

### IKKa Monoclonal Antibody

Catalog No: YM0360

Reactivity: Human

**Applications:** WB,ELISA

Gene Name: CHUK

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

Human Gene Id: 1147

**Human Swiss Prot** 

No:

**Mouse Swiss Prot** 

No:

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

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

**Formulation:** Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50% glycerol.

Source: Mouse

Dilution: Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other

applications.

015111

Q60680

**Purification :** Affinity purification

Storage Stability: -20°C/1 year

**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:**

conserved helix-loop-helix ubiquitous kinase(CHUK) Homo sapiens 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:**

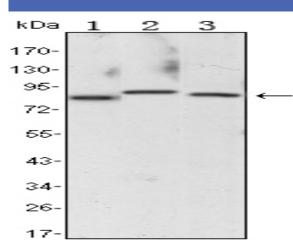
catalytic activity:ATP + [I-kappa-B protein] = ADP + [I-kappa-B phosphoprotein].,enzyme regulation:Activated when phosphorylated and inactivated when dephosphorylated.,function:Acts as part of the IKK complex in the conventional pathway of NF-kappa-B activation and phosphorylates inhibitors of NF-kappa-B 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 ReIB, inducing its proteolytic processing to NFKB2/p52 and the formation of NF-kappa-B ReIB-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:

intracellular,nucleoplasm,cytoplasm,cytosol,lkappaB kinase complex,cytoplasmic side of plasma membrane,CD40 receptor complex,intracellular membrane-bounded organelle,

**Expression:** Brain, Cervix carcinoma, Heart, Lymph, T-cell,

## **Products Images**



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