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**Product Name: IKK $\alpha$ / $\beta$  (phospho Ser180/181) Rabbit Polyclonal Antibody****Catalog #: APRab04827**

For research use only.

**Summary**

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC,ICC/IF,ELISA
<b>Reactivity</b>	Human,Mouse,Rat
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Phosphorylated
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
<b>Molecular Weight</b>	85kDa

**Antigen Information**

<b>Gene Name</b>	CHUK/IKKB CHUK; IKKA; TCF16; Inhibitor of nuclear factor kappa-B kinase subunit alpha; I-kappa-B
<b>Alternative Names</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
<b>Gene ID</b>	1147/3551
<b>SwissProt ID</b>	O15111/O14920
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human IKK-alpha/beta around the phosphorylation site of Ser180/181. AA range:151-200

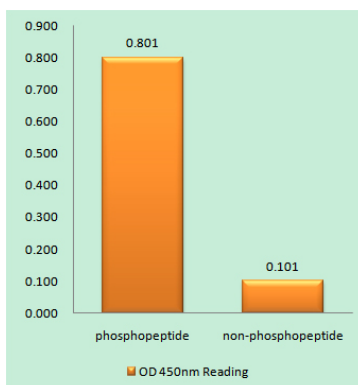
## Background

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.,

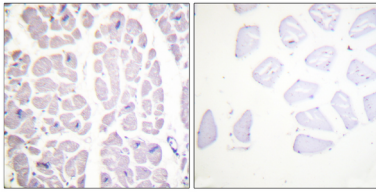
## Research Area

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

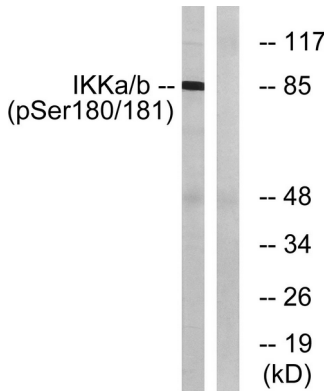
## Image Data



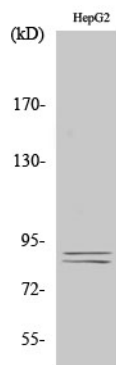
Enzyme-Linked Immunosorbent Assay ( Phospho-ELISA ) for Immunogen Phosphopeptide ( Phospho-left ) and Non-Phosphopeptide ( Phospho-right ) , using IKK-alpha/beta ( Phospho-Ser180/181 ) Antibody



Immunohistochemistry analysis of paraffin-embedded human heart, using IKK-alpha/beta (Phospho-Ser180/181) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HepG2 cells treated with TNF 20ng/ml 5', using IKK-alpha/beta (Phospho-Ser180/181) Antibody. The lane on the right is blocked with the phospho peptide.



Western Blot analysis of various cells using Phospho-IKK $\alpha/\beta$  (S180/181) Polyclonal Antibody diluted at 1: 1000