

## Datasheet for ABIN6655526 anti-IKK alpha antibody



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### 3 Images

#### Overview

Quantity:	100 µg
Target:	IKK alpha (CHUK)
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This IKK alpha antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunoprecipitation (IP), Flow Cytometry (FACS), Chromatin Immunoprecipitation (ChIP)

#### Product Details

Purpose:	IKK alpha Antibody
Immunogen:	IKK alpha Antibody was produced in mice prepared by repeated immunizations by a His-tagged human IKK alpha protein at full-length.
Clone:	14A231
Isotype:	IgG1 kappa
Cross-Reactivity (Details):	A BLAST analysis was used to suggest cross-reactivity with IKK $\alpha$ from Human, Mouse and New World Monkey based on 100 % homology with the immunizing sequence.
Purification:	Anti-IKK $\alpha$ Antibody was purified by Protein G chromatography.

#### Target Details

Target:	IKK alpha (CHUK)
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## Target Details

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Alternative Name: [IKK alpha \(CHUK Products\)](#)

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Background: Synonyms: IKKA, TCF16, Inhibitor of nuclear factor kappa-B kinase subunit alpha, I-kappa-B kinase alpha, IKK-A, IKK-alpha, IkbKA, IkappaB kinase, 2.7.11.10, Conserved helix-loop-helix ubiquitous kinase, I-kappa-B kinase 1, IKK1, Nuclear factor NF-kappa-B inhibitor kinase alpha, NFKBIKA, Transcription factor 16, TCF-16

Background: Anti-IKK alpha antibody detects human IKK alpha. NF-kB (nuclear factor kB) is sequestered in the cytoplasm by Ikb family of inhibitory proteins that mask the nuclear localization signal of NF-kB thereby preventing translocation of NF-kB to the nucleus. External stimuli such as tumor necrosis factor or other cytokines results in phosphorylation and degradation of Ikb releasing NF-kB dimers. NF-kB dimer subsequently translocates to the nucleus and activates target genes. Synthesis of IkbA is autoregulated. Ikb proteins are phosphorylated by Ikb kinase complex consisting of at least three proteins, IKK alpha, IKK beta, and IKK gamma. In vitro, IKK alpha and IKK beta can form homo- and heterodimers that can phosphorylate IkbA at the regulatory serine residues directly. IKK alpha and IKK beta are phosphorylated by NF-kB-inducing kinase (NIK) and MAP kinase kinase kinase-1 (MEKK1), respectively. Targeted disruption of IKK alpha gene in mice results in skin and limb abnormalities and death of newborns. Anti-IKK alpha antibody is ideal for investigators involved in cytokines and growth factor and NFkappaB research.

Gene Name: CHUK

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Gene ID: 1147

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NCBI Accession: [NP\\_001269](#)

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UniProt: [O15111](#)

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Pathways: [PI3K-Akt Signaling](#), [NF-kappaB Signaling](#), [RTK Signaling](#), [TCR Signaling](#), [TLR Signaling](#), [Fc-epsilon Receptor Signaling Pathway](#), [EGFR Signaling Pathway](#), [Neurotrophin Signaling Pathway](#), [Activation of Innate immune Response](#), [Hepatitis C](#), [Toll-Like Receptors Cascades](#), [BCR Signaling](#), [Ubiquitin Proteasome Pathway](#), [S100 Proteins](#)

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## Application Details

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Application Notes: Immunoprecipitation\_Dilution: 1-2 µg/mL  
Immunohistochemistry\_Dilution: 5 µg/mL  
Flow\_Cytometry\_Dilution: 0.25-0.5 µg/10<sup>6</sup> cells  
Western\_Blot\_Dilution: 1 µg/mL

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Comment: Anti-IKK alpha antibody is tested for use in WB, CHIP, Flow, Flow-IC, ICC/IF, IHC, IHC-Fr, IHC-P,

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## Application Details

and IP. Expect a band approximately 85-90kDa on specific lysates. Specific conditions for reactivity should be optimized by the end user.

