

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

Product Details

Purpose:	IKK E phospho T501 Antibody
Immunogen:	Immunogen: IKKe phospho peptide corresponding to a region of the human protein surrounding pT501 conjugated to KLH. Immunogen Type: Conjugated Peptide
Isotype:	IgG
Cross-Reactivity (Details):	This phospho specific polyclonal antibody is specific for phosphorylated pT501 human IKKe.
Characteristics:	Synonyms: rabbit anti-IKK epsilon pT501 antibody, rabbit anti-IKKE pT501 antibody, I kappa B kinase epsilon antibody, IKK-epsilon, IKK-E, Inducible I kappa-B kinase, IkbKE antibody, IKBKE protein antibody, Inhibitor of nuclear factor kappa B kinase subunit epsilon antibody, IKKE, IKKI
Purification:	Anti-IKKe pT501 antibody was affinity purified from monospecific antiserum by immunoaffinity purification against the phosphopeptide and cross adsorption against the non-phosphorylated

Product Details

form of the peptide followed by non-adsorption against a non-specific peptide backbone to further reduce non-specific reactivity.

Sterility: Sterile filtered

Target Details

Target: IKKi/IKKe (IKBKE)

Alternative Name: IKBKE ([IKBKE Products](#))

Background: Background: Nuclear Factor kappa B (NF- κ B) is a ubiquitous transcription factor and an essential mediator of gene expression during the activation of immune and inflammatory responses. NF- κ B mediates the expression of a great variety of genes in response to extracellular stimuli. NF- κ B is associated with I κ B proteins in the cytoplasm of the cell, which inhibit NF- κ B activity. I κ B proteins are phosphorylated by an I κ B kinase complex consisting of at least three proteins, IKK α , IKK β , and IKK γ . 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- κ B by mitogens and T cell receptors but not by TNF α or IL-1. LPS increases the IKKe mRNA level in mouse macrophage cell lines. This protein has significant sequence homology with kinase domains of IKK α and IKK β . Overexpression of wild type IKKe in cells phosphorylates Ser32 and Ser36 of I κ B α . Anti-IKKe pT501 antibody is ideal for investigators involved in NF κ B and apoptosis research.

Gene ID: 9641

UniProt: [Q14164](#)

Pathways: [TLR Signaling](#), [Activation of Innate immune Response](#), [Hepatitis C](#), [Toll-Like Receptors Cascades](#)

Application Details

Application Notes: Application Note: IKKe pT501 antibody is tested 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.

Western Blot Dilution: 1:500 - 1:3,000

ELISA Dilution: 1:5,000 - 1:25,000

Application Details

Other: User Optimized

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1.15 mg/mL

Buffer: Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Stabilizer: None

Preservative: 0.1 % (w/v) Sodium Azide

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: 4 °C, -20 °C

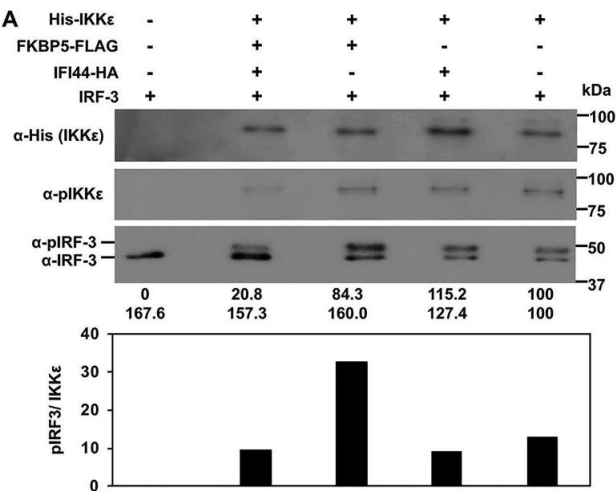
Storage Comment: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiry Date: 12 months

Publications

Product cited in: DeDiego, Nogales, Martinez-Sobrido, Topham: "Interferon-Induced Protein 44 Interacts with Cellular FK506-Binding Protein 5, Negatively Regulates Host Antiviral Responses, and Supports Virus Replication." in: **mBio**, Vol. 10, Issue 4, (2020) ([PubMed](#)).

Sweeney, Mo, Firestein: "Antiviral gene expression in rheumatoid arthritis: role of IKKepsilon and interferon regulatory factor 3." in: **Arthritis and rheumatism**, Vol. 56, Issue 3, pp. 743-52, (2007) ([PubMed](#)).



Western Blotting

Image 1. IFI44 decreases the kinase activity of IKK β and IKK ϵ . Human 293T cells were silenced for IFI44, or for FKBP5, and were transfected with plasmids expressing His-IKK ϵ (A) or MYC-IKK β (B), together with IFI44-HA, and FKBP5-FLAG expression plasmids. At 24 hpt, IKK ϵ (A) and IKK β (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 IKK ϵ complexes shown in panel A) and I κ B α (for the IKK β complexes shown in panel B) as substrates. The levels of phosphorylated and unphosphorylated forms of IRF-3 (panel A, bottom blot) and I κ B α (panel B, third and fourth blots) were analyzed by Western blotting using specific antibodies. Levels of IKK ϵ were analyzed using an anti-His-specific antibody (A, first blot) and anti-pIKK ϵ (A, second blot), and levels of IKK β were analyzed using an anti-MYC-specific antibody (B, first blot) and anti-pIKK β (B, second blot). Western blots were quantified by densitometry using ImageJ software (v1.46). Protein expression levels in cells expressing IKK ϵ (A) and IKK β (B) alone were assigned a value of 100 % for comparisons with the levels of expression in cells expressing the different combinations of IKK ϵ /IFI44/FKBP5 (A) or IKK β /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 plkB α and I κ B α (third and bottom blot in panel B) are represented with numbers below each blot. Levels of pIRF-3 and plkB α normalized to the levels of IKK ϵ and IKK β 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