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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

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). 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

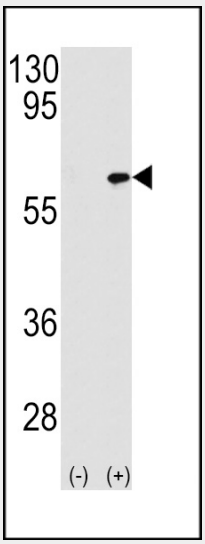
Tissue Location
Ubiquitous..

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 Cytomety
- 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

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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)