

# Rabbit Anti-TBK1/NAK antibody

# SL7497R

Product Name:	TBK1/NAK
Chinese Name:	NF-κB活化激酶抗体
Alias:	EC 2.7.11.1; FLJ11330; NAK; NF kappa B activating kinase; NF kB activating kinase; NF-kappa-B-activating kinase; Serine/threonine protein kinase TBK 1; Serine/threonine protein kinase TBK1; Serine/threonine-protein kinase TBK1; T2K; TANK binding kinase 1; TANK-binding kinase 1; TBK 1; Tbk1; TBK1_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Pig, Cow, Horse, Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-
	500IF=1:100-500 (Paraffin sections need antigen repair)
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	84kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human TBK1:131-230/729
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized
	antibody is stable at room temperature for at least one month and for greater than a year
	when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of
	antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	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]

#### 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.

### **Subcellular Location:**

Cytoplasm.

## Tissue Specificity:

Ubiquitous with higher expression in testis.

## Similarity:

Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. I-kappa-B kinase subfamily.

Contains 1 protein kinase domain.

**SWISS:** 

Q9UHD2

Gene ID:

29110

## Database links:

Entrez Gene: 29110 Human

Entrez Gene: 56480 Mouse

Entrez Gene: 299827 Rat

Omim: 604834 Human

SwissProt: O9UHD2 Human

SwissProt: Q9WUN2 Mouse

Unigene: 505874 Human

Unigene: 34580 Mouse

Unigene: 30683 Rat

# **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.