

## Product datasheet for **TP510080**

### Ikbke (BC037446) Mouse Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse inhibitor of kappaB kinase epsilon (cDNA clone MGC:46849 IMAGE:3980145), complete cds, with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR210080 representing BC037446 <b>Red</b> =Cloning site <b>Green</b> =Tags(s)

MQSTTNYLWHTDDLLGQGATASVYKARNKKSSEVAVKVFNSASYRRPPEVQGGSRQKVLIMEYCSSGSL  
LSVLEDPENTFGLSEEEFLVLRVWAGMNHLENGIVHRDIKPGNIMRLVGEQGSIYKLSDFGAARKL  
DDDEKFVSVYGTEEYLHPDMYERAVLRKPQQKAFGVTVDLWSIGVTLYHAATGSLPFIPFGGPRRNEIM  
YRITTEKPAGAISGTQKQENGLPWSYSLPITCRLSMGLQNQLVPILANILEVEEDKCWGFDFFAETSD  
ILQRTVIHVFSLPQAVLHHVYIHAHNTIAIFLEAVYEQTNTVTPKHQEYLFEGHPCVLEPSLSAQHIAHTA  
ASSPLTLFSMSSDTPKGLAFRDPALDVPKFPKVDLQADYSTAKGVLGAGYQALWLARVLLDGGALMLRG  
LHWVLEVLQDTCQQTLEVTRTALLYLGSSLGTERFSSGSGMPDVQERKEATELRLRLQTLSEILSKCSHN  
VTETQRSLSCLGEELLKNRDIHEDNKSIQIKQCCLDKMHFIYKQFKKSRMRPGLSYNEEQIHKLDKVN  
SHLAKRLLQVFQEECVQTYQVSLVTHGKRMQVQRAQNHLHLIGHSVATCNSEARGAQESLNKIFDQLLL  
DRASEQGAEVSPQPMAPHPGDPKDLVFMQELCNDMKLLAFDLQDNNRLIERLHRVPSAPDV

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

Tag:	C-MYC/DDK
Predicted MW:	107.5 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.
Storage:	Store at -80°C after receiving vials.



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<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>Locus ID:</b>	56489
<b>UniProt ID:</b>	<a href="#">Q9R0T8</a>
<b>RefSeq Size:</b>	2931
<b>Cytogenetics:</b>	1 E4
<b>RefSeq ORF:</b>	2079
<b>Synonyms:</b>	Ikki, IKK-i
<b>Summary:</b>	<p>Serine/threonine kinase that plays an essential role in regulating inflammatory responses to viral infection, through the activation of the type I IFN, NF-kappa-B and STAT signaling. Also involved in TNFA and inflammatory cytokines, like Interleukin-1, signaling. Following activation of viral RNA sensors, such as RIG-I-like receptors, associates with DDX3X and phosphorylates interferon regulatory factors (IRFs), IRF3 and IRF7, as well as DDX3X. This activity allows subsequent homodimerization and nuclear translocation of the IRF3 leading to transcriptional activation of pro-inflammatory and antiviral genes including IFNB. In order to establish such an antiviral state, IKBKE forms several different complexes whose composition depends on the type of cell and cellular stimuli. Thus, several scaffolding molecules including IPS1/MAVS, TANK, AZI2/NAP1 or TBKBP1/SINTBAD can be recruited to the IKBKE-containing-complexes. Activated by polyubiquitination in response to TNFA and interleukin-1, regulates the NF-kappa-B signaling pathway through, at least, the phosphorylation of CYLD. Phosphorylates inhibitors of NF-kappa-B thus leading to the dissociation of the inhibitor/NF-kappa-B complex and ultimately the degradation of the inhibitor. In addition, is also required for the induction of a subset of ISGs which displays antiviral activity, may be through the phosphorylation of STAT1 at 'Ser-708'. Phosphorylation of STAT1 at 'Ser-708' seems also to promote the assembly and DNA binding of ISGF3 (STAT1:STAT2:IRF9) complexes compared to GAF (STAT1:STAT1) complexes, in this way regulating the balance between type I and type II IFN responses. Protects cells against DNA damage-induced cell death. Also plays an important role in energy balance regulation by sustaining a state of chronic, low-grade inflammation in obesity, which leads to a negative impact on insulin sensitivity. Phosphorylates AKT1.[UniProtKB/Swiss-Prot Function]</p>