

**Anti-TAB1 Picoband Antibody**  
**Catalog # ABO12134****Specification**

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**Anti-TAB1 Picoband Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q15750</a>
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for TGF-beta-activated kinase 1/MAP3K7-binding protein 1(TAB1) detection. Tested with WB in Human;Rat.

**Reconstitution**

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

**Anti-TAB1 Picoband Antibody - Additional Information**

**Gene ID** 10454

**Other Names**

TGF-beta-activated kinase 1 and MAP3K7-binding protein 1, Mitogen-activated protein kinase kinase kinase 7-interacting protein 1, TGF-beta-activated kinase 1-binding protein 1, TAK1-binding protein 1, TAB1, MAP3K7IP1

**Calculated MW**

54644 MW KDa

**Application Details**

Western blot, 0.1-0.5 µg/ml, Human, Rat<br>

**Tissue Specificity**

Ubiquitous.

**Protein Name**

TGF-beta-activated kinase 1/MAP3K7-binding protein 1

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>N.

**Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminus of human TAB1 (78-108aa NFVAQRLSAELLGLQLNAEHAEADVRRVLLQ), different from the related mouse sequence by two amino acids.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Sequence Similarities**

Contains 1 PPM-type phosphatase domain.

**Anti-TAB1 Picoband Antibody - Protein Information**

**Name** TAB1

**Synonyms** MAP3K7IP1

**Function**

Key adapter protein that plays an essential role in JNK and NF-kappa-B activation and proinflammatory cytokines production in response to stimulation with TLRs and cytokines (PubMed: [22307082](http://www.uniprot.org/citations/22307082)), PubMed: [24403530](http://www.uniprot.org/citations/24403530)). Mechanistically, associates with the catalytic domain of MAP3K7/TAK1 to trigger MAP3K7/TAK1 autophosphorylation leading to its full activation (PubMed: [10838074](http://www.uniprot.org/citations/10838074), PubMed: [25260751](http://www.uniprot.org/citations/25260751)). Similarly, associates with MAPK14 and triggers its autophosphorylation and subsequent activation (PubMed: [11847341](http://www.uniprot.org/citations/11847341), PubMed: [29229647](http://www.uniprot.org/citations/29229647)). In turn, MAPK14 phosphorylates TAB1 and inhibits MAP3K7/TAK1 activation in a feedback control mechanism (PubMed: [14592977](http://www.uniprot.org/citations/14592977)). Plays also a role in recruiting MAPK14 to the TAK1 complex for the phosphorylation of the TAB2 and TAB3 regulatory subunits (PubMed: [18021073](http://www.uniprot.org/citations/18021073)).

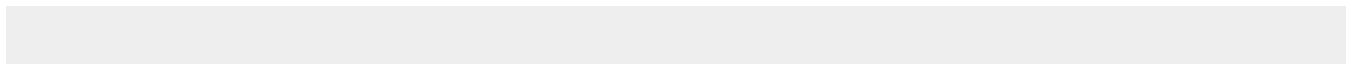
**Tissue Location**

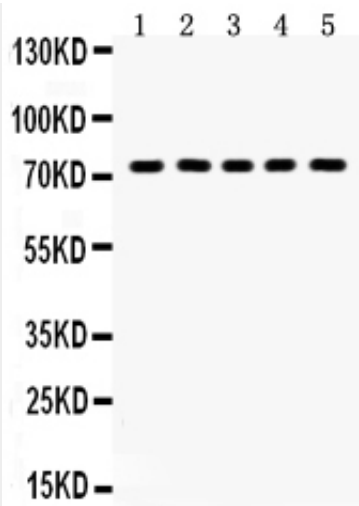
Ubiquitous.

**Anti-TAB1 Picoband Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-TAB1 Picoband Antibody - Images**



Anti- TAB1 Picoband antibody, ABO12134, Western blotting All lanes: Anti TAB1 (ABO12134) at 0.5ug/ml  
Lane 1: Rat Liver Tissue Lysate at 50ug  
Lane 2: Rat Lung Tissue Lysate at 50ug  
Lane 3: HELA Whole Cell Lysate at 40ug  
Lane 4: A549 Whole Cell Lysate at 40ug  
Lane 5: JURKAT Whole Cell Lysate at 40ug  
Predicted bind size: 55KD  
Observed bind size: 72KD

#### **Anti-TAB1 Picoband Antibody - Background**

Mitogen-activated protein kinase kinase kinase 7-interacting protein 1, also called TAB1, is an enzyme that in humans is encoded by the MAP3K7IP1 gene. It is mapped to 22q13.1. The protein encoded by this gene was identified as a regulator of the MAP kinase kinase kinase MAP3K7/TAK1, which is known to mediate various intracellular signaling pathways. This protein can interact with and activate the mitogen-activated protein kinase 14 (MAPK14/p38alpha), and thus represents an alternative activation pathway, in addition to the MAPKK pathways, which contributes to the biological responses of MAPK14 to various stimuli. TAB1 also can activate the kinase activity of TAK1 by direct interaction, and it may be an important signaling intermediate between TGFβ receptors and TAK1. What's more, TAB1 plays an important role in skin homeostasis, wound repair, and oncogenesis.