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MAP3K7IP1 Antibody(Center T431) Blocking peptide

Synthetic peptide
Catalog # BP6861b

Specification

MAP3K7IP1 Antibody(Center T431) Blocking peptide - Product Information

Primary Accession Q15750

MAP3K7IP1 Antibody(Center T431) Blocking peptide - 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
The synthetic peptide sequence used to generate the antibody AP6861b was selected from the region of human MAP3K7IP1-pT431. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MAP3K7IP1 Antibody(Center T431) Blocking peptide - 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:<a

href="http://www.uniprot.org/citations/37832545" target="_blank">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 Antibody(Center T431) Blocking peptide - Protocols

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

- Blocking Peptides

MAP3K7IP1 Antibody(Center T431) Blocking peptide - Images

MAP3K7IP1 Antibody(Center T431) Blocking peptide - 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 Antibody(Center T431) Blocking peptide - References

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