

Datasheet for ABIN746363
anti-TBK1 antibody (pSer172)[Go to Product page](#)

4 Images

3 Publications

Overview

Quantity:	100 µL
Target:	TBK1
Binding Specificity:	pSer172
Reactivity:	Mouse, Rat, Monkey
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This TBK1 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	KLH conjugated synthetic phosphopeptide derived from human TBK1 around the phosphorylation site of Ser172
Isotype:	IgG
Specificity:	This phosphorylation site is homologous across the listed species.
Cross-Reactivity:	Human, Mouse
Purification:	Purified by Protein A.

Target Details

Target:	TBK1
Alternative Name:	TBK1 (TBK1 Products)

Target Details

Background:	<p>Synonyms: NAK, T2K, Serine/threonine-protein kinase TBK1, NF-kappa-B-activating kinase, TANK-binding kinase 1, TBK1</p> <p>Background: 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. Phosphorylates and activates AKT1. 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. Phosphorylates Borna disease virus (BDV) P protein.</p>
Gene ID:	29110
UniProt:	Q9UHD2
Pathways:	TLR Signaling , Activation of Innate immune Response , Hepatitis C , Toll-Like Receptors Cascades , SARS-CoV-2 Protein Interactome

Application Details

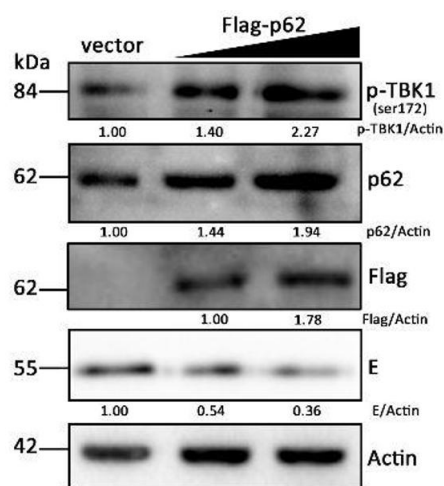
Application Notes:	WB 1:300-5000 ELISA 1:500-1000 IHC-P 1:200-400 IHC-F 1:100-500 IF(IHC-P) 1:50-200 IF(IHC-F) 1:50-200 IF(ICC) 1:50-200
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 µg/µL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

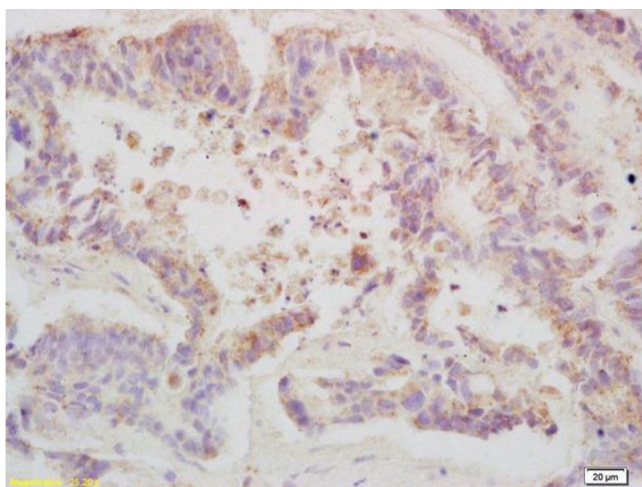
Publications

Product cited in:	<p>Hu, Pan, Cheng, Zhang, Wang, Chen, Zhu, Liu, Yang, Wu, Zhao, Huang, Zhang, Mao, Ou, Yu, Zhang, Liu, Tian, Pan, Rehman, Yin, Jia: "Autophagy Promotes Duck Tembusu Virus Replication by Suppressing p62/SQSTM1-Mediated Innate Immune Responses In Vitro." in: Vaccines, Vol. 8 , Issue 1, (2020) (PubMed).</p> <p>Wan, Chen, Li, Pang, Chen, Nie, Pan, Qiao, Bao: "Porcine FcγRIIb mediated PRRSV ADE infection through inhibiting IFN-β by cytoplasmic inhibitory signal transduction." in: International journal of biological macromolecules, Vol. 138, pp. 198-206, (2020) (PubMed).</p> <p>Takahashi, Loo, Okada, Kamachi, Watanabe, Wakita, Watanabe, Kawamoto, Miyata, Barber, Ohtani, Hara: "Downregulation of cytoplasmic DNases is implicated in cytoplasmic DNA accumulation and SASP in senescent cells." in: Nature communications, Vol. 9, Issue 1, pp. 1249, (2018) (PubMed).</p>
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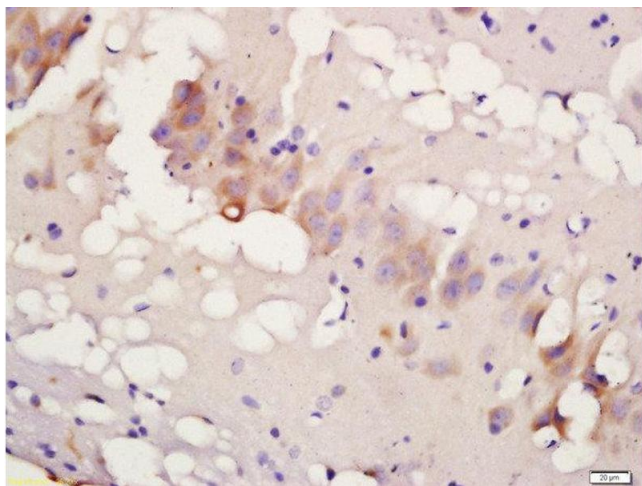
Western Blotting

Image 1. DEF cells were treated as described in Figure 6A, and cells were harvested for Western blot analysis and immunoblotted for p-TBK1 (ABIN746363), p62, Flag, DTMUV-E, and beta-actin. Source:31941042



Immunohistochemistry

Image 2. Formalin-fixed and paraffin embedded human colon carcinoma labeled with Anti-Phospho-TBK1/NAK (Ser172) Polyclonal Antibody, Unconjugated (ABIN746363) at 1:200 followed by conjugation to the secondary antibody and DAB staining



Immunohistochemistry (Paraffin-embedded Sections)

Image 3. Formalin-fixed and paraffin embedded rat brain labeled with Rabbit Anti-TBK1 (Ser172) Polyclonal Antibody, Unconjugated 1:200 followed by conjugation to the secondary antibody and DAB staining

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN746363.