

Summary

Production Name	ΙΚΚα/β (phospho Ser176/177) Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,IHC-P,IF-P,IF-F,ICC/IF,ELISA
Reactivity	Human, Mouse, Rat

Performance

Conjugation	Unconjugated
Modification	Phospho Antibody
lsotype	lgG
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/ІКВКВ
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	1147/3551
SwissProt ID	O15111/O14920. The antiserum was produced against synthesized peptide derived
	from human IKK-alpha around the phosphorylation site of Ser177. AA range:151-200

Application

Dilution Ratio	WB 1:500-1:2000, IHC-P 1:100-1:300, ELISA 1:10000, IF-P/IF-F/ICC/IF 1:50-200
Molecular Weight	80kDa



Background

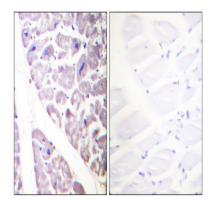
This gene encodes a member of the serine/threonine protein kinase family. The encoded protein, a component of a cytokine-activated protein complex that is an inhibitor of the essential transcription factor NF-kappa-B complex, phosphorylates sites that trigger the degradation of the inhibitor via the 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

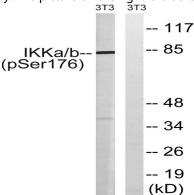
T_Cell_Receptor; Insulin Receptor; B_Cell_Antigen; Stem cell pathway; Toll_Like; MAPK_ERK_Growth;MAPK_G_Protein; PI3K/Akt; NF_kappaB; Protein_Acetylation

Image Data

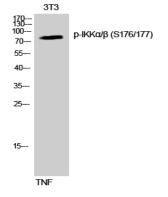




Immunohistochemistry analysis of paraffin-embedded human heart, using IKK-alpha (Phospho-Ser176) /IKK-beta (Phospho-Ser177) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from NIH/3T3 cells treated with TNF 20ng/ml 30 ', 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-IKKα/β (S176/177) Polyclonal Antibody diluted at 1: 1000

Note

For research use only.