

Datasheet for 200-301-H82**IKK alpha Antibody****Overview**

Description:	Anti-IKK α (MOUSE) Monoclonal Antibody - 200-301-H82
Item No.:	200-301-H82
Size:	100 μ g
Applications:	ChIP, FC, IF, IHC, IP, WB
Reactivity:	Human
Host Species:	Mouse

Product Details

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 Ikb α 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 Ikb α s 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.
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, NFKBKA, Transcription factor 16, TCF-16
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	14A231
Format:	IgG1

Target Details

Gene Name:	CHUK
Reactivity:	Human
Immunogen Type:	Recombinant Protein
Immunogen:	IKK alpha Antibody was produced in mice prepared by repeated immunizations by a His-tagged human IKK alpha protein at full-length.
Purity/Specificity:	Anti-IKK α Antibody was purified by Protein G chromatography. A BLAST analysis was used to suggest cross-reactivity with IKK α from Human, Mouse and New World Monkey based on 100% homology with the immunizing sequence. Cross-reactivity with Anti-IKK α from other sources has not been determined.
Relevant Links:	• UniProtKB - O15111 • NCBI - NP_001269.3 • GeneID - 1147

Application Details

Tested Applications:	ChIP, FC, IF, IHC, IP, WB
Application Note:	Anti-IKK alpha antibody is tested for use in WB, ChIP, Flow, Flow-IC, ICC/IF, IHC, IHC-Fr, IHC-P, and IP. Expect a band approximately 85-90kDa on specific lysates. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
FC:	0.25-0.5 μ g/10 ⁶ cells
IHC:	5 μ g/mL
IP:	1-2 μ g/mL
WB:	1 μ g/mL

Formulation

Physical State:	Liquid
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Preservative: 0.05% (w/v) Sodium Azide

Stabilizer: None

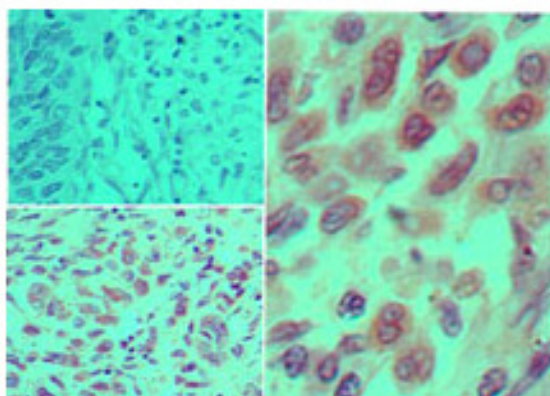
Shipping & Handling

Shipping Condition: Dry Ice

Storage Condition: 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.

Expiration: Expiration date is one (1) year from date of receipt.

Images

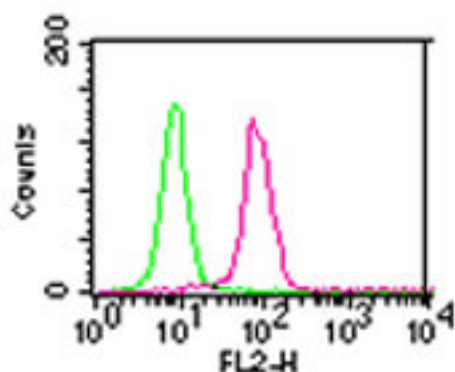


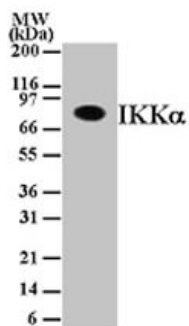
Immunohistochemistry

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.

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.



**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: IRDye800™ 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.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.