Recombinant Human IKBKB Protein (S695-S756), Tag Free

Cat. No. IKBKB-1064H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human GG-IKKβ(S695-S756 end) Protein was expressed in Insect cell.
Species	Human
Source	Insect Cells
ProteinLength	S695-S756
Description	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. 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

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	NF-kappa-B activation. Phosphorylates RIPK1 at 'Ser-25' which represses its kinase activity and consequently prevents TNF-mediated RIPK1-dependent cell death. Phosphorylates the C-terminus of IRF5, stimulating IRF5 homodimerization and translocation into the nucleus.
Form	Liquid
Endotoxin	< 0.01 EU per μg of the protein
Purity	90%
Stability	Samples are stable for up to twelve months from date of receipt at -20 to -80 centigrade.
Storage	Store it under sterile conditions at -20 to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Storage Buffer	Supplied as sterile 50 mM Tris-HCl (pH7.5), 200 mM NaCl, 20% glycerol
Shipping	It is shipped out with blue ice.

GENE INFORMATION

Gene Name	IKBKB inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase beta [Homo sapiens (human)]
Official Symbol	IKBKB
Synonyms	IKBKB; inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase beta; inhibitor of nuclear factor kappa-B kinase subunit beta; IKK beta; IKK2; IKKB; NFKBIKB; IKK-B; I-kappa-B kinase 2; I-kappa-B-kinase beta; nuclear factor NF-

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	kappa-B inhibitor kinase beta; IKK-beta; FLJ33771; FLJ36218; FLJ38368; FLJ40509; MGC131801;
Gene ID	3551
mRNA Refseq	NM_001190720
Protein Refseq	NP_001177649
MIM	603258
UniProt ID	O14920

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