

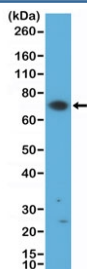
## ZAP70 Antibody for WB / T-cell Signaling Kinase Western Blot Antibody [clone RM408] (R20424)

Catalog No.	Formulation	Size
R20424-0.1ML	Antibody in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	100 ul

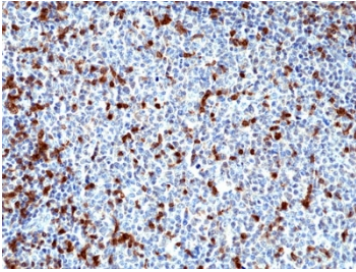
Recombinant **RABBIT MONOCLONAL**

[Bulk quote request](#)

<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Purified
<b>Host</b>	Rabbit
<b>Clonality</b>	Recombinant Rabbit Monoclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Name</b>	RM408
<b>Purity</b>	Protein A purified from animal origin-free supernatant
<b>UniProt</b>	P43403
<b>Localization</b>	Cytoplasmic
<b>Applications</b>	Immunohistochemistry (FFPE) : 1:100-1:200 Western Blot : 1:250-1:500
<b>Limitations</b>	This recombinant ZAP70 antibody is available for research use only.



ZAP70 Antibody for WB / T-cell Signaling Kinase Western Blot Antibody. Western blot analysis of human Jurkat T lymphocyte cell lysate using ZAP70 Antibody for WB / T-cell Signaling Kinase Western Blot Antibody at 1:500 dilution. A band is detected at approximately 70 kDa, consistent with the predicted molecular weight of Zeta-chain-associated protein kinase 70 (ZAP70), a cytoplasmic tyrosine kinase central to T-cell receptor signaling. This result aligns with the known enrichment of ZAP70 in T-cell-derived systems such as Jurkat cells, supporting its role as a core mediator of T-cell signaling pathways.



IHC staining of FFPE human tonsil tissue with recombinant ZAP70 antibody at 1:200.

## Description

ZAP70 antibody, also known as Zeta-chain-associated protein kinase 70 antibody, recognizes a cytoplasmic tyrosine kinase that serves as a central regulator of T-cell receptor signaling and adaptive immune activation. ZAP70 Antibody for WB is specifically designed for western blot analysis of this signaling kinase, enabling detection of protein expression and evaluation of signaling-related band patterns in lymphoid cell lysates. ZAP70 is primarily localized in the cytoplasm of T lymphocytes and natural killer cells and is highly expressed in lymphoid tissues including thymus, spleen, and circulating immune cells.

ZAP70 plays a critical role in early T-cell receptor (TCR) signaling by binding to phosphorylated immunoreceptor tyrosine-based activation motifs (ITAMs) on the CD3 complex following antigen recognition. This recruitment leads to activation of ZAP70 and propagation of downstream signaling cascades involving adaptor proteins such as LAT and SLP-76. These pathways regulate T-cell activation, proliferation, and differentiation. In western blot applications, ZAP70 is typically detected as a distinct band corresponding to its predicted molecular weight, providing a reliable readout of protein expression in T-cell-derived samples.

This ZAP70 Antibody for WB is uniquely positioned for studies focused on core T-cell signaling biology at the protein level, emphasizing baseline expression and pathway-associated kinase presence rather than activation state or disease-specific variation. Western blot analysis allows researchers to compare ZAP70 expression across different lymphoid cell types, experimental conditions, and stimulation states, supporting investigation of signaling pathway integrity and protein abundance in immune cells.

In addition to T cells, ZAP70 is expressed in natural killer cells, where it contributes to activation signaling and cytotoxic responses. Its conserved role in immune signaling makes it a key intracellular kinase for mechanistic studies of receptor-mediated signal transduction. Western blot detection of ZAP70 provides a robust method for confirming protein expression and assessing its presence in signaling models, including Jurkat cells and other T-cell systems commonly used in research.

ZAP70 may exhibit variation in band intensity depending on cellular context and experimental conditions, reflecting differences in protein expression levels across immune cell populations. While its core molecular weight remains consistent, subtle changes in migration or signal intensity may be observed in response to stimulation or regulatory mechanisms. Overall, ZAP70 Antibody for WB provides a reliable and focused tool for analyzing T-cell signaling kinases by western blot, supporting detailed investigation of immune signaling pathways and protein-level regulation in lymphocyte biology.

## Application Notes

The stated application concentrations are suggested starting points. Titration of the ZAP70 Antibody for WB / T-cell Signaling Kinase Western Blot Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

## Immunogen

A peptide corresponding to residues near the N-terminus of human ZAP70 was used as the immunogen for the ZAP70 Antibody for WB / T-cell Signaling Kinase Western Blot Antibody.

## Storage

Store the recombinant ZAP70 antibody at -20oC.

## Alternate Names

ZAP70 western blot antibody, ZAP70 WB antibody, Zeta-chain-associated protein kinase 70 western blot antibody, ZAP70 T-cell signaling antibody, ZAP70 kinase WB antibody