

Product datasheet

Anti-ZAP70 (phospho Y493) antibody ab194800

1 References 2 Images

Overview

<b>Product name</b>	Anti-ZAP70 (phospho Y493) antibody
<b>Description</b>	Rabbit polyclonal to ZAP70 (phospho Y493)
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF, IHC-P, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide within Human ZAP70 (phospho Y493). The exact sequence is proprietary. Database link: <a href="#">P43403</a>
<b>Positive control</b>	WB: PMA/TPA, ATP or Anisomycin-treated Jurkat cell lysates; IHC-P: Human breast carcinoma tissue.

Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.3 Preservative: 0.02% Sodium azide Constituents: 49% PBS, 50% Glycerol
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab194800** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

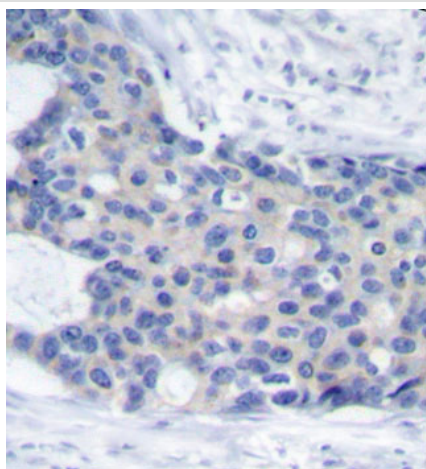
Application	Abreviews	Notes
ICC/IF		1/50 - 1/200.

Application	Abreviews	Notes
IHC-P		1/50 - 1/100.
WB		1/2000 - 1/5000. Predicted molecular weight: 70 kDa.

## Target

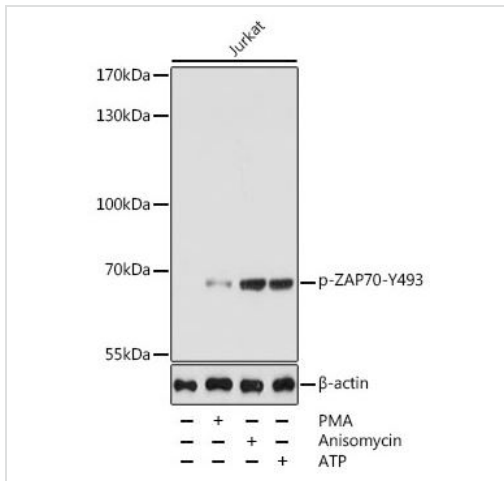
<b>Function</b>	Plays a role in T-cell development and lymphocyte activation. Essential for TCR-mediated IL-2 production. Isoform 1 induces TCR-mediated signal transduction, isoform 2 does not.
<b>Tissue specificity</b>	Expressed in T- and natural killer cells.
<b>Involvement in disease</b>	Defects in ZAP70 are the cause of selective T-cell defect (STD) [MIM:176947]. STD is an autosomal recessive form of severe combined immunodeficiency characterized by a selective absence of CD8-type T-cells.
<b>Sequence similarities</b>	Belongs to the protein kinase superfamily. Tyr protein kinase family. SYK/ZAP-70 subfamily. Contains 1 protein kinase domain. Contains 2 SH2 domains.
<b>Domain</b>	The SH2 domains bind to the phosphorylated tyrosine-based activation motif (TAM) of CD3Z and the non-canonical phosphorylated tyrosine-based activation motif (TAM) of RHOH.
<b>Post-translational modifications</b>	Phosphorylated on tyrosine residues upon T-cell antigen receptor (TCR) stimulation. Tyr-319 phosphorylation is essential for full activity.
<b>Cellular localization</b>	Cytoplasm. Cell membrane. After antigen stimulation, isoform 1 concentrates at the immunological synapse and isoform 2 remains cytoplasmic. Co-localizes together with RHOH in the immunological synapse. RHOH is required for its proper localization to the cell membrane and cytoskeleton fractions in the thymocytes.

## Images



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue, labeling ZAP70 (phospho Y493) with ab194800 at 1/50 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ZAP70 (phospho Y493) antibody (ab194800)



Western blot - Anti-ZAP70 (phospho Y493) antibody (ab194800)

**All lanes** : Anti-ZAP70 (phospho Y493) antibody (ab194800) at 1/5000 dilution

**Lane 1** : Jurkat cell lysate

**Lane 2** : PMA/TPA-treated Jurkat cell lysate

**Lane 3** : Anisomycin-treated Jurkat cell lysate

**Lane 4** : ATP-treated Jurkat cell lysate

Lysates/proteins at 25 µg per lane.

### Secondary

**All lanes** : HRP Goat Anti-Rabbit IgG (H+L)

Developed using the ECL technique.

**Predicted band size:** 70 kDa

**Exposure time:** 30 seconds

Jurkat cells were treated by PMA/TPA (200 nM) at 37°C for 10 minutes, treated by Anisomycin (5 µg/ml) at 37°C for 30 minutes after serum-starvation overnight, or treated by ATP (5 mM) at 30°C for 1 hour.

Blocking buffer: 3% BSA.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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