

## Anti-Zap-70 (Ab-319) Antibody

Catalog Number: A00754

### About ZAP70

ZAP70 is a 70-kD tyrosine phosphoprotein that associates with the zeta chain and undergoes tyrosine phosphorylation following TCR stimulation. The ZAP70 gene is expressed in T- and natural KILLER cells. Protein-Tyrosine Kinases (PTKs) play an integral role in T-cell activation. Stimulation of the T-cell antigen receptor results in tyrosine phosphorylation of a number of cellular substrates. One of these is the TCR-zeta chain, which can mediate the transduction of extracellular stimuli into cellular effector functions

Salomon AR, et al. (2003) Proc Natl Acad Sci U S A; 100(2): 443-448

Ku GM, et al. (2001) EMBO J; 20(3): 457-465

Tang J, et al. (1999) Proc Natl Acad Sci U S A; 96(17): 9775-9780

Zhao Q, et al. (1996) Mol Cell Biol; 16(12): 6765-6774

Williams BL, et al. (1999) EMBO J; 18(7): 1832-1844

Adjali O, et al. (2005) J Clin Invest; 115(8): 2287-2295.

### Overview

Product Name	Anti-Zap-70 (Ab-319) Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Zap-70 (Ab-319) Antibody (Catalog # A00754). Tested in WB, IHC applications. This antibody reacts with Human, Mouse, Rat.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage Instructions	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P43403

### Technical Details

Immunogen	Peptide sequence around aa.317~321 (S-P-Y-S-D) derived from Human ZAP70.
Predicted Reactive Species	Bovine, Pig
Isotype	IgG

Form	Liquid
Concentration	1 mg/ml
Purification	Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Predicted MW: 70kd</p> <p>Western blotting: 1:500~1:1000</p> <p>Immunohistochemistry: 1:50~1:100</p>

## Anti-Zap-70 (Ab-319) Antibody (A00754) Images

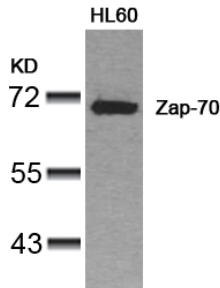


Figure 1. Western blot analysis of ZAP70 using anti-ZAP70 antibody (A00754). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-ZAP70 antigen affinity purified polyclonal antibody (Catalog # A00754) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-Rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # SA1022) with Tanon 5200 system. A specific band was detected for ZAP70.

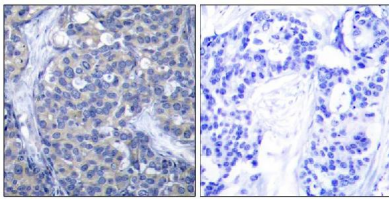


Figure 2. IHC analysis of ZAP70 using anti-ZAP70 antibody (A00754). ZAP70 was detected in paraffin-embedded section. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-ZAP70 Antibody (A00754) overnight at 4°C. Biotinylated goat anti Rabbit IgG antibody was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

## Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-Zap-70 (Ab-319) Antibody