Restrictions: For Research Use only

## Handling

Format: Liquid

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

Stabilizer: None

Preservative: 0.05 % (w/v) Sodium Azide

Preservative: Sodium azide

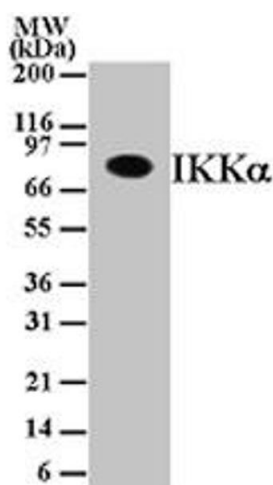
Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

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.

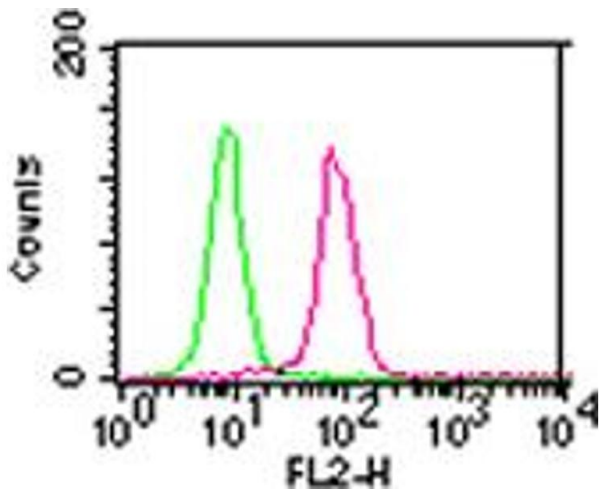
Expiry Date: 12 months

## Images



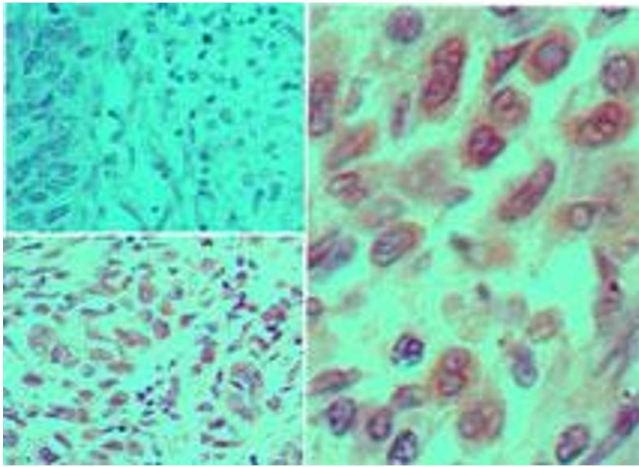
### Western Blotting

**Image 1.** IKK alpha Western Blot. Western Blot of Mouse Anti-IKK alpha antibody. Lane 1: Daudi cell lysate. Load: 30 µg per lane. Primary antibody: IKK alpha antibody at 1 µg/mL for overnight at 4°C. Secondary antibody: mouse secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 84.6 kDa for IKKα. Other band(s): none.



### Flow Cytometry

**Image 2.** IKK alpha Flow Cytometry Flow Cytometry of Mouse Anti-IKK alpha antibody. Cells: HEK293 cells. Stimulation: none. Primary Antibody: IKKa antibody at 0.5 µg/mL (red) and isotype control (green). Secondary Antibody: anti-mouse IgG1 Phycoerythrin conjugated secondary antibody.



### Immunohistochemistry

**Image 3.** IKK alpha Immunohistochemistry. Immunohistochemistry of mouse Anti-IKK alpha antibody. Tissue: human cervix tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: IKK alpha at 5 µg/ml for 1 h at RT. Secondary antibody: Peroxidase mouse secondary antibody at 1:10,000 for 45 min at RT. Localization: Shuttles between the cytoplasm and the nucleus. Staining: IKK alpha antibody is stained using a DAB chromogen and Hematoxylin counterstain.