

Datasheet for ABIN7140130  
**anti-TBK1 antibody (AA 644-661)**[Go to Product page](#)

## 2 Images

## Overview

Quantity:	100 µL
Target:	TBK1
Binding Specificity:	AA 644-661
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This TBK1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (IF)

## Product Details

Immunogen:	Peptide sequence from Human Serine/threonine-protein kinase TBK1 protein (644-661AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

## Target Details

Target:	TBK1
Alternative Name:	TBK1 ( <a href="#">TBK1 Products</a> )
Background:	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

## Target Details

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, which 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).

Aliases: EC 2.7.11.1 antibody, FLJ11330 antibody, FTDALS4 antibody, NAK antibody, NF kappa B activating kinase antibody, NF kB activating kinase antibody, NF-kappa-B-activating kinase antibody, Serine/threonine protein kinase TBK 1 antibody, Serine/threonine protein kinase TBK1 antibody, Serine/threonine-protein kinase TBK1 antibody, T2K antibody, TANK binding kinase 1 antibody, TANK-binding kinase 1 antibody, TBK 1 antibody, Tbk1 antibody, TBK1\_HUMAN antibody

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: Recommended dilution: WB:1:1000-1:5000, IF:1:50-1:200,

Restrictions: For Research Use only

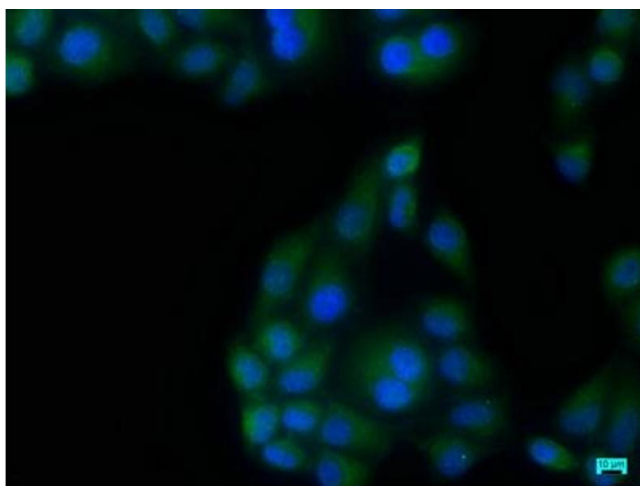
## Handling

Format: Liquid

## Handling

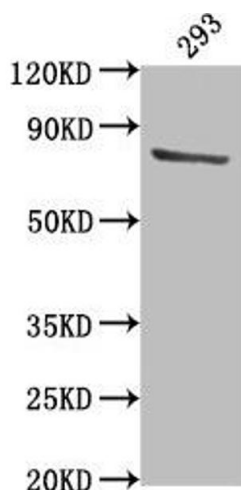
Buffer:	Preservative: 0.03 % Proclin 300
	Constituents: 50 % Glycerol, 0.01M PBS, pH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

## Images



### Immunofluorescence

**Image 1.** Immunofluorescence staining of HeLa cells with ABIN7140130 at 1:133, counter-stained with DAPI. The cells were fixed in 4 % formaldehyde, permeabilized using 0.2 % Triton X-100 and blocked in 10 % normal Goat Serum. The cells were then incubated with the antibody overnight at 4 °C. The secondary antibody was Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



### Western Blotting

**Image 2.** Western Blot Positive WB detected in: 293 whole cell lysate. All lanes: TBK1 antibody at 1:2000. Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution. Predicted band size: 84 kDa. Observed band size: 84 kDa.