

## Product datasheet for **TP510500**

### **Ikbkb (NM\_001159774) Mouse Recombinant Protein**

#### Product data:

**Product Type:** Recombinant Proteins

**Description:** Purified recombinant protein of Mouse inhibitor of kappaB kinase beta (Ikbkb), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug

**Species:** Mouse

**Expression Host:** HEK293T

**Expression cDNA Clone or AA Sequence:** >MR210500 representing NM\_001159774  
**Red**=Cloning site **Green**=Tags(s)

MSWSPSLPTQTCGAWEMKERLGTGGFGNVIRWHNQATGEQIAIKQCRQELSPKNRDRWCLEIQIMRRL  
NH  
PNVVAARDVPEGMQNLAPNDLPLLAMEYCQGGDLRRYLNQFENCCGLREGAVLTLLSDIASALRYLHEN  
R  
IIHRDLKPENIVLQQGEKRLIHKIIDLGYAKELDQGSLSCTSFVGTLLQYLAPELLEQQKYTVTVDYWSFGT  
LAFECITGFRPFLPNWQPQVQWHSKVRQKSEVDIVVSEDLNGAVKFSSSLPFPNNLNSVLAERLEKWLQLM  
LMWHPRQRGTDPQYGPNGCFRALDDILNLKLHVHVNMTGTVHTYPTVEDESLQSLKTRIQEDTGILETD  
QELLQEAGLVLLPDKPATQCISDSKTNEGLTLDMDLVFLFDNSKINYETQITPRQPESVSCILQEPKRN  
LSFFQLRKVWQVWHSIQTLKEDCNRLQQGQRAAMMSLLRNNSCLSKMKNAMASTAQQLKAKLDDFFK  
TSI  
QIDLEKYKEQTEFGITSDKLLLAWREMEQAVEQCGRENDVKHLVERMMALQTDIVDLQRSPMGRKQGGT  
L  
DDLEEQARELYRRLREKPRDQRTEGDSQEMVRLLLQAIQSFEKKVRVIYQLSKTVVCKQKALELLPKVE  
EVVSLMNEDERTVRLQEKRQKELWNLLKIACSKVRGPVSGSPDSMNVSRLSHPGQLMSQPSSACDSL  
P  
E  
SDKKSEELVAEHALCSRLESALQDTVKEQDRSFTTLDWSWLQMEDEERCSLEQACD

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Tag:** C-MYC/DDK

**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



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<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C after receiving vials.
<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_001153246</a>
<b>Locus ID:</b>	16150
<b>UniProt ID:</b>	<a href="#">Q5D0E0</a>
<b>RefSeq Size:</b>	3598
<b>Cytogenetics:</b>	8 A2
<b>RefSeq ORF:</b>	2271
<b>Synonyms:</b>	AI132552; IKK-2; IKK-beta; IKK2; IKKbeta; IKK[b]
<b>Summary:</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> <p>[UniProtKB/Swiss-Prot Function]</p>