



# TBK1 Rabbit mAb

<b>Catalog No</b>	YP-rAb-17808
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human,Mouse,Rat
<b>Applications</b>	WB,IHC,IF,ELISA
<b>Gene Name</b>	TBK1
<b>Protein Name</b>	Serine/threonine-protein kinase TBK1
<b>Purification Process</b>	Protein A
<b>Specificity</b>	Endogenous
<b>Formulation</b>	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
<b>Source</b>	Monoclonal, Rabbit,IgG
<b>Dilution</b>	IHC 1:200-1:1000; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
<b>Concentration</b>	0.5 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-15° C to -25° C/1 year(Do not lower than -25° C)
<b>Synonyms</b>	TBK1 ; NAK ; Serine/threonine-protein kinase TBK1 ; NF-kappa-B-activating kinase ; T2K ; TANK-binding kinase 1
<b>Observed Band</b>	84kD
<b>Calculated Molecular Weight</b>	84kD
<b>Cell Pathway</b>	Cytoplasm
<b>Tissue Specificity</b>	Ubiquitous with higher expression in testis. Expressed in the ganglion cells, nerve fiber layer and microvasculature of the retina.
<b>Function</b>	Catalytic activity:ATP + a protein = ADP + a phosphoprotein.,Function:Serine/threonine protein involved in the signaling cascade converging to the activation of the transcription factor NF-kappa-B. May function as an IKK kinase, playing an essential role in the transcription of a subset of TNF-alpha-induced genes. Also mediates production of RANTES/CCL5 and interferon-beta/IFNB1. Has a pivotal role in the innate immune response. Phosphorylates Borna disease virus (BDV) P protein. Phosphorylates and activates IRF3 and IRF7 and allows their nuclear localization. This leads to production of alpha/beta interferons and the development of a cellular antiviral state. It also seems to be a central factor in the induction of the antiviral interferon response. Inhibition of its interaction with IRF3, due to HCV NS3 binding or BDV P protein seems to be one mechanism of inhibition of the innate immune responses





of hepatitis C virus (HCV) infection or Borna disease virus infection respectively.,similarity:Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. I-kappa-B kinase subfamily.,similarity:Contains 1 protein kinase domain.,subunit:Interacts with TIRAP, TANK and TRAF2. Part of a ternary complex consisting of TANK, TRAF2 and TBK1. Interacts with AZI2. Interacts with SIKE. Interacts with TICAM1/TRIF, IRF3 and DDX58/RIG-I, interactions are disrupted by the interaction between TBK1 and SIKE. Interacts with HCV NS3, a hepatitis C virus protein and with BDV P protein, a Borna disease virus protein.,tissue specificity:Ubiquitous with higher expression in testis.,

## Background

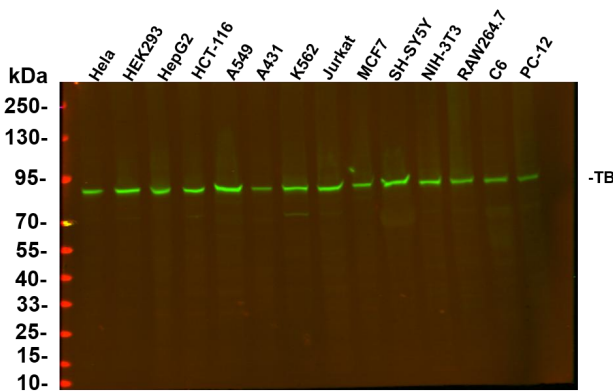
The NF-kappa-B (NFKB) complex of proteins is inhibited by I-kappa-B (IKB) proteins, which inactivate NFKB by trapping it in the cytoplasm. Phosphorylation of serine residues on the IKB proteins by IKB kinases marks them for destruction via the ubiquitination pathway, thereby allowing activation and nuclear translocation of the NFKB complex. The protein encoded by this gene is similar to IKB kinases and can mediate NFKB activation in response to certain growth factors. [provided by RefSeq, Oct 2010],

