

## IKK- $\alpha$ / $\beta$ (Phospho Ser176/177) Rabbit pAb

CatalogNo: YP0141

Orthogonal Validated 

### Key Features

#### Host Species

- Rabbit

#### Reactivity

- Human, Mouse, Rat

#### Applications

- WB, IHC, IF, ELISA

#### MW

- 80kD (Observed)

#### Isotype

- IgG

### Recommended Dilution Ratios

**WB 1:500-1:2000****IHC 1:100-1:300****ELISA 1:10000****IF 1:50-200**

### Storage

**Storage\*** -15°C to -25°C/1 year (Do not lower than -25°C)**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

### Basic Information

**Clonality** Polyclonal

### Immunogen Information

**Immunogen** The antiserum was produced against synthesized peptide derived from human IKK- $\alpha$  around the phosphorylation site of Ser177. AA range: 151-200

## Specificity

This antibody detects endogenous levels of IKK $\alpha$ / $\beta$  only when phosphorylated at Human:S176/S177, Mouse:S176/S177, Rat:S176/S177..The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):QGSLC

## Target Information

### Gene name

CHUK/IKBKB

### Protein Name

Inhibitor of nuclear factor kappa-B kinase subunit alpha

Organism	Gene ID	UniProt ID
Human	<a href="#">1147</a> ; <a href="#">3551</a> ;	<a href="#">O15111</a> ; <a href="#">O14920</a> ;
Mouse	<a href="#">16150</a> ;	
Rat	<a href="#">84351</a> ;	<a href="#">Q9QY78</a> ;

### Cellular Localization

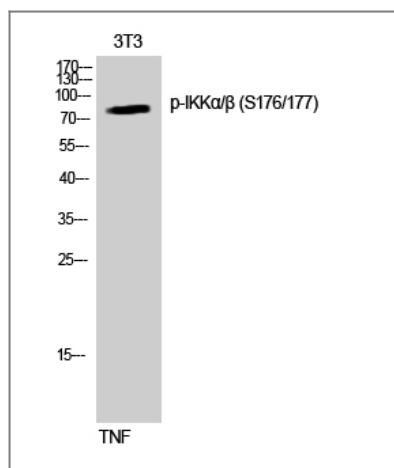
Cytoplasm . Nucleus . Shuttles between the cytoplasm and the nucleus.

**Tissue specificity** Widely expressed.

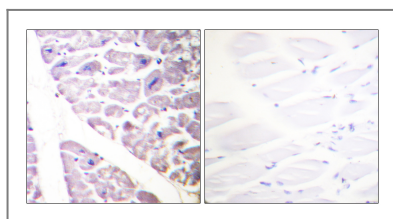
### Function

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.,

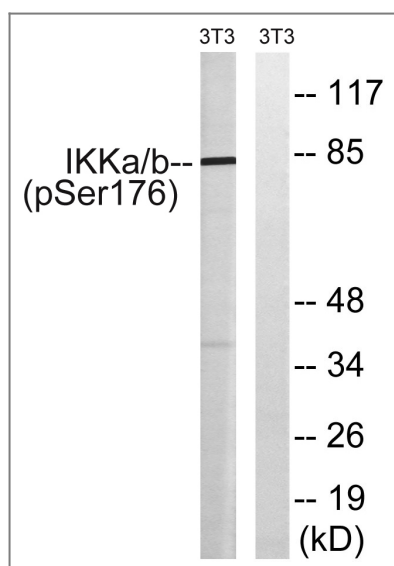
## Validation Data



Western Blot analysis of NIH-3T3 cells using Phospho-IKK $\alpha$ / $\beta$  (S176/177) Polyclonal Antibody diluted at 1:1000



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.

## Contact information

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Please scan the QR code to access additional product information:  
**IKK- $\alpha$ / $\beta$  (Phospho Ser176/177) Rabbit pAb**