

### **Summary**

Production Name	IKK $\alpha$ (phospho Thr23) Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IHC,WB,
Reactivity	Human, Mouse, Rat

## Performance

Conjugation	Unconjugated
Modification	Phospho Antibody
lsotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

## Immunogen

Gene Name	СНИК
Alternative Names	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
Gene ID	1147.0
SwissProt ID	O15111. The antiserum was produced against synthesized peptide derived from human
	IKK-alpha around the phosphorylation site of Thr23. AA range:15-64

# **Application**

**Dilution Ratio** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000..



#### **Molecular Weight**

### 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],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 MAP3K14activated CHUK/IKKA homodimer phosphorylates NFKB2/p100 associated with ReIB, 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 MEKK1, and dephosphorylated by PP2A. Autophosphorylated.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. I-kappa-B kinase subfamily., similarity: Contains 1 protein kinase domain.,subcellular location:Shuttles between the cytoplasm and the nucleus.,subunit:Component of the I-kappa-B-kinase (IKK) core complex consisting of CHUK, IKBKB and IKBKG; probably four alpha/CHUK-beta/IKBKB dimers are associated with four gamma/IKBKG subunits. The IKK core complex seems to associate with regulatory or adapter proteins to form a IKK-signalosome holo-complex. Part of a complex composed of NCOA2, NCOA3, CHUK/IKKA, IKBKB, IKBKG and CREBBP. Part of a 70-90 kDa complex at least consisting of CHUK/IKKA, IKBKB, NFKBIA, RELA, IKBKAP and MAP3K14. Directly interacts with IKK-gamma/NEMO and TRPC4AP (By similarity). May interact with TRAF2. Interacts with NALP2. May interact with MAVS/IPS1., tissue specificity: Widely expressed.,

### **Research Area**

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

### Image Data





Immunohistochemistry analysis of paraffin-embedded human colon carcinoma, using IKK-alpha (Phospho-Thr23) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from MDA-MB-435 cells treated with EGF, using IKK-alpha (Phospho-Thr23) Antibody. The lane on the left is blocked with the phospho peptide.



Western Blot analysis of various cells using Phospho-IKKa (T23) Polyclonal Antibody diluted at 1: 1000



Western Blot analysis of KB cells using Phospho-IKKa (T23) Polyclonal Antibody diluted at 1: 1000

### Note

For research use only.