

## Anti-14-3-3 zeta/delta/YWHAZ Antibody Picoband®

Catalog Number: A01141-1

### About YWHAZ

14-3-3 protein zeta/delta (14-3-3zeta) is a protein that in humans is encoded by the YWHAZ gene on chromosome 8. This gene product belongs to the 14-3-3 family of proteins which mediate signal transduction by binding to phosphoserine-containing proteins. This highly conserved protein family is found in both plants and mammals, and this protein is 99% identical to the mouse, rat and sheep orthologs. The encoded protein interacts with IRS1 protein, suggesting a role in regulating insulin sensitivity. Several transcript variants that differ in the 5' UTR but that encode the same protein have been identified for this gene.

### Overview

Product Name	Anti-14-3-3 zeta/delta/YWHAZ Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-14-3-3 zeta/delta/YWHAZ Antibody Picoband® catalog # A01141-1. Tested in IF, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	IF, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.01mg NaN <sub>3</sub> .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P63104

### Technical Details

Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human 14-3-3 zeta/delta, which shares 97.8% amino acid (aa) sequence identity with both mouse and rat 14-3-3 zeta/delta.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for ICC.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized

Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml Immunocytochemistry/Immunofluorescence, 5ug/ml

## Anti-14-3-3 zeta/delta/YWHAZ Antibody Picoband® (A01141-1) Images

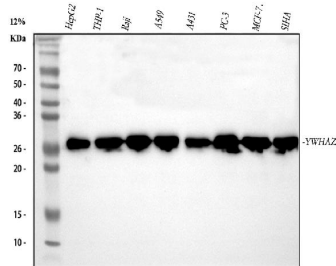


Figure 1. Western blot analysis of 14-3-3 zeta/delta using anti-14-3-3 zeta/delta antibody (A01141-1). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HepG2 whole cell lysates,  
Lane 2: human THP-1 whole cell lysates,  
Lane 3: human Raji whole cell lysates,  
Lane 4: human A549 whole cell lysates,  
Lane 5: human A431 whole cell lysates,  
Lane 6: human PC-3 whole cell lysates,  
Lane 7: human MCF-7 whole cell lysates,  
Lane 8: human SiHa whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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-14-3-3 zeta/delta antigen affinity purified polyclonal antibody (Catalog # A01141-1) 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 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for 14-3-3 zeta/delta at approximately 28 kDa. The expected band size for 14-3-3 zeta/delta is at 28 kDa.

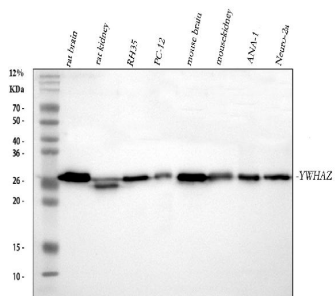


Figure 2. Western blot analysis of 14-3-3 zeta/delta using anti-14-3-3 zeta/delta antibody (A01141-1). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat brain tissue lysates,  
Lane 2: rat kidney tissue lysates,  
Lane 3: rat RH35 whole cell lysates,  
Lane 4: rat PC-12 whole cell lysates,  
Lane 5: mouse brain tissue lysates,  
Lane 6: mouse kidney tissue lysates,  
Lane 7: mouse ANA-1 whole cell lysates,  
Lane 8: mouse Neuro-2a whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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-14-3-3 zeta/delta antigen affinity purified polyclonal antibody (Catalog # A01141-1) 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 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002)

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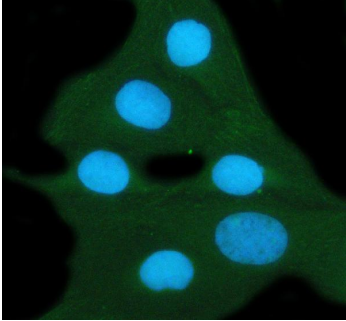


Figure 3. IF analysis of 14-3-3 zeta/delta using anti-14-3-3 zeta/delta antibody (A01141-1). 14-3-3 zeta/delta was detected in an immunocytochemical section of U2OS cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-14-3-3 zeta/delta Antibody (A01141-1) overnight at 4°C. DyLight488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

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Anti-14-3-3 zeta/delta/YWHAZ Antibody