

Phospho-MAP3K7IP1(S423) Antibody
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3421a

Specification

Phospho-MAP3K7IP1(S423) Antibody - Product Information

Application	DB,E
Primary Accession	Q15750
Other Accession	NP_006107
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG

Phospho-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 phosphopeptide corresponding to amino acid residues surrounding S423 of human MAP3K7IP1.

Dilution

DB~~1:500

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

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

Phospho-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

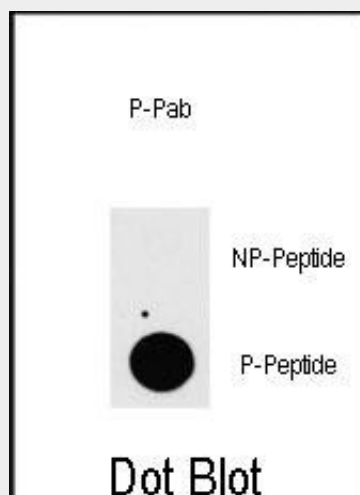
Ubiquitous..

Phospho-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](#)

Phospho-MAP3K7IP1(S423) Antibody - Images



Dot blot analysis of anti-MAP3K7IP1-pS423 Phospho-specific Pab (Cat.#AP3421a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

Phospho-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.

Phospho-MAP3K7IP1(S423) Antibody - References

Conner,S.H., Biochem. J. 399 (3), 427-434 (2006)
Zhou,H., Mol. Cell. Biol. 26 (10), 3824-3834 (2006)
Singhirunnusorn,P., J. Biol. Chem. 280 (8), 7359-7368 (2005)
Jin,J., Curr. Biol. 14 (16), 1436-1450 (2004)