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MAP3K7IP1 Antibody (monoclonal) (M03)

Mouse monoclonal antibody raised against a partial recombinant MAP3K7IP1.
Catalog # AT2780a

Product Information

Application	WB, IF, E
Primary Accession	Q15750
Other Accession	NM_153497
Reactivity	Human, Rat
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	2A12
Calculated MW	54644

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	MAP3K7IP1 (NP_705717.1, 3 a.a. ~ 100 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	MAP3K7IP1 Antibody (monoclonal) (M03) is for research use only and not for use in diagnostic or therapeutic procedures.

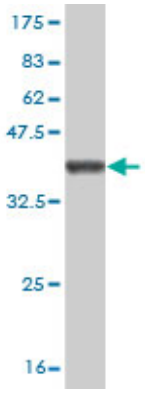
Background

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, 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. Alternatively spliced transcript variants encoding distinct isoforms have been reported.

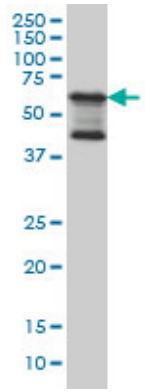
References

Fucosyltransferase 2 (FUT2) non-secretor status is associated with Crohn's disease. McGovern DP, et al. Hum Mol Genet, 2010 Sep 1. PMID 20570966.Autoactivation of transforming growth factor beta-activated kinase 1 is a sequential bimolecular process. Scholz R, et al. J Biol Chem, 2010 Aug 13. PMID 20538596.Association between anti-tumour necrosis factor treatment response and genetic variants within the TLR and NF{kappa}B signalling pathways. Potter C, et al. Ann Rheum Dis, 2010 Jul. PMID 20448286.The metastasis efficiency modifier ribosomal RNA processing 1 homolog B (RRP1B) is a chromatin-associated factor. Crawford NP, et al. J Biol Chem, 2009 Oct 16. PMID 19710015.Suppression of cell invasiveness by periostin via TAB1/TAK1. Isono T, et al. Int J Oncol, 2009 Aug. PMID 19578758.

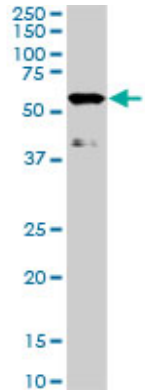
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.52 KDa) .

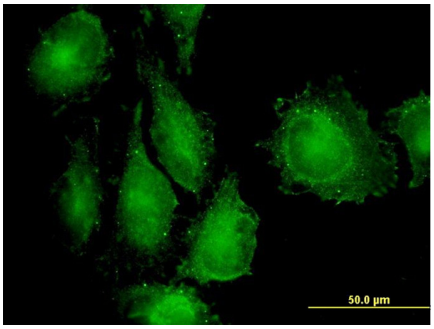


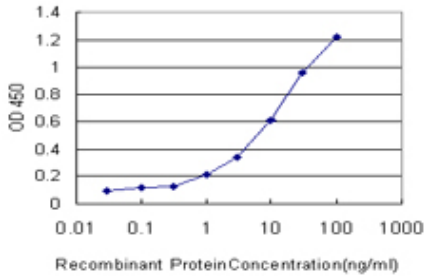
MAP3K7IP1 monoclonal antibody (M03), clone 2A12 Western Blot analysis of MAP3K7IP1 expression in HeLa ((Cat # AT2780a)



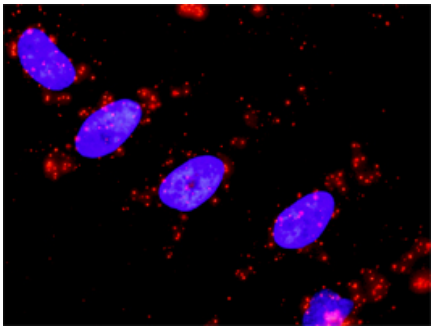
MAP3K7IP1 monoclonal antibody (M03), clone 2A12. Western Blot analysis of MAP3K7IP1 expression in PC-12 ((Cat # AT2780a)

Immunofluorescence of monoclonal antibody to MAP3K7IP1 on HeLa cell. [antibody concentration 10 ug/ml]





Detection limit for recombinant GST tagged MAP3K7IP1 is approximately 0.3ng/ml as a capture antibody.



Proximity Ligation Analysis of protein-protein interactions between HSPA1L and MAP3K7IP1 HeLa cells were stained with anti-HSPA1L rabbit purified polyclonal 1:1200 and anti-MAP3K7IP1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).