

## IKK $\beta$ Polyclonal Antibody

Catalog # AP70486

### Specification

#### IKK $\beta$ Polyclonal Antibody - Product Information

|                   |                          |
|-------------------|--------------------------|
| Application       | <b>WB</b>                |
| Primary Accession | <a href="#">O14920</a>   |
| Reactivity        | <b>Human, Mouse, Rat</b> |
| Host              | <b>Rabbit</b>            |
| Clonality         | <b>Polyclonal</b>        |

#### IKK $\beta$ Polyclonal Antibody - Additional Information

Gene ID 3551

#### Other Names

IKBKB; IKKB; Inhibitor of nuclear factor kappa-B kinase subunit beta; I-kappa-B-kinase beta; IKK-B; IKK-beta; IkbKB; I-kappa-B kinase 2; IKK2; Nuclear factor NF-kappa-B inhibitor kinase beta; NFKBIKB

#### Dilution

WB~~Western Blot: 1/500 - 1/2000.  
Immunohistochemistry: 1/100 - 1/300.  
ELISA: 1/5000. Not yet tested in other applications.

#### Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

#### Storage Conditions

-20°C

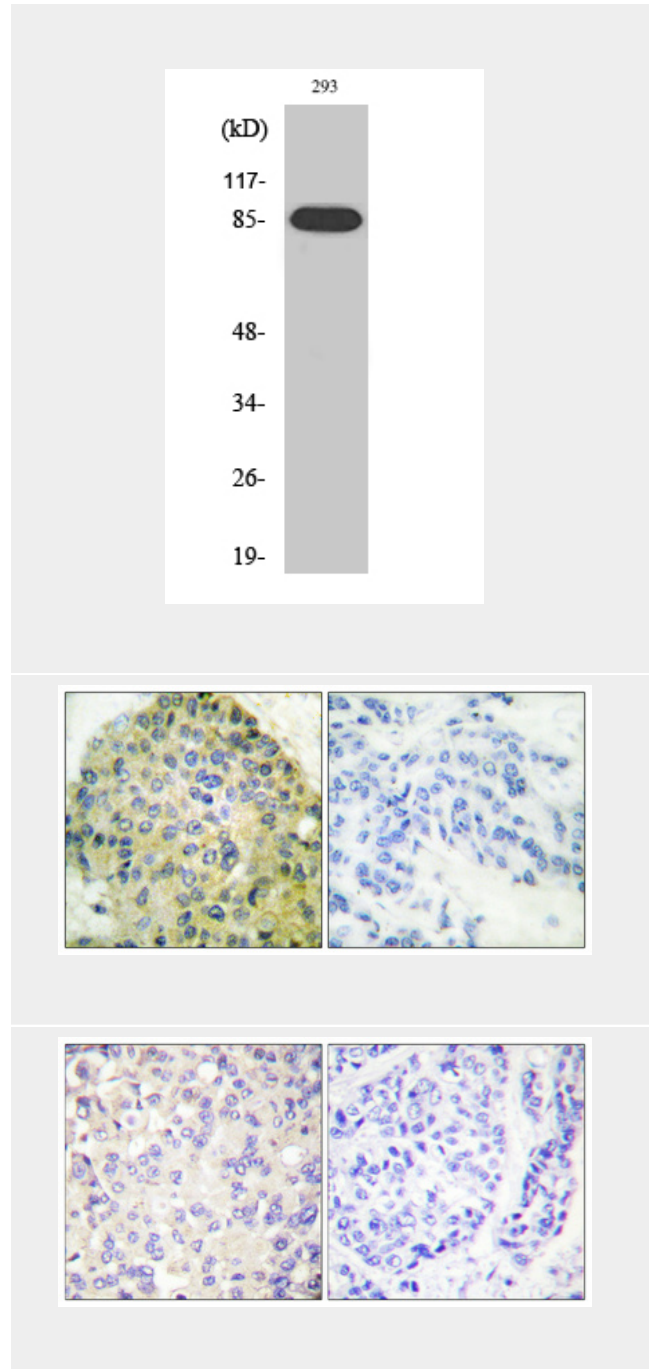
#### IKK $\beta$ Polyclonal Antibody - Protein Information

Name IKBKB

Synonyms IKKB

#### Function

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



#### IKK $\beta$ Polyclonal Antibody - Background

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

stresses (PubMed:<a href="http://www.uniprot.org/citations/30337470" target="\_blank">30337470</a>). Acts as part of the canonical IKK complex in the conventional pathway of NF-kappa-B activation. Phosphorylates inhibitors of NF-kappa-B on 2 critical 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. In addition to the NF-kappa-B inhibitors, phosphorylates several other components of the signaling pathway including NEMO/IKBKG, NF-kappa-B subunits RELA and NFKB1, as well as IKK-related kinases TBK1 and IKBKE (PubMed:<a href="http://www.uniprot.org/citations/11297557" target="\_blank">11297557</a>, PubMed:<a href="http://www.uniprot.org/citations/20410276" target="\_blank">20410276</a>). IKK-related kinase phosphorylations may prevent the overproduction of inflammatory mediators since they exert a negative regulation on canonical IKKs. Phosphorylates FOXO3, mediating the TNF-dependent inactivation of this pro-apoptotic transcription factor (PubMed:<a href="http://www.uniprot.org/citations/15084260" target="\_blank">15084260</a>). Also phosphorylates other substrates including NCOA3, BCL10 and IRS1 (PubMed:<a href="http://www.uniprot.org/citations/17213322" target="\_blank">17213322</a>). Within the nucleus, acts as an adapter protein for NFKBIA degradation in UV-induced NF-kappa-B activation (PubMed:<a href="http://www.uniprot.org/citations/11297557" target="\_blank">11297557</a>). Phosphorylates RIPK1 at 'Ser-25' which represses its kinase activity and consequently prevents TNF-mediated RIPK1-dependent cell death (By similarity). Phosphorylates the C- terminus of IRF5, stimulating IRF5 homodimerization and translocation into the nucleus (PubMed:<a href="http://www.uniprot.org/citations/25326418" target="\_blank">25326418</a>).

### Cellular Location

Cytoplasm. Nucleus. Membrane raft.  
Note=Colocalized with DPP4 in membrane

products, DNA damages or other cellular stresses (PubMed:30337470). Acts as part of the canonical IKK complex in the conventional pathway of NF- kappa-B activation. Phosphorylates inhibitors of NF-kappa-B on 2 critical 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. In addition to the NF-kappa-B inhibitors, phosphorylates several other components of the signaling pathway including NEMO/IKBKG, NF-kappa-B subunits RELA and NFKB1, as well as IKK-related kinases TBK1 and IKBKE. IKK-related kinase phosphorylations may prevent the overproduction of inflammatory mediators since they exert a negative regulation on canonical IKKs. Phosphorylates FOXO3, mediating the TNF-dependent inactivation of this pro-apoptotic transcription factor. Also phosphorylates other substrates including NCOA3, BCL10 and IRS1. Within the nucleus, acts as an adapter protein for NFKBIA degradation in UV-induced NF-kappa-B activation.

rafts.

**Tissue Location**

Highly expressed in heart, placenta, skeletal muscle, kidney, pancreas, spleen, thymus, prostate, testis and peripheral blood

**IKK $\beta$  Polyclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)