

MAP3K7IP1-S423 Antibody
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6861a**Specification**

MAP3K7IP1-S423 Antibody - Product Information

Application	WB,E
Primary Accession	Q15750
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	54644
Antigen Region	401-430

MAP3K7IP1-S423 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

Target/Specificity

This MAP3K7IP1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 401-430 amino acids from human MAP3K7IP1.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

MAP3K7IP1-S423 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

MAP3K7IP1-S423 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](#)). Also plays 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

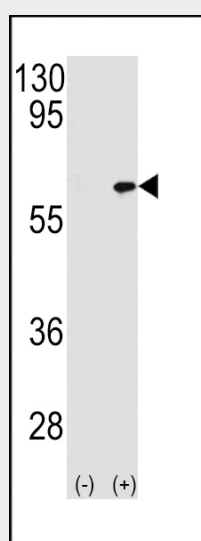
Ubiquitous..

MAP3K7IP1-S423 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](#)

MAP3K7IP1-S423 Antibody - Images



Western blot analysis of MAP3K7IP1 (arrow) using rabbit polyclonal MAP3K7IP1-pS423 (Cat. #AP6861a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected

with the MAP3K7IP1 gene (Lane 2) (Origene Technologies).

MAP3K7IP1-S423 Antibody - Background

MAP3K7IP1 was identified as a regulator of the MAP kinase kinase kinase MAP3K7/TAK1, which is known to mediate various intracellular signaling pathways, such as those induced by TGF beta, interleukin 1, and WNT-1. This protein interacts and thus activates TAK1 kinase. It has been shown that the C-terminal portion of this protein is sufficient for binding and activation of TAK1, while a portion of the N-terminus acts as a dominant-negative inhibitor of TGF beta, suggesting that this protein may function as a mediator between TGF beta receptors and TAK1. This protein can also 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.

MAP3K7IP1-S423 Antibody - References

Arch,R.H., et.al., Genes Dev. 12 (18), 2821-2830 (1998)
Yamaguchi,K., et.al., EMBO J. 18 (1), 179-187 (1999)