

Datasheet for ABIN6241987

**anti-ZAP70 antibody****2** Images[Go to Product page](#)

## Overview

Quantity:	100 µL
Target:	ZAP70
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This ZAP70 antibody is un-conjugated
Application:	Western Blotting (WB), Immunoprecipitation (IP)

## Product Details

Immunogen:	Recombinant Protein
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## Target Details

Target:	ZAP70
Alternative Name:	ZAP-70 ( <a href="#">ZAP70 Products</a> )
Background:	<p>Tyrosine kinase that plays an essential role in regulation of the adaptive immune response. Regulates motility, adhesion and cytokine expression of mature T-cells, as well as thymocyte development. Contributes also to the development and activation of primary B-lymphocytes. When antigen presenting cells (APC) activate T-cell receptor (TCR), a serie of phosphorylations lead to the recruitment of ZAP70 to the doubly phosphorylated TCR component CD247/CD3Z through ITAM motif at the plasma membrane. This recruitment serves to localization to the stimulated TCR and to relieve its autoinhibited conformation. Release of ZAP70 active conformation is further stabilized by phosphorylation mediated by LCK. Subsequently, ZAP70</p>

## Target Details

phosphorylates at least 2 essential adapter proteins: LAT and LCP2. In turn, a large number of signaling molecules are recruited and ultimately lead to lymphokine production, T-cell proliferation and differentiation. Furthermore, ZAP70 controls cytoskeleton modifications, adhesion and mobility of T-lymphocytes, thus ensuring correct delivery of effectors to the APC. ZAP70 is also required for TCR-CD247/CD3Z internalization and degradation through interaction with the E3 ubiquitin-protein ligase CBL and adapter proteins SLA and SLA2. Thus, ZAP70 regulates both T-cell activation switch on and switch off by modulating TCR expression at the T-cell surface. During thymocyte development, ZAP70 promotes survival and cell-cycle progression of developing thymocytes before positive selection (when cells are still CD4/CD8 double negative). Additionally, ZAP70-dependent signaling pathway may also contribute to primary B-cells formation and activation through B-cell receptor (BCR).

UniProt: [P43403](#)

Pathways: [TCR Signaling, Ubiquitin Proteasome Pathway](#)

## Application Details

Application Notes: IP: 1:500. WB: 1:1000

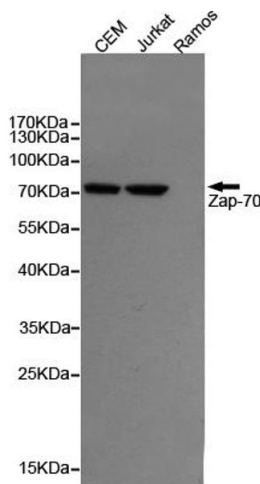
Restrictions: For Research Use only

## Handling

Format: Liquid

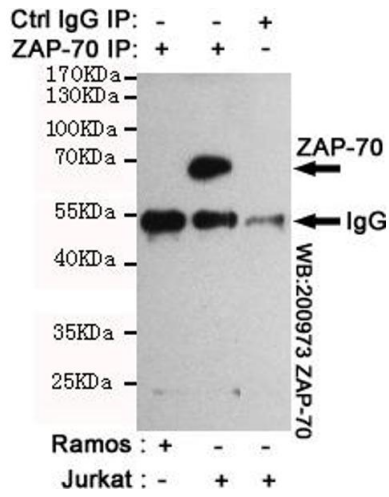
Storage: 4 °C, -20 °C

## Images



### Western Blotting

**Image 1.** Western blot detection of Z70 in CEM and Jurkat cell lysates, negative in the Ramos cell lysates using Z70 mouse mAb (1:1000 diluted). Predicted band size: 70KDa. Observed band size: 70KDa.



### Immunoprecipitation

**Image 2.** Immunoprecipitation analysis of Jurkat cell lysates (Z70 positive expression cell line) and Ramos cell lysates (Z70 negative expression cell line) using Z70 mouse mAb.