



# IKK $\alpha$ / $\beta$ (phospho Ser176/177) Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-14313
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	CHUK/IKBKB
<b>Protein Name</b>	Inhibitor of nuclear factor kappa-B kinase subunit alpha
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human IKK-alpha around the phosphorylation site of Ser177. AA range:151-200
<b>Specificity</b>	Phospho-IKK $\alpha$ / $\beta$ (S176/177) Polyclonal Antibody detects endogenous levels of IKK $\alpha$ / $\beta$ protein only when phosphorylated at S176/177.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/10000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	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
<b>Observed Band</b>	80kD
<b>Cell Pathway</b>	Cytoplasm . Nucleus . Shuttles between the cytoplasm and the nucleus.
<b>Tissue Specificity</b>	Widely expressed.
<b>Function</b>	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 MEKK

**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],

**matters needing attention**

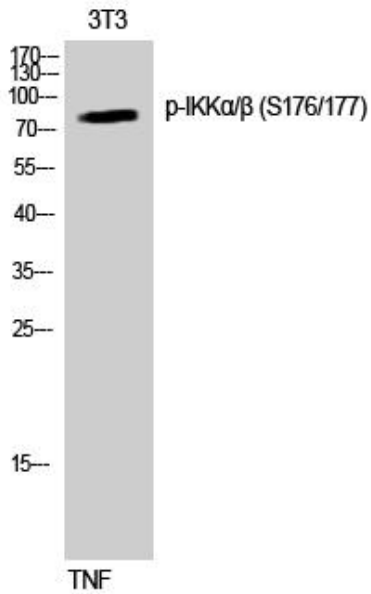
Avoid repeated freezing and thawing!

**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



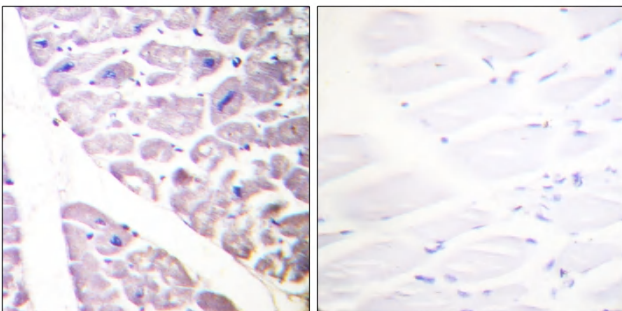
## Products Images



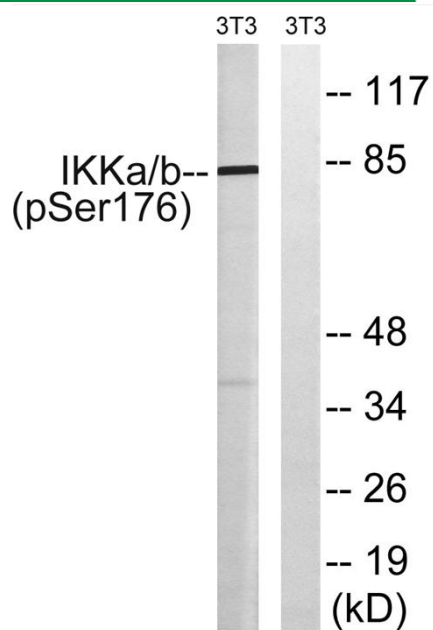
Western Blot analysis of NIH-3T3 cells using Phospho-IKKα/β (S176/177) Polyclonal Antibody diluted at 1:1000



The picture was kindly provided by our customer, antibody was diluted at 1:500



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.