

IKKa Monoclonal Antibody

Catalog No: YM0361

Reactivity: Human

Applications: WB;IF;FCM;ELISA

Target: IKKa

Fields: >>Antifolate resistance;>>MAPK signaling pathway;>>Ras signaling

pathway;>>Chemokine signaling pathway;>>NF-kappa B signaling

pathway;>>FoxO signaling pathway;>>mTOR signaling pathway;>>PI3K-Akt signaling pathway;>>Apoptosis;>>Osteoclast differentiation;>>Toll-like receptor signaling pathway;>>NOD-like receptor signaling pathway;>>RIG-I-like receptor signaling pathway;>>Cytosolic DNA-sensing pathway;>>C-type lectin receptor

signaling pathway;>>IL-17 signaling pathway;>>Th1 and Th2 cell

 $\label{thm:continuous} \textit{differentiation;} >> T \ \textit{cell differentiation;} >> T \ \textit{cell receptor signaling pathway;} >> B$

cell receptor signaling pathway;>>TNF signaling pathway;>>Adipocytokine signaling pathway:>>Alcoholic liver disease:>>Alzheimer disease:>>Epithelial cell

signaling in Helicobacter pylori infection:>>Pathogenic Escherichia coli

infection;>>Shigellosis;>>Salmonella infection;>>Yersinia infection;>>Chagas disease;>>Toxoplasmosis;>>Hepatitis C;>>Hepatitis B;>>Measles;>>Human

cytomegalovirus infection;>>Influenza A;>>Human pap

Gene Name: CHUK

Protein Name: Inhibitor of nuclear factor kappa-B kinase subunit alpha

Human Gene Id: 1147

Human Swiss Prot 015111

No:

Mouse Swiss Prot Q60680

No:

Immunogen : Purified recombinant fragment of human IKKα expressed in E. Coli.

Specificity: IKKa Monoclonal Antibody detects endogenous levels of IKKa protein.

Formulation: Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

1/3



Source: Monoclonal, Mouse

Dilution: WB 1:500 - 1:2000. IF 1:200 - 1:1000. Flow cytometry: 1:200 - 1:400. ELISA:

1:10000. Not yet tested in other applications.

Purification : Affinity purification

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 85kD

Cell Pathway: T_Cell_Receptor; Insulin Receptor; B_Cell_Antigen; Stem cell pathway;

Toll Like; MAPK ERK Growth; MAPK G Protein; PI3K/Akt; NF kappaB;

Protein_Acetylation

P References: 1. Mol Cancer. 2010 Jan 5:9:1.

2. J Infect Dis. 2010 May 1;201(9):1371-80.

Background: This gene encodes a member of the serine/threonine protein kinase family. The

encoded protein, a component of a cytokine-activated protein complex that is an inhibitor of the essential transcription factor NF-kappa-B complex, phosphorylates sites that trigger the degradation of the inhibitor via the ubiquination pathway,

thereby activating the transcription factor. [provided by RefSeq, Jul 2008],

Function : catalytic activity:ATP + [I-kappa-B protein] = ADP + [I-kappa-B

phosphoprotein].,enzyme regulation:Activated when phosphorylated and

inactivated when dephosphorylated.,function:Acts as part of the IKK complex in the conventional pathway of NF-kappa-B activation and phosphorylates inhibitors

of NF-kappa-B thus leading to the dissociation of the inhibitor/NF-kappa-B complex and ultimately the degradation of the inhibitor. As part of the non-canonical pathway of NF-kappa-B activation, the MAP3K14-activated

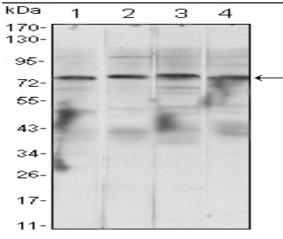
CHUK/IKKA homodimer phosphorylates NFKB2/p100 associated with RelB, inducing its proteolytic processing to NFKB2/p52 and the formation of NF-kappa-B RelB-p52 complexes. Also phosphorylates NCOA3. Phosphorylates 'Ser-10' of histone H3 at NF-kappa-B-regulated promoters during inflammatory responses triggered by cytokines.,PTM:Phosphorylated by MAP3K14/NIK, AKT and to a

lesser extent by MEKK

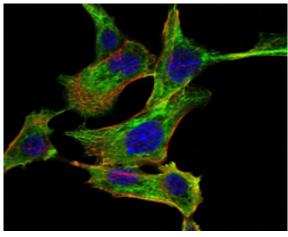
Subcellular Location : Cytoplasm . Nucleus . Shuttles between the cytoplasm and the nucleus.

Expression: Widely expressed.

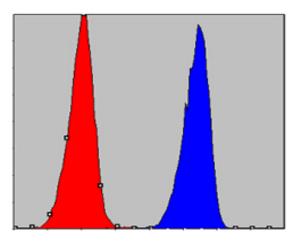
Products Images



Western Blot analysis using IKKα Monoclonal Antibody against Raji (1), Jurkat (2), THP-1 (3) and K562 (4) cell lysate.



Immunofluorescence analysis of NIH/3T3 cells using IKKα Monoclonal Antibody (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow cytometric analysis of A549 cells using IKKα Monoclonal Antibody (blue) and negative control (red).