

IKK alpha Rabbit mAb

Catalog No: #52362

Package Size: #52362-1 50ul #52362-2 100ul

Orders: order@signalwayantibody.com

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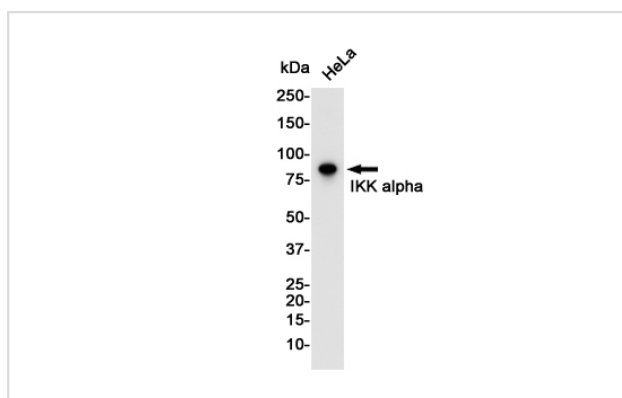
Description

Product Name	IKK alpha Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	S07-917
Isotype	Rabbit IgG
Purification	Affinity Purified
Applications	WB
Species Reactivity	Human,Mouse,Rat
Immunogen Description	A synthetic peptide of human IKK alpha
Conjugates	Unconjugated
Modification	Unmodification
Other Names	IKK1; IKKA; IKBKA; TCF16; NFKBIKA; IKK-alpha
Accession No.	Swiss-Prot:O15111GeneID:1147
Uniprot	O15111
GeneID	1147
Calculated MW	Calculated MW: 85 kDa; Observed MW: 85 kDa
Concentration	0.3 mg/ml
Formulation	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

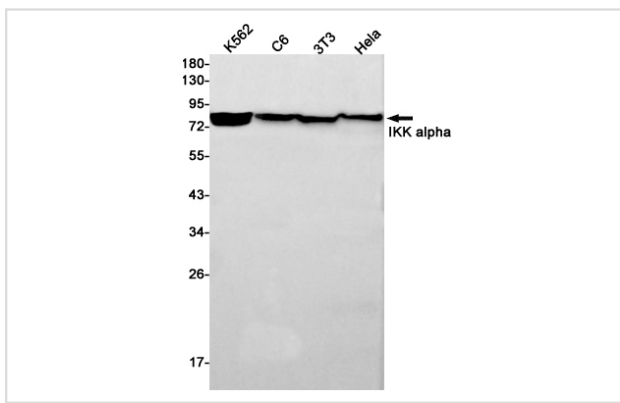
Application Details

WB: 1/2000

Images



Western blot detection of IKK alpha in HeLa cell lysates using IKK alpha Rabbit mAb(1:1000 diluted).Predicted band size:85kDa.Observed band size:85kDa.



Western blot detection of IKK alpha in K562, C6, 3T3, HeLa cell lysates using IKK alpha Rabbit mAb (1:1000 diluted). Predicted band size: 85kDa. Observed band size: 85kDa.

Background

Swiss-Prot Acc.O15111. Serine kinase that plays an essential role in the NF-kappa-B signaling pathway which is activated by multiple stimuli such as inflammatory cytokines, bacterial or viral products, DNA damages or other cellular stresses. Acts as part of the canonical IKK complex in the conventional pathway of NF-kappa-B activation and phosphorylates inhibitors of NF-kappa-B on serine residues. These modifications allow polyubiquitination of the inhibitors and subsequent degradation by the proteasome. In turn, free NF-kappa-B is translocated into the nucleus and activates the transcription of hundreds of genes involved in immune response, growth control, or protection against apoptosis. Negatively regulates the pathway by phosphorylating the scaffold protein TAXBP1 and thus promoting the assembly of the A20/TNFAIP3 ubiquitin-editing complex (composed of A20/TNFAIP3, TAX1BP1, and the E3 ligases ITCH and RNF11). Therefore, CHUK plays a key role in the negative feedback of NF-kappa-B canonical signaling to limit inflammatory gene activation. 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. In turn, these complexes regulate genes encoding molecules involved in B-cell survival and lymphoid organogenesis. Participates also in the negative feedback of the non-canonical NF-kappa-B signaling pathway by phosphorylating and destabilizing MAP3K14/NIK. Within the nucleus, phosphorylates CREBBP and consequently increases both its transcriptional and histone acetyltransferase activities. Modulates chromatin accessibility at NF-kappa-B-responsive promoters by phosphorylating histones H3 at Ser-10; that are subsequently acetylated at Lys-14; by CREBBP. Additionally, phosphorylates the CREBBP-interacting protein NCOA3. Also phosphorylates FOXO3 and may regulate this pro-apoptotic transcription factor (PubMed:15084260).

Note: This product is for in vitro research use only