



TBK1/NAK (phospho-Ser172) rabbit pAb

Catalog No	YP-Ab-14622
Isotype	IgG
Reactivity	Human;Mouse
Applications	ELISA
Gene Name	TBK1 NAK
Immunogen	Synthesized phosho peptide around human TBK1 and NAK (Ser172)
Specificity	This antibody detects endogenous levels of Human Mouse TBK1/NAK (phospho-Ser172). The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):FVsLY
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit serum by affinity-chromatography using specific immunogen.
Dilution	ELISA 1:5000-20000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	EC:2.7.11.1;NF kappa B activating kinase;NF-kappa-B-activating kinase;Serine/threonine protein;TBK1;TBK1 NAK;TBK1/NAK (Ser172);Serine/threonine-protein kinase TBK1;T2K;TANK-binding kinase 1
Observed Band	80kD
Calculated Molecular Weight	80kD
Cell Pathway	Cytoplasm . Upon mitogen stimulation or triggering of the immune system, TBK1 is recruited to the exocyst by EXOC2. .
Tissue Specificity	Ubiquitous with higher expression in testis. Expressed in the ganglion cells, nerve fiber layer and microvasculature of the retina.
Function	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.

Products Images