

Product datasheet for TP510500

OriGene Technologies, Inc.

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Ikbkb (NM 001159774) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Purified recombinant protein of Mouse inhibitor of kappaB kinase beta (Ikbkb), with C-terminal Description:

MYC/DDK tag, expressed in HEK293T cells, 20ug

Species: Mouse **Expression Host:** HEK293T

Expression cDNA Clone >MR210500 representing NM 001159774

or AA Sequence: Red=Cloning site Green=Tags(s)

> MSWSPSLPTQTCGAWEMKERLGTGGFGNVIRWHNQATGEQIAIKQCRQELSPKNRDRWCLEIQIMRRLNH PNVVAARDVPEGMQNLAPNDLPLLAMEYCQGGDLRRYLNQFENCCGLREGAVLTLLSDIASALRYLHENR IIHRDLKPENIVLQQGEKRLIHKIIDLGYAKELDQGSLCTSFVGTLQYLAPELLEQQKYTVTVDYWSFGT LAFECITGFRPFLPNWQPVQWHSKVRQKSEVDIVVSEDLNGAVKFSSSLPFPNNLNSVLAERLEKWLQLM LMWHPRQRGTDPQYGPNGCFRALDDILNLKLVHVLNMVTGTVHTYPVTEDESLQSLKTRIQEDTGILETD QELLQEAGLVLLPDKPATQCISDSKTNEGLTLDMDLVFLFDNSKINYETQITPRPQPESVSCILQEPKRN LSFFQLRKVWGQVWHSIQTLKEDCNRLQQGQRAAMMSLLRNNSCLSKMKNAMASTAQQLKAKLDFFKTSI QIDLEKYKEQTEFGITSDKLLLAWREMEQAVEQCGRENDVKHLVERMMALQTDIVDLQRSPMGRKQGGTL DDLEEQARELYRRLREKPRDQRTEGDSQEMVRLLLQAIQSFEKKVRVIYTQLSKTVVCKQKALELLPKVE EVVSLMNEDERTVVRLQEKRQKELWNLLKIACSKVRGPVSGSPDSMNVSRLSHPGQLMSQPSSACDSLPE SDKKSEELVAEAHALCSRLESALQDTVKEQDRSFTTLDWSWLQMEDEERCSLEQACD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

C-MYC/DDK Tag: Predicted MW: 86.8 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Store at -80°C after receiving vials. Storage:





Ikbkb (NM_001159774) Mouse Recombinant Protein - TP510500

Stability: Stable for 12 months from the date of receipt of the product under proper storage and handling

conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 001153246

 Locus ID:
 16150

 UniProt ID:
 Q5D0E0

 RefSeq Size:
 3598

 Cytogenetics:
 8 A2

 RefSeq ORF:
 2271

Synonyms: Al132552; IKK-2; IKK-beta; IKK2; IKKbeta; IKK[b]

Summary: 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.[UniProtKB/Swiss-Prot Function]