR3 (low affinity immunoglobulin gamma Fc region receptor III)-mediated signaling in natural killer cells and FCER1 (high affinity immunoglobulin epsilon receptor)-mediated signaling in mast cells. Couples activation of these receptors and their associated kinases with distal intracellular events such as mobilization of intracellular calcium stores, PKC activation, MAPK activation or cytoskeletal reorganization through the recruitment of PLCG1, GRB2, GRAP2, and other signaling molecules.
Tissue specificity	Expressed in thymus, T-cells, NK cells, mast cells and, at lower levels, in spleen. Present in T-cells but not B-cells (at protein level).
Post-translational modifications	Phosphorylated on tyrosines by ZAP-70 upon TCR activation, or by SYK upon other immunoreceptor activation; which leads to the recruitment of multiple signaling molecules. Is one of the most prominently tyrosine-phosphorylated proteins detected following TCR engagement. May be dephosphorylated by PTPRJ. Palmitoylation of Cys-26 and Cys-29 is required for raft targeting and efficient phosphorylation.
Cellular localization	Cell membrane. Present in lipid rafts.

Images



All lanes : Anti-LAT (phospho Y200) antibody [EP983(2)Y] (ab68139) at 1/10000 dilution

Lane 1 : Jurkat (Human T cell leukemia T lymphocyte) whole cell lysate

Lane 2 : Jurkat treated with 1mM pervanadate for 30 min whole cell lysate

Lysates/proteins at 15 µg per lane.

Secondary

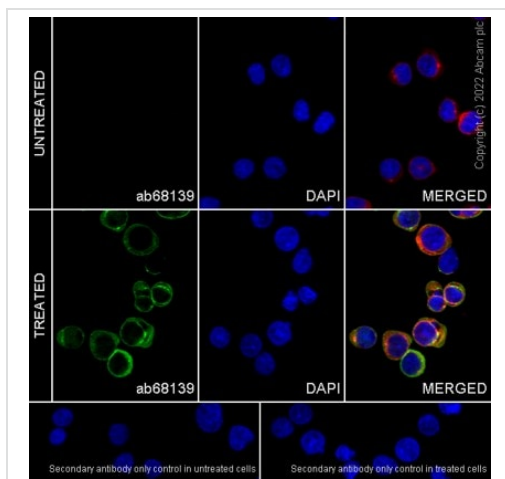
All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Predicted band size: 35 kDa

Observed band size: 35 kDa

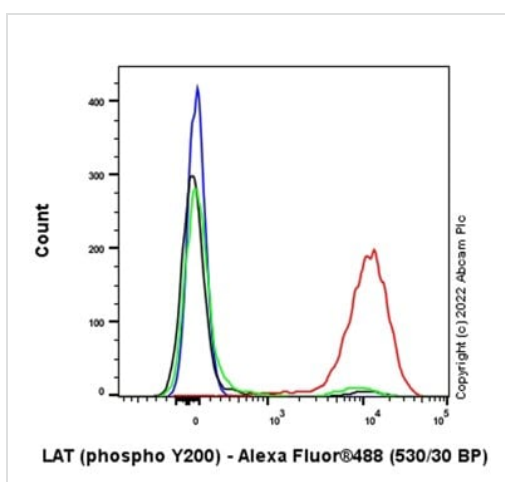
Exposure time: 7 seconds

Blocking and diluting buffer and concentration: 5% NFDM/TBST.



Immunocytochemistry/ Immunofluorescence - Anti-LAT (phospho Y200) antibody [EP983(2)Y] (ab68139)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized Jurkat cells labelling LAT with ab68139 at 1/250 dilution, followed by **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 dilution (Green). Confocal image showing no staining in Jurkat cells and positive staining in Jurkat cells treated with pervanadate 1mM for 30 mins. **ab195889** AlexaFluor® 594-conjugated Anti-alpha Tubulin was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue). Secondary antibody only control: Secondary antibody is **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.



Flow Cytometry (Intracellular) - Anti-LAT (phospho Y200) antibody [EP983(2)Y] (ab68139)

Flow cytometric analysis of 4% paraformaldehyde fixed bLA permeabilized Jurkat cells labelling LAT with ab68139 at 1:2000 dilution (Red) compared with an isotype control (Black) and an unlabelled control (Cell without incubation with primary antibody and secondary antibody (Blue)). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, **ab150081**) at 1/2000 dilution was used as the secondary antibody.

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