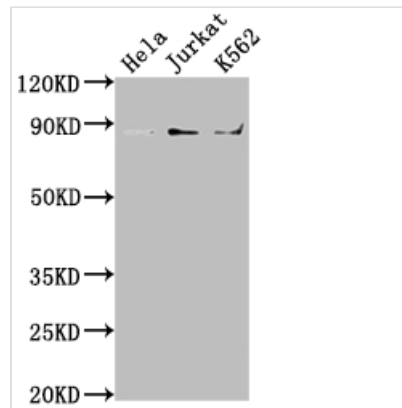




# IKBKB Antibody

<b>Product Code</b>	CSB-RA261933A0HU
<b>Storage</b>	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
<b>Uniprot No.</b>	O14920
<b>Immunogen</b>	A synthesized peptide derived from human IKK beta
<b>Species Reactivity</b>	Human
<b>Tested Applications</b>	ELISA, WB; Recommended dilution: WB:1:500-1:5000
<b>Relevance</b>	<p>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 stresses. Acts as part of the canonical IKK complex in the conventional pathway of NF-kappa-B activation and 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.</p>
<b>Form</b>	Liquid
<b>Conjugate</b>	Non-conjugated
<b>Storage Buffer</b>	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
<b>Purification Method</b>	Affinity-chromatography
<b>Isotype</b>	Rabbit IgG
<b>Clonality</b>	Monoclonal
<b>Product Type</b>	Recombinant Antibody
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Research Area</b>	Epigenetics and Nuclear Signaling; Cardiovascular; Immunology; Signal transduction
<b>Gene Names</b>	IKBKB
<b>Accession NO.</b>	5D12

Image


**Western Blot**

Positive WB detected in: HeLa whole cell lysate,

Jurkat whole cell lysate, K562 whole cell lysate

All lanes: IKBKB antibody at 1:2000

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 87, 86, 30, 80 kDa

Observed band size: 87 kDa

**Description**

The production of the recombinant IKBKB antibody depended on Single B Cell technology. There are 3 main steps in the production: 1, Isolation of single B cells. High-throughput methods could be used to obtain the efficient identification and desired specificity of B cells. 4, Single B cell antibody sequencing and cloning. In this step, the antibody gene sequence of IKBKB was obtained and introduced to plasmids, which then would be transferred to mammalian cells for in vitro expression of the IKBKB antibody. 3, Screening of antibodies. The target antibody was obtained in this step. And it has been validated in ELISA, WB.

IKBKB is a catalytic subunit of the I $\kappa$ B kinase (IKK) complex that activates the transcription factor NF $\kappa$ B. Increased expression or abnormal activity of IKBKB has been found in multiple human malignancies such as lung cancer and melanoma. Besides, IKBKB also phosphorylates numerous other proteins involved in many cellular activities, including cell cycle, metabolism, mRNA stability, DNA damage response, immune response, inflammation, cell survival, apoptosis, migration, metastasis, and differentiation.