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TAB2 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1475a

Product Information

Application	WB, FC, E
Primary Accession	Q9NYJ8
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	3B5
Isotype	IgG1
Calculated MW	76494
Description	The protein encoded by this gene is an activator of MAP3K7/TAK1, which is required for for the IL-1 induced activation of nuclear factor kappaB and MAPK8/JNK. This protein forms a kinase complex with TRAF6, MAP3K7 and TAB1, thus serves as an adaptor linking MAP3K7 and TRAF6. This protein, TAB1, and MAP3K7 also participate in the signal transduction induced by TNFSF11/RANKl through the activation of the receptor activator of NF-kappB (TNFRSF11A/RANK), which may regulate the development and function of osteoclasts.
Immunogen	Purified recombinant fragment of human TAB2 expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID	23118
Other Names	TGF-beta-activated kinase 1 and MAP3K7-binding protein 2, Mitogen-activated protein kinase kinase kinase 7-interacting protein 2, TAK1-binding protein 2, TAB-2, TGF-beta-activated kinase 1-binding protein 2, TAB2, KIAA0733, MAP3K7IP2
Dilution	WB~~1/500 - 1/2000 FC~~1/200 - 1/400 E~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	TAB2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TAB2 {ECO:0000303|PubMed:10882101, ECO:0000312|HGNC:HGNC:17075}
Function	Adapter required to activate the JNK and NF-kappa-B signaling pathways through the specific recognition of 'Lys-63'-linked polyubiquitin chains by its RanBP2-type zinc finger (NZF) (PubMed:10882101, PubMed:11460167, PubMed:15327770, PubMed:22158122, PubMed:27746020, PubMed:33184450, PubMed:36681779). Acts as an adapter linking MAP3K7/TAK1 and TRAF6 to 'Lys-63'-linked polyubiquitin chains (PubMed:10882101, PubMed:11460167, PubMed:15327770, PubMed:22158122, PubMed:27746020). The RanBP2-type zinc finger (NZF) specifically recognizes Lys-63'-linked polyubiquitin chains unanchored or anchored to the substrate proteins such as RIPK1/RIP1 and RIPK2: this acts as a scaffold to organize a large signaling complex to promote autophosphorylation of MAP3K7/TAK1, and subsequent activation of I-kappa-B-kinase (IKK) core complex by MAP3K7/TAK1 (PubMed:15327770, PubMed:18079694, PubMed:22158122). Also recognizes and binds Lys-63'-linked polyubiquitin chains of heterotypic 'Lys-63'-/'Lys-48'-linked branched ubiquitin chains (PubMed:27746020). Regulates the IL1-mediated translocation of NCOR1 out of the nucleus (By similarity). Involved in heart development (PubMed:20493459).
Cellular Location	Membrane; Peripheral membrane protein. Endosome membrane; Peripheral membrane protein. Lysosome membrane; Peripheral membrane protein. Cytoplasm, cytosol. Note=Following IL1 stimulation, translocation occurs from the membrane to cytosol (PubMed:10882101) Interaction with TRIM38 promotes translocation from cytosol to endosome and lysosome (PubMed:24434549).
Tissue Location	Widely expressed. In the embryo, expressed in the ventricular trabeculae, endothelial cells of the conotruncal cushions of the outflow tract and in the endothelial cells lining the developing aortic valves.

References

1. J Clin Endocrinol Metab. 2006 Mar;91(3):1056-61. 2. Sci STKE. 2006 Oct 17;2006(357):re13. 3. Am J Hum Genet. 2010 Jun 11;86(6):839-49.

Images

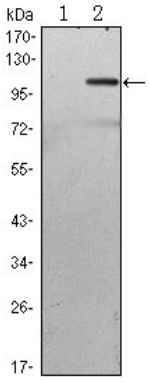
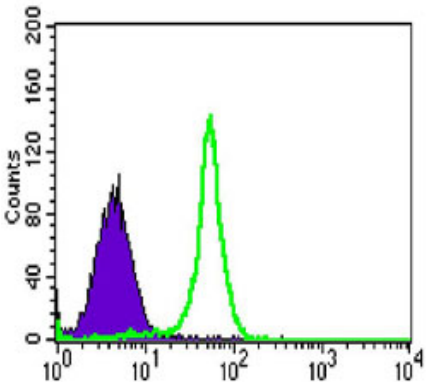


Figure 1: Western blot analysis using TAB2 mAb against HEK293 (1) and TAB2(AA: 1-300)-hIgGFc transfected HEK293 (2) cell lysate.

Figure 2: Flow cytometric analysis of HL-60 cells using TAB2 mouse mAb (green) and negative control (purple).



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