

TAB3 Antibody

Catalog # ASC10268

Product Information

Application	E, IHC-P
Primary Accession	Q8N5C8
Other Accession	NP_690000 , 98991767
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	78653
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	TAB3 antibody can be used for detection of TAB3 by immunohistochemistry at 5 µg/mL.

Additional Information

Gene ID	257397
Other Names	TAB3 Antibody: NAP1, MAP3K7IP3, TGF-beta-activated kinase 1 and MAP3K7-binding protein 3, Mitogen-activated protein kinase kinase 7-interacting protein 3, TAB-3, TGF-beta activated kinase 1/MAP3K7 binding protein 3
Target/Specificity	TAB3; TAB3 antibody is human specific. TAB3 antibody is predicted not to cross-react with other TAB proteins.
Reconstitution & Storage	TAB3 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	TAB3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TAB3 {ECO:0000303 PubMed:14633987, ECO:0000312 HGNC:HGNC:30681}
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: 14633987 , PubMed: 14766965 , PubMed: 15327770 , PubMed: 22158122). Acts as an adapter linking MAP3K7/TAK1 and TRAF6 to 'Lys-63'-linked polyubiquitin chains (PubMed: 14633987 , PubMed: 14766965 , PubMed: 15327770 , PubMed: 22158122 , PubMed: 36593296). 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](#)).

Tissue Location

Widely expressed. Constitutively overexpressed in certain tumor tissues. [Isoform 2]: Minor transcript.

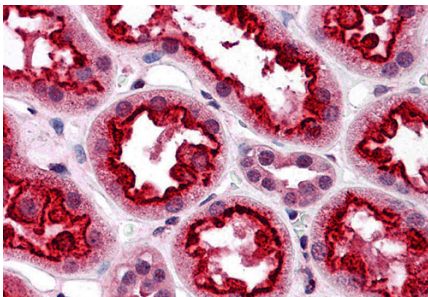
Background

TAB3 Antibody: TAB3 functions in the NF-kappaB signal transduction pathway. It and the similar and functionally redundant protein TAB2, form a ternary complex with the protein kinase TAK1 and either TRAF2 or TRAF6 in response to stimulation with the pro-inflammatory cytokines TNF or IL-1. Subsequent TAK1 kinase activity triggers a signaling cascade leading to activation of the NF-kappaB transcription factor. Recent experiments have shown that TAB2 and the related protein TAB3 constitutively interact with the autophagy mediator Beclin-1; upon induction of autophagy, these proteins dissociate from Beclin-1 and bind TAK1. Overexpression of TAB2 and TAB3 inhibit autophagy, while their depletion triggers it, suggesting that TAB2 and TAB3 act as a control point for autophagy.

References

Cheung PC, Nebreda AR, and Cohen P. TAB3, a new binding partner of the protein kinase TAK1. *Biochem. J.* 2004; 378:27-34.
Besse A, Lamothe B, Campos AD, et al. TAK1-dependent signaling requires functional interaction with TAB2/TAB3. *J. Biol. Chem.* 2007; 282:3918-28.
Criollo A, Niso-Santano M, Malik SA, et al. Inhibition of autophagy by TAB2 and TAB3. *EMBO J.* 2011; 30:4908-20.

Images



Immunohistochemistry of TAB3 in human kidney tissue with TAB3 antibody at 5 µg/mL.

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