

Bioactive

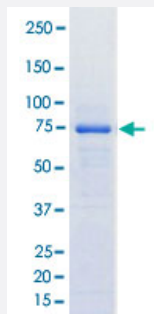
Full-Length

IKBKB (Human) Recombinant Protein

Catalog # P5720

Size 5 ug

Applications



Result of activity analysis

Result of activity analysis

□

Specification

Product Description	Human IKBKB (NP_001547.1, 1 a.a. - 662 a.a.) full-length recombinant protein with GST tag expressed in Baculovirus infected Sf21 cells.
Host	insect
Theoretical MW (kDa)	77
Form	Liquid
Preparation Method	Baculovirus infected insect cell (Sf21) expression system
Purification	Glutathione sepharose chromatography
Purity	86 % by SDS-PAGE/CBB staining.

Activity	The activity was measured by off-chip mobility shift assay. The enzyme was incubated with fluorescence-labeled substrate and Mg (or Mn)/ATP. The phosphorylated and unphosphorylated substrates were separated and detected by LabChip™3000. Substrate : Modified IκappaBα-derived peptide. ATP: 100 μM.
Quality Control Testing	Loading 1 ug protein in SDS-PAGE
Storage Buffer	In 50 mM Tris-HCl, 150 mM NaCl, pH 7.5 (0.05% Brij35, 1 mM DTT, 10% glycerol)
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Result of activity analysis Result of activity analysis

Applications

- Functional Study
- SDS-PAGE

Gene Info — IKBKB

Entrez GeneID	3551
Protein Accession#	NP_001547.1
Gene Name	IKBKB
Gene Alias	FLJ40509, IKK-beta, IKK2, IKKB, MGC131801, NFKBIKB
Gene Description	inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase beta
Omim ID	603258
Gene Ontology	Hyperlink
Gene Summary	NFKB1 (MIM 164011) or NFKB2 (MIM 164012) is bound to REL (MIM 164910), RELA (MIM 164014), or RELB (MIM 604758) to form the NFKB complex. The NFKB complex is inhibited by Iκappa-B proteins (NFKBIA, MIM 164008, or NFKBIB, MIM 604495), which inactivate NF-κappa-B by trapping it in the cytoplasm. Phosphorylation of serine residues on the Iκappa-B proteins by kinases (IKBKA, MIM 600664, or IKBKB) marks them for destruction via the ubiquitination pathway, thereby allowing activation of the NF-κappa-B complex. Activated NFKB complex translocates into the nucleus and binds DNA at kappa-B-binding motifs such as 5-prime GGGRNNYYCC 3-prime or 5-prime HGGARNYYCC 3-prime (where H is A, C, or T; R is an A or G purine; and Y is a C or T pyrimidine).[supplied by OMIM]

Other Designations

inhibitor of nuclear factor kappa B kinase beta subunit|nuclear factor NF-kappa-B inhibitor kinase beta

Pathway

- [Acute myeloid leukemia](#)
- [Adipocytokine signaling pathway](#)
- [Apoptosis](#)
- [B cell receptor signaling pathway](#)
- [Chemokine signaling pathway](#)
- [Chronic myeloid leukemia](#)
- [Epithelial cell signaling in Helicobacter pylori infection](#)
- [Insulin signaling pathway](#)
- [MAPK signaling pathway](#)
- [Neurotrophin signaling pathway](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)
- [Prostate cancer](#)
- [Small cell lung cancer](#)
- [T cell receptor signaling pathway](#)
- [Toll-like receptor signaling pathway](#)
- [Type II diabetes mellitus](#)

Disease

- [Arthritis](#)
- [Asthma](#)
- [Bronchiolitis](#)

- [Colonic Neoplasms](#)
- [Disease Susceptibility](#)
- [Genetic Predisposition to Disease](#)
- [Hematologic Diseases](#)
- [Hepatitis C](#)
- [HIV Infections](#)
- [Hodgkin Disease](#)
- [Infant](#)
- [Inflammation](#)
- [Lymphoma](#)
- [Lymphoproliferative Disorders](#)
- [Multiple Myeloma](#)
- [Occupational Diseases](#)
- [Rectal Neoplasms](#)
- [Respiratory Syncytial Virus Infections](#)
- [Thyroid Neoplasms](#)
- [Waldenstrom Macroglobulinemia](#)
- [Werner syndrome](#)