## matters needing attention

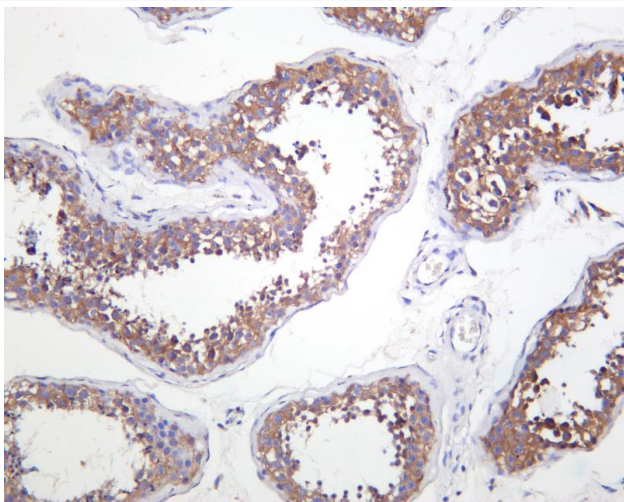
Avoid repeated freezing and thawing!

## Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

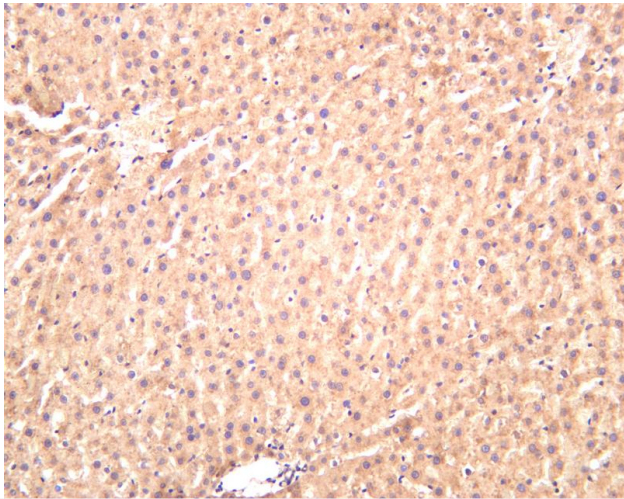


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the primary antibody was used at 4°C, over night with a 1:5000 dilution. The Dylight 800-conjugated Goat anti-Rabbit antibody

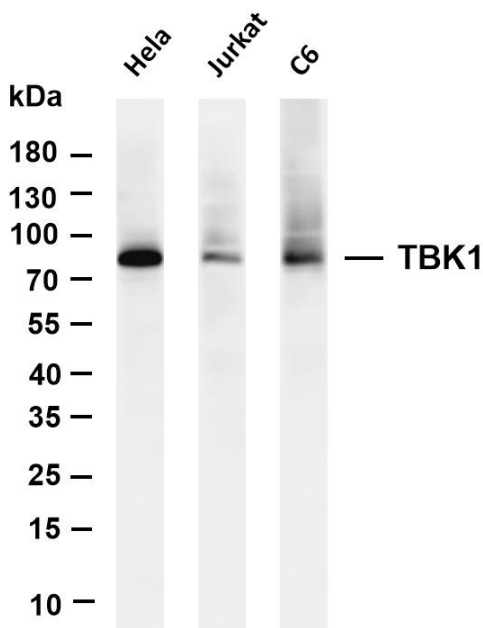


Human testis was stained with anti-TBK1 rabbit antibody

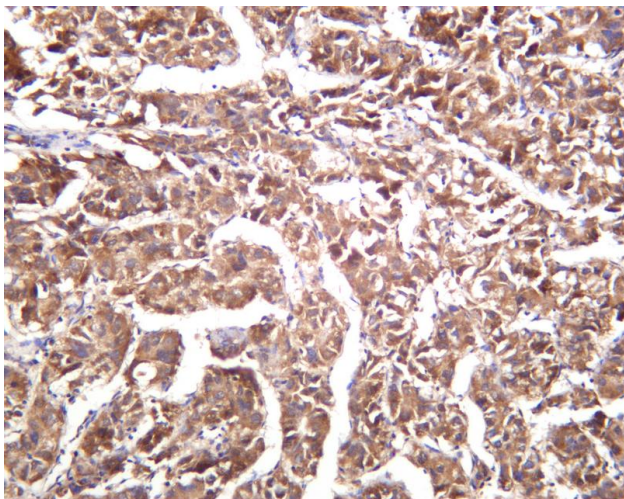




Rat liver was stained with anti-TBK1 rabbit antibody



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-TBK1 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: HeLa Lane 2: Jurkat Lane 3: C6  
Predicted band size: 84kDa Observed band size: 84kDa



Human hepatocellular carcinoma was stained with anti-TBK1 rabbit antibody

