

Product Name: IKK α (phospho Thr23) Rabbit Polyclonal Antibody**Catalog #: APRab04825**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Phosphorylated
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:10000
Molecular Weight	

Antigen Information

Gene Name	CHUK
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
Immunogen	The antiserum was produced against synthesized peptide derived from human IKK-alpha around the phosphorylation site of Thr23. AA range:15-64

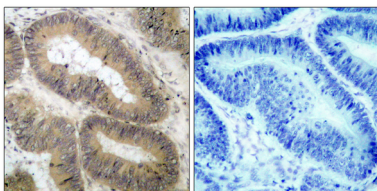
Background

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 ubiquitination pathway, thereby activating the transcription factor. [provided by RefSeq, Jul 2008], catalytic activity: $\text{ATP} + [\text{I-kappa-B protein}] = \text{ADP} + [\text{I-kappa-B phosphoprotein}]$, 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 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,

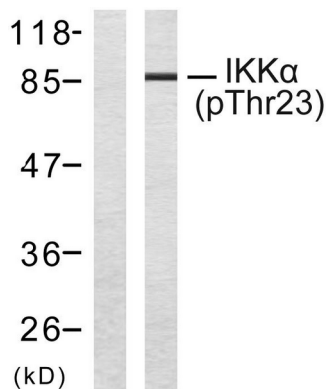
Research Area

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

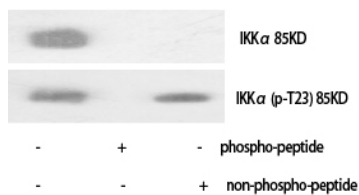


Immunohistochemistry analysis of paraffin-embedded human colon carcinoma, using IKK-alpha (Phospho-Thr23) Antibody. The picture on the right is blocked with the phosphopeptide.



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-IKK α (T23) Polyclonal Antibody diluted at 1: 1000



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

