

Anti-TAB1 Antibody
Catalog # ABO11597**Specification**

Anti-TAB1 Antibody - Product Information

Application	WB
Primary Accession	Q15750
Host	Rabbit
Reactivity	Human, Mouse, 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;Mouse;Rat.

Reconstitution

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

Anti-TAB1 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, Mouse, Rat

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 Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human TAB1(304-321aa QANQEIAAMIDTEFAKQT), identical to the related mouse sequence, and different from the related rat sequence by one amino acid.

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 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, PubMed: 24403530). Mechanistically, associates with the catalytic domain of MAP3K7/TAK1 to trigger MAP3K7/TAK1 autophosphorylation leading to its full activation (PubMed: 10838074, PubMed: 25260751, PubMed: 37832545). Similarly, associates with MAPK14 and triggers its autophosphorylation and subsequent activation (PubMed: 11847341, PubMed: 29229647). In turn, MAPK14 phosphorylates TAB1 and inhibits MAP3K7/TAK1 activation in a feedback control mechanism (PubMed: 14592977). Plays also a role in recruiting MAPK14 to the TAK1 complex for the phosphorylation of the TAB2 and TAB3 regulatory subunits (PubMed: 18021073).

Cellular Location

Cytoplasm, cytosol. Endoplasmic reticulum membrane; Peripheral membrane protein; Cytoplasmic side. Note=Recruited to the endoplasmic reticulum following interaction with STING1

Tissue Location

Ubiquitous..

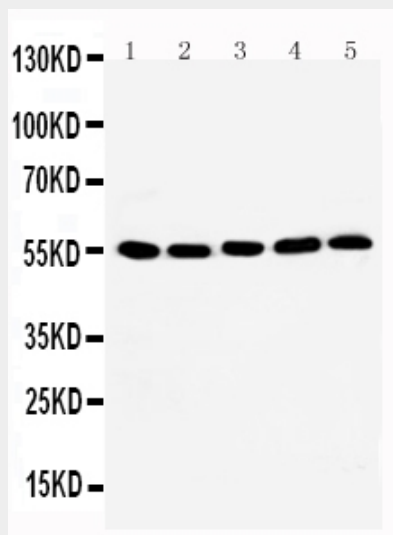
Anti-TAB1 Antibody - Protocols

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 Antibody - Images



Anti-TAB1 antibody, ABO11597, All Western blotting
All lanes: Anti-TAB1(ABO11597) at 0.5ug/ml
Lane 1: HELA Whole Cell Lysate at 40ug
Lane 2: Mouse Brain Tissue Lysate at 40ug
Lane 3: Mouse Testis Tissue Lysate at 40ug
Lane 4: Mouse Spleen Tissue Lysate at 40ug
Lane 5: HEPA Whole Cell Lysate at 40ug
Predicted bind size: 55KD
Observed bind size: 55KD

Anti-TAB1 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.