

Rabbit Phospho-TBK (S172) Polyclonal Antibody | anti-TBK1 antibody

Phospho-TBK (S172) Antibody

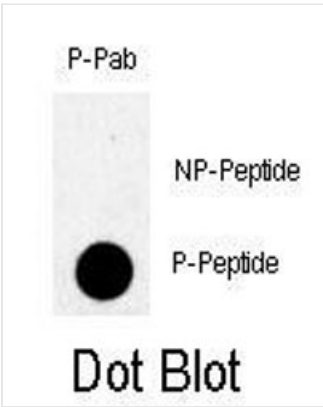
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA283616	Rabbit	Human; Predicted: Zebrafish, Mouse, Xenopus	ELISA, Dot Blot

PRODUCT SYNONYMS

Phospho-TBK (S172); Polyclonal Antibody; Phospho-TBK (S172) Antibody; Serine/threonine-protein kinase TBK1; NF-kappa-B-activating kinase; T2K; TANK-binding kinase 1; TBK1; NAK; anti-TBK1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human; Predicted: Zebrafish, Mouse, Xenopus
Clonality	Polyclonal
Isotype	Rabbit Ig
Clone Number	RB16573
Specificity	This TBK Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S172 of human TBK.
Purity/Purification	Peptide Affinity Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Applicable Applications for anti-TBK1 antibody	ELISA, DB (Dot Blot)
Cellular Location	Cytoplasm. Note=Upon mitogen stimulation or triggering of the immune system, TBK1 is recruited to the exocyst by EXOC2
Tissue Location	Ubiquitous with higher expression in testis. Expressed in the ganglion cells, nerve fiber layer and microvasculature of the retina.
Preparation and Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.



DB (Dot Blot)
Dot blot analysis of anti-Phospho-TBK-pS172 Antibody (AAA283616) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

ADDITIONAL INFORMATION

Related Product Information for anti-TBK1 antibody	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. TKB is similar to IKB kinases and can mediate NFKB activation in response to certain growth factors. The protein can form a complex with the IKB protein TANK and TRAF2 and release the NFKB inhibition caused by TANK. Function: Serine/threonine kinase that plays an essential role in regulating inflammatory responses to foreign agents. Following activation of toll-like receptors by viral or bacterial components, associates with TRAF3 and TANK and phosphorylates interferon regulatory factors (IRFs) IRF3 and IRF7 as well as DDX3X. This activity allows subsequent homodimerization and nuclear translocation of the IRFs leading to transcriptional activation of pro-inflammatory and antiviral genes including IFNA and IFNB. In order to establish such an antiviral state, TBK1 form several different complexes whose composition depends on the type of cell and cellular stimuli. Thus, several scaffolding molecules including FADD, TRADD, MAVS, AZI2, TANK or TBKBP1/SINTBAD can be recruited to the TBK1-containing-complexes. Under particular conditions, functions as a NF-kappa-B effector by phosphorylating NF-kappa-B inhibitor alpha/NFKBIA, IKBKB or RELA to translocate NF-Kappa-B to the nucleus. Restricts bacterial proliferation by phosphorylating the autophagy receptor OPTN/Optineurin on 'Ser- 177', thus enhancing LC3 binding affinity and antibacterial autophagy (PubMed:21617041). Phosphorylates SMCR8 component of the C9orf72-SMCR8 complex, promoting autophagosome maturation (PubMed:27103069). Phosphorylates and activates AKT1 (PubMed:21464307). Seems to play a role in energy balance regulation by sustaining a state of chronic, low-grade inflammation in obesity, wich leads to a negative impact on insulin sensitivity. Attenuates retroviral budding by phosphorylating the endosomal sorting complex required for transport-I (ESCRT-I) subunit VPS37C (PubMed:21270402). Phosphorylates Borna disease virus (BDV) P protein (PubMed:16155125). Plays an essential role in the TLR3- and IFN dependent control of herpes virus HSV-1 and HSV-2 infections in the central nervous system (PubMed:22851595).
Product Categories/Family for anti-TBK1 antibody	Signal Transduction; Phospho Antibodies
References	Deng,W., J. Biol. Chem. 283 (51), 35590-35597 (2008) Chessler,A.D., J. Immunol. 181 (11), 7917-7924 (2008) Soulat,D., EMBO J. 27 (15), 2135-2146 (2008)

NCBI AND UNIPROT INFORMATION

NCBI GI #	7019547
NCBI GeneID	29110
NCBI Accession #	NP_037386.1

NCBI GenBank Nucleotide #	NM_013254.3
UniProt Accession #	Q9UHD2 ; Q8IYV3 ; Q9NUJ5 ; A8K4S4
NCBI Official Full Name	serine/threonine-protein kinase TBK1
NCBI Official Synonym Full Names	TANK-binding kinase 1
NCBI Official Symbol	TBK1
NCBI Official Synonym Symbols	NAK; T2K
NCBI Protein Information	serine/threonine-protein kinase TBK1
UniProt Protein Name	Serine/threonine-protein kinase TBK1
UniProt Gene Name	TBK1
UniProt Synonym Gene Names	NAK
UniProt Entry Name	TBK1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/phospho-tbk-s172-antibody-clone-rb16573-dot-blot-elisa/283616>