

## IKK- $\alpha/\beta$ (PT0435R) PT<sup>™</sup> Rabbit mAb

CatalogNo: YM8275 **Recombinant** 

### Key Features

#### Host Species

- Rabbit

#### Reactivity

- Human, Mouse, Rat, Pig

#### Applications

- WB, IHC, IF, IP, ELISA

#### MW

- 86kD (Calculated)
- 86kD (Observed)

#### Isotype

- IgG, Kappa

### Storage

**Storage\*** -15°C to -25°C/1 year (Do not lower than -25°C)**Formulation** PBS, 50% glycerol, 0.05% Proclin 300, 0.05% BSA

### Recommended Dilution Ratios

**IHC 1:500-1:2000****WB 1:1000-1:5000****IF 1:200-1:1000****ELISA 1:5000-1:20000****IP 1:50-1:200**

### Basic Information

**Clonality** Monoclonal**Clone Number** PT0435R

### Immunogen Information

**Immunogen** The specific immunogen used to produce this antibody is proprietary information.**Specificity** Endogenous

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## | 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> ;

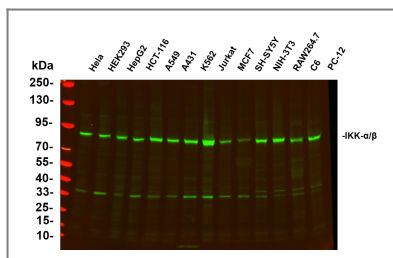
**Cellular Localization** Cytoplasm, Nucleus

**Tissue specificity** Widely expressed.

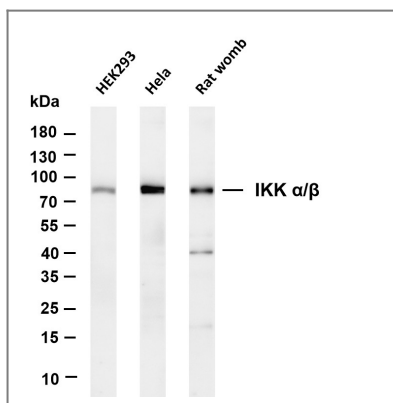
**Function** Catalytic activity:ATP + [I-kappa-B protein] = ADP + [I-kappa-B phosphoprotein].,enzyme regulation:Activated when phosphorylated and inactivated when dephosphorylated.,Function:Acts as part of the IKK complex in the conventional pathway of NF-kappa-B activation and phosphorylates inhibitors 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.,

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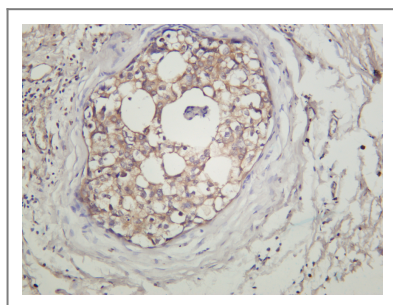
## | Validation Data



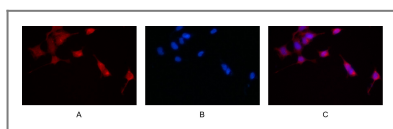
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the primary antibody was used at 4°C over night with a 1:2500 dilution. The Dylight 800-conjugated Goat anti-Rabbit antibody (Cat:RS23920) was used to detect the antibody. Lane1: HeLa - Human cervical cancer Lane2: HEK293 - Human normal embryonic kidney Lane3: HepG2 - Human hepatocellular carcinoma Lane4: HCT-116 - Human colon cancer Lane5: A549 - Human lung adenocarcinoma Lane6: A431 - Human skin squamous cell carcinoma Lane7: K562 - Human chronic myeloid leukemia Lane8: Jurkat - Human acute T cell leukemia cells Lane9: MCF7 - Human breast cancer Lane10: SH-SY5Y - Human neuroblastoma cells Lane11: NIH-3T3 - NIH mouse fibroblasts Lane12: RAW264.7 - Mouse mononuclear macrophage leukemia cells Lane13: C6 - Rat glioma cells Lane14: PC-12 - Pheochromocytoma in rats Predicted band size: 86kDa Observed band size: 86kDa



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-IKK α/β antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: HEK293 Lane 2: HeLa Lane 3: Rat womb Predicted band size: 86kDa Observed band size: 86kDa



Human breast carcinoma was stained with anti-IKK α/β rabbit antibody



Immunofluorescence analysis of HEK293. Picture A: IKK α/β antibody (red). Picture B: DAPI (blue). Picture C: Merge of A+B

## Contact information

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Please scan the QR code to access additional product information:  
**IKK-α/β (PT0435R)**  
**PT™ Rabbit mAb**