

### **Product datasheet for TA336453**

#### OriGene Technologies, Inc.

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# **TBK1 Mouse Monoclonal Antibody [Clone ID: 108A429]**

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: 108A429

**Applications:** ICC/IF, IHC, IP, WB

Recommended Dilution: Immunocytochemistry/ Immunofluorescence: 1:20, Immunohistochemistry: 1:10-1:500,

Immunohistochemistry-Paraffin: 1:10-1:500, Western Blot: 1-2 ug/ml, Simple Western: 10

ug/ml, Knockout Validated, Immunoprecipitation

**Reactivity:** Human, Mouse, Rat, Bovine, Canine

**Host:** Mouse

Isotype: IgG1, kappa
Clonality: Monoclonal

**Immunogen:** A synthetic peptide corresponding to amino acids 563-577 (YYQFKKDKAERRLAYC) of human

TBK1 was used as immunogen for this antibody (NP\_037386).

Formulation: PBS containing 0.05% BSA, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -

20C long term. Avoid freeze-thaw cycles.

**Concentration:** lot specific

**Purification:** Protein G purified

**Conjugation:** Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Gene Name:** TANK binding kinase 1

Database Link: NP 037386

Entrez Gene 56480 MouseEntrez Gene 299827 RatEntrez Gene 29110 Human

Q9UHD2





Background:

NF-kB (nuclear factor kB) is sequestered in the cytoplasm by IkB family of inhibitory proteins that mask the nuclear localization signal of NF-kB thereby preventing translocation of NF-kB to the nucleus. External stimuli such as tumor necrosis factor or other cytokines results in phosphorylation and degradation of IkB releasing NF-kB dimers. NF-kB dimer subsequently translