Datasheet for ABIN100676

anti-IKKi/IKKe antibody (pThr501)

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Overview

Quantity:	100 µg
Target:	IKKi/IKKe (IKBKE)
Binding Specificity:	pThr501
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This IKKi/IKKe antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunoprecipitation (IP)

Product Details

Immunogen:	IKKe phospho peptide corresponding to a region of the human protein surrounding pT501 conjugated to KLH.
Isotype:	IgG
Characteristics:	Concentration Definition: by UV absorbance at 280 nm
Sterility:	Sterile filtered

Target Details

Target:	IKKi/IKKe (IKBKE)
Alternative Name:	IKK E (IKBKE Products)
Background:	Nuclear Factor kappa B (NF-kB) is a ubiquitous transcription factor and an essential mediator

Target Details

	of gene expression during the activation of immune and inflammatory responses. NF-kB mediates the expression of a great variety of genes in response to extracellular stimuli. NF-kB is associated with IkB proteins in the cytoplasm of the cell, which inhibit NF-kB activity. IkB proteins are phosphorylated by an IkB kinase complex consisting of at least three proteins, IKKa, IKKb, and IKKg. Isolated from a cDNA library of LPS-stimulated mouse macrophage cells, a novel molecule in the IKK complex has been recently identified and designated IKKi and/or IKKe. IKKepsilon is required for the activation of NF-kB by mitogens and T cell receptors but not by TNFα or IL-1. LPS increases the IKKe mRNA level in mouse macrophage cell lines. This protein has significant sequence homology with kinase domains of IKKa and IKKb. Overexpression of wild type IKKe in cells phosphorylates Ser32 and Ser36 of IkBa. Anti-IKKε pT501 antibody is ideal for investigators involved in NFkappaB and apoptosis reasearch. Synonyms: I kappa B kinase epsilon antibody, IkBKE antibody, IKBKE protein antibody, Inhibitor of kappa light polypeptide gene enhancer in B cells kinase epsilon antibody, Inhibitor of nuclear factor kappa B kinase subunit epsilon antibody, IKKE, IKKI, KIAA0151
Gene ID:	9641
UniProt:	Q9R0T8, Q14164
Pathways:	TLR Signaling, Activation of Innate immune Response, Hepatitis C, Toll-Like Receptors Cascades

Application Details

Application Notes:	IKKε pT501 antibody is suitable for use in ELISA, western blotting, and although not tested, this antibody is likely functional in immunohistochemistry and immunoprecipitation. An 85 kDa band corresponding to human IKKe is detected. HeLa cells or TNF inducible KBM-5 cells can be used as a positive control. Researchers should determine optimal titers for other applications.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1.15 mg/mL
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	Sodium azide

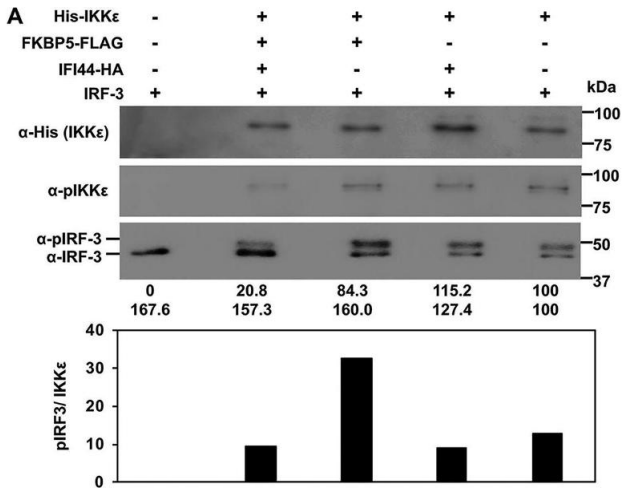
Handling

Precaution of Use:	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C

Publications

Product cited in:	Gauthamadasa, Vaitinadin, Dressman, Macha, Homan, Greis, Silva: "Apolipoprotein A-II-mediated conformational changes of apolipoprotein A-I in discoidal high density lipoproteins." in: **The Journal of biological chemistry**, Vol. 287, Issue 10, pp. 7615-25, (2012) (PubMed).

Images



Western Blotting

Image 1. IFI44 decreases the kinase activity of IKKβ and IKKε. Human 293T cells were silenced for IFI44, or for FKBP5, and were transfected with plasmids expressing His-IKKε (A) or MYC-IKKβ (B), together with IFI44-HA, and FKBP5-FLAG expression plasmids. At 24 hpt, IKKε (A) and IKKβ (B) complexes were purified with anti-His and anti-MYC antibodies, respectively, and these complexes were assayed in kinase assays using IRF-3 (for the IKKε complexes shown in panel A) and IkBα (for the IKKβ complexes shown in panel B) as substrates. The levels of phosphorylated and unphosphorylated forms of IRF-3 (panel A, bottom blot) and IkBα (panel B, third and fourth blots) were analyzed by Western blotting using specific antibodies. Levels of IKKε were analyzed using an anti-His-specific antibody (A, first blot) and anti-pIKKε (A, second blot), and levels of IKKβ were analyzed using an anti-MYC-specific antibody (B, first blot) and anti-pIKKβ (B, second blot). Western blots were quantified by densitometry using ImageJ software (v1.46). Protein expression levels in cells expressing IKKε (A) and IKKβ (B) alone were assigned a value of 100 % for comparisons with the levels of

expression in cells expressing the different combinations of IKKε/IFI44/FKBP5 (A) or IKKβ/IFI44/FKBP5 (B) (numbers are indicated below each plot). pIRF-3 and IRF-3 levels (observed in the same bottom blot in panel A) and pIkBα and IkBα (third and bottom blot in panel B) are represented with numbers below each blot. Levels of pIRF-3 and pIkBα normalized to the levels of IKKε and IKKβ are represented in the bottom graphs in panels A and B, respectively. Molecular weight markers are indicated (in kilodaltons) on the right. - figure provided by CiteAb. Source: PMID31455651

