



Rabbit Anti-IKK Alpha + IKK beta antibody

SL10123R

Product Name:	IKK Alpha + IKK beta
Chinese Name:	KB抑制蛋白激酶 α/β 抗体
Alias:	IKK-Alpha; I kappa A kinase 2; I kappa A kinase Alpha; I κ BKA; IKK 1; IKKA; IKK Alpha; IKK A; IKK Alpha; IKK1; IKKA; IKK- β ; I kappa B kinase 2; I kappa B kinase beta; I κ BKB; IKK 2; IKK β ; IKK β ; IKK B; IKK beta; IKK2; IKKB; Inhibitor of kappa light chain gene enhancer in B cells; Inhibitor of kappa light polypeptide gene enhancer in B cells; Inhibitor of kappa light polypeptide gene enhancer in B cells kinase beta; Inhibitor of nuclear factor kappa B kinase beta subunit; Inhibitor of nuclear factor kappa B kinase subunit beta; MGC131801; NF κ BIKB; Nuclear factor NF kappa B inhibitor kinase beta; Nuclear factor of kappa light chain gene enhancer in B cells inhibitor.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	83kDa
Cellular localization:	The nucleuscytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human IKK Alpha/IKK beta:151-250/756
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

PubMed:[PubMed](#)

IKK Alpha/IKK beta is a member of the IKK complex which is composed of IKK alpha, IKK beta, IKK gamma and IKAP. Phosphorylation of I-Kappa-B on a serine residue by the IKK complex frees NF-kB from I-Kappa-B and marks it for degradation via ubiquitination. IKK beta has been shown to activate NF-kB and phosphorylate IKB alpha and beta. Phosphorylation of 2 sites at the activation loop of IKK beta is essential for activation of IKK by TNF and IL1. Once activated, IKK beta autophosphorylates which in turn decreases IKK activity and prevents prolonged activation of the inflammatory response. Additionally, IKK beta activity can also be regulated by MEKK1.

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. The IKK complex associates with TERF2IP/RAP1, leading to promote IKK-mediated phosphorylation of RELA/p65. 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. Found in a membrane raft complex, at least composed of BCL10, CARD11, DPP4 and IKBKB. 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. Interacts with ARRB1 and ARRB2. Interacts with TRIM21. Interacts with NLRC5; prevents IKBKB phosphorylation and kina

Product Detail:**Subcellular Location:**

Cytoplasm. Nucleus. Membrane raft. Note=Colocalized with DPP4 in membrane rafts.

Tissue Specificity:

IKK beta: Highly expressed in heart, placenta, skeletal muscle, kidney, pancreas, spleen, thymus, prostate, testis and peripheral blood.

IKK alpha: Widely expressed.

Post-translational modifications:

Phosphorylated by MAP3K14/NIK, AKT and to a lesser extent by MEKK1, and dephosphorylated by PP2A. Autophosphorylated.

Acetylation of Thr-179 by Yersinia yopJ prevents phosphorylation and activation, thus blocking the I-kappa-B signaling pathway.

DISEASE:

Defects in CHUK are the cause of cocoon syndrome (COCOS) [MIM:613630]; also known as fetal encasement syndrome. COCOS is a lethal syndrome characterized by multiple fetal malformations including defective face and seemingly absent limbs, which

are bound to the trunk and encased under the skin.

Similarity:

Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. I-kappa-B kinase subfamily.

Contains 1 protein kinase domain.

SWISS:

O14920

Gene ID:

1147

Database links:

[Entrez Gene: 1147](#) Human

[Entrez Gene: 3551](#) Human

[Entrez Gene: 12675](#) Mouse

[Entrez Gene: 16150](#) Mouse

[Omim: 600664](#) Human

[Omim: 603258](#) Human

[SwissProt: O14920](#) Human

[SwissProt: O15111](#) Human

[SwissProt: O88351](#) Mouse

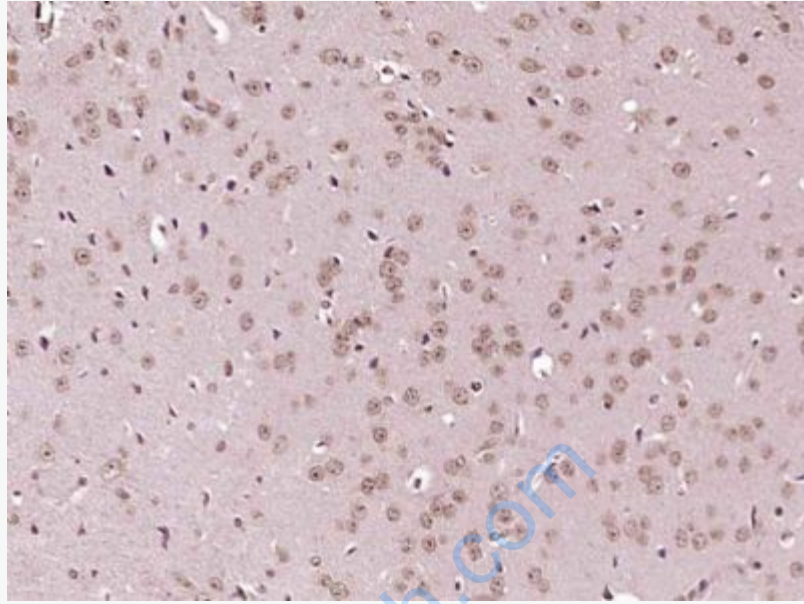
[SwissProt: Q60680](#) Mouse

[Unigene: 198998](#) Human

[Unigene: 413513](#) Human

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (IKK Alpha + IKK beta) Polyclonal Antibody, Unconjugated (SL10123R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.