10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-14-3-3 zeta/delta/YWHAZ Antibody Picoband™ (monoclonal, 6H7)

Catalog # ABO14957

Specification

Anti-14-3-3 zeta/delta/YWHAZ Antibody Picoband™ (monoclonal, 6H7) - Product Information

Application	**WB**
Primary Accession	P63104
Host	**Mouse**
Isotype	**Mouse IgG1**
Reactivity	**Rat, Human, Mouse, Monkey**
Clonality	**Monoclonal**
Format	**Lyophilized**

Description
Anti-14-3-3 zeta/delta/YWHAZ Antibody Picoband™ (monoclonal, 6H7) . Tested in WB applications. This antibody reacts with Human, Monkey, Mouse, Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-14-3-3 zeta/delta/YWHAZ Antibody Picoband™ (monoclonal, 6H7) - Additional Information

Gene ID 7534

Other Names
14-3-3 protein zeta/delta, Protein kinase C inhibitor protein 1, KCIP-1, YWHAZ

Calculated MW
28 kDa KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Monkey, Rat

Subcellular Localization
Cytoplasm. Melanosome.

Contents
Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃.

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.

Purification
Immunogen affinity purified.

Cross Reactivity

No cross-reactivity with other proteins.

Storage	**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.**

Anti-14-3-3 zeta/delta/YWHAZ Antibody Picoband™ (monoclonal, 6H7) - Protein Information

Name YWHAZ

Function
Adapter protein implicated in the regulation of a large spectrum of both general and specialized signaling pathways (PubMed:14578935, PubMed:15071501, PubMed:15644438, PubMed:16376338, PubMed:16959763, PubMed:31024343, PubMed:9360956). Binds to a large number of partners, usually by recognition of a phosphoserine or phosphothreonine motif (PubMed:35662396). Binding generally results in the modulation of the activity of the binding partner (PubMed:35662396). Promotes cytosolic retention and inactivation of TFEB transcription factor by binding to phosphorylated TFEB (PubMed:35662396). Induces ARHGEF7 activity on RAC1 as well as lamellipodia and membrane ruffle formation (PubMed:16959763). In neurons, regulates spine maturation through the modulation of ARHGEF7 activity (By similarity).

Cellular Location
Cytoplasm. Melanosome. Note=Located to stage I to stage IV melanosomes.

Anti-14-3-3 zeta/delta/YWHAZ Antibody Picoband™ (monoclonal, 6H7) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-14-3-3 zeta/delta/YWHAZ Antibody Picoband™ (monoclonal, 6H7) - Images

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

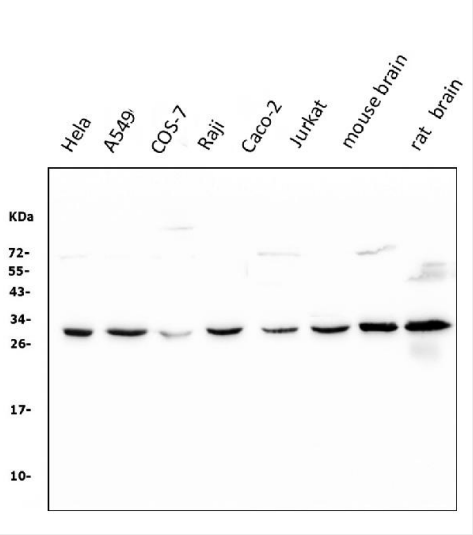

Figure 1. Western blot analysis of 14-3-3 zeta/delta using anti-14-3-3 zeta/delta antibody (M01141-1).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: human Hela whole cell lysates;
Lane 2: human A549 whole cell lysates;
Lane 3: monkey COS-7 whole cell lysates;
Lane 4: human Raji whole cell lysates;
Lane 5: huamn Caco-2 whole cell lysates;
Lane 6: huamn Jurkat whole cell lysates;
Lane 7: mouse brain tissue lysates;
Lane 8: rat brain tissue lysates
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 mouse anti-14-3-3 zeta/delta antigen affinity purified monoclonal antibody (Catalog # M01141-1) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse 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 # EK1001) with Tanon 5200 system. A specific band was detected for 14-3-3 zeta/delta at approximately 28KD. The expected band size for 14-3-3 zeta/delta is at 28KD.

Anti-14-3-3 zeta/delta/YWHAZ Antibody Picoband™ (monoclonal, 6H7) - Background

14-3-3 protein zeta/delta (14-3-3ζ) 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.