
Product Name: IKK α / β (phospho Ser176/177) Rabbit Polyclonal Antibody**Catalog #: APRab04826**

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 1:5000-1:20000
Molecular Weight	80kDa

Antigen Information

Gene Name	CHUK/IKBKB CHUK; IKKA; TCF16; Inhibitor of nuclear factor kappa-B kinase subunit alpha; I-kappa-B
Alternative Names	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	1147/3551
SwissProt ID	O15111/O14920
Immunogen	The antiserum was produced against synthesized peptide derived from human IKK-alpha around the phosphorylation site of Ser177. AA range:151-200

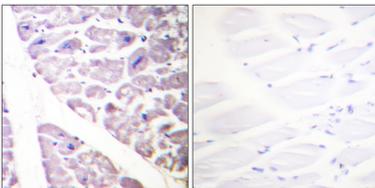
Background

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: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 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.,

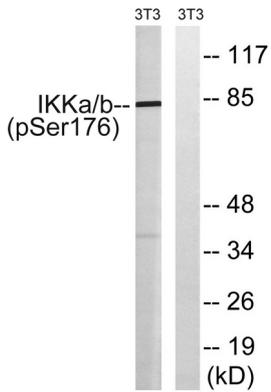
Research Area

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

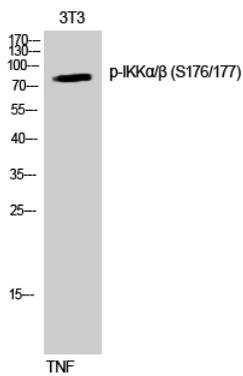
Image Data



Immunohistochemistry analysis of paraffin-embedded human heart, using IKK-alpha (Phospho-Ser176) /IKK-beta (Phospho-Ser177) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from NIH/3T3 cells treated with TNF 20ng/ml 30 min; using IKK-alpha (Phospho-Ser176) /IKK-beta (Phospho-Ser177) Antibody. The lane on the right is blocked with the phospho peptide.



Western Blot analysis of NIH-3T3 cells using Phospho-IKK α/β (S176/177) Polyclonal Antibody diluted at 1:1000