
Product Name: IKK β Rabbit Polyclonal Antibody**Catalog #: APRab12478**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
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	86kDa

Antigen Information

Gene Name	IKBKB IKBKB; IKKB; Inhibitor of nuclear factor kappa-B kinase subunit beta; I-kappa-B-kinase beta;
Alternative Names	IKK-B; IKK-beta; Ikbkb; I-kappa-B kinase 2; IKK2; Nuclear factor NF-kappa-B inhibitor kinase beta; NFKBIKB
Gene ID	3551.0
SwissProt ID	O14920
Immunogen	The antiserum was produced against synthesized peptide derived from human IKK-beta. AA range:166-215

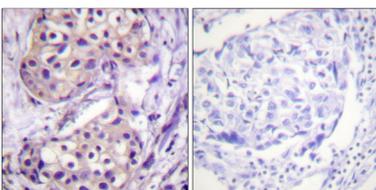
Background

The protein encoded by this gene phosphorylates the inhibitor in the inhibitor/NF-kappa-B complex, causing dissociation of the inhibitor and activation of NF-kappa-B. The encoded protein itself is found in a complex of proteins. Several transcript variants, some protein-coding and some not, have been found for this gene. [provided by RefSeq, Sep 2011], catalytic activity: ATP + [I-kappa-B protein] = ADP + [I-kappa-B phosphoprotein], 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. Also phosphorylates NCOA3, PTM: Ubiquitination on 'Ser-163' modulates phosphorylation on C-terminal serine residues, PTM: Upon cytokine stimulation, phosphorylated on Ser-177 and Ser-181 by MEKK1 and/or MAP3K14/NIK; which enhances activity. Once activated, autophosphorylates on the C-terminal serine cluster; which decreases activity and prevents prolonged activation of the inflammatory response, PTM: Yersinia yopJ may acetylate Ser/Thr residues, preventing phosphorylation and activation, which blocks the I-kappa-B signaling pathway, similarity: Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. I-kappa-B kinase subfamily, similarity: Contains 1 protein kinase domain, 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. Interacts with SQSTM1 through PRKCZ or PRKCI. Forms an NGF-induced complex with IKBKB, PRKCI and TRAF6. May interact with MAVS/IPS1. Interacts with NALP2. Interacts with TICAM1. Interacts with Yersinia yopJ. Interacts with FAF1; the interaction disrupts the IKK complex formation. Interacts with ATM. Part of a ternary complex consisting of TANK, IKBKB and IKBKG. Interacts with NIBP; the interaction is direct, tissue specificity: Highly expressed in heart, placenta, skeletal muscle, kidney, pancreas, spleen, thymus, prostate, testis and peripheral blood,

Research Area

MAPK_ERK_Growth; MAPK_G_Protein; Chemokine; Apoptosis_Inhibition; Apoptosis_Mitochondrial; Apoptosis_Overview; Toll_Like ; NOD-like receptor; RIG-I-like receptor; Cytosolic DNA-sensing pathway; T_Cell_Receptor; B_Cell_Antigen; Neurotrophin; Insulin_Receptor; Adipocytokine; Type II diabetes mellitus; Epithelial cell signaling in Helicobacter pylori infection; Pathways in cancer; Pancreatic cancer; Prostate cancer; Chronic myeloid leukemia; Acute myeloid leukemia; Small cell lung cancer;

Image Data



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using IKK-beta Antibody. The picture on the right is blocked with the synthesized peptide.