



IKK α Monoclonal Antibody

Catalog No	YP-Ab-14159
Isotype	IgG
Reactivity	Human
Applications	WB;IF;FCM;ELISA
Gene Name	CHUK
Protein Name	Inhibitor of nuclear factor kappa-B kinase subunit alpha
Immunogen	Purified recombinant fragment of human IKK α expressed in E. Coli.
Specificity	IKK α Monoclonal Antibody detects endogenous levels of IKK α protein.
Formulation	Ascitic fluid containing 0.03% sodium azide, 0.5% BSA, 50% glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. Flow cytometry: 1/200 - 1/400. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CHUK; IKKA; TCF16; Inhibitor of nuclear factor kappa-B kinase subunit alpha; I-kappa-B kinase alpha; IKK-A; IKK-alpha; IkBKA; IkappaB kinase; Conserved helix-loop-helix ubiquitous kinase; I-kappa-B kinase 1; IKK1; Nuclear factor NF-kappa-B
Observed Band	
Cell Pathway	Cytoplasm . Nucleus . Shuttles between the cytoplasm and the nucleus.
Tissue Specificity	Widely expressed.
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

**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],

matters needing attention

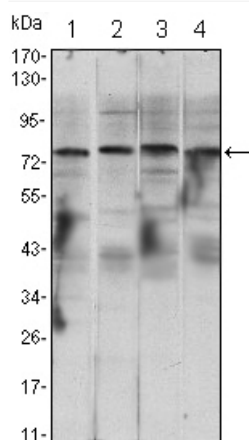
Avoid repeated freezing and thawing!

Usage suggestions

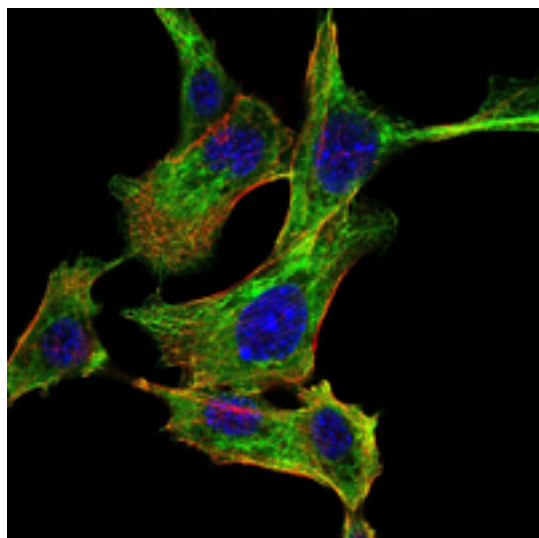
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



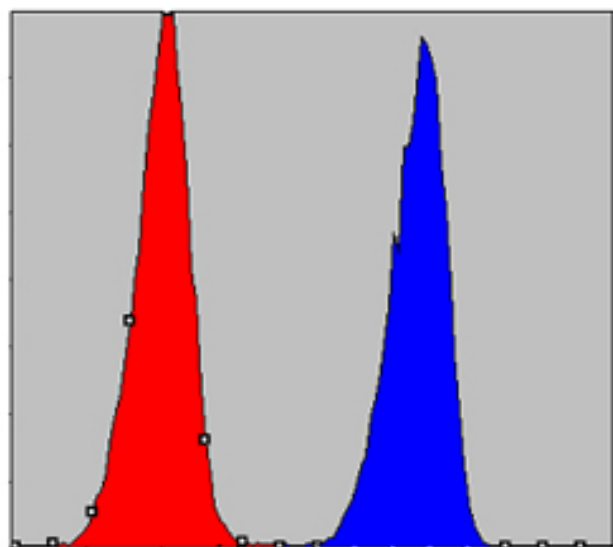
Products Images



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



Immunofluorescence analysis of NIH/3T3 cells using IKK α 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 IKK α Monoclonal Antibody (blue) and negative control (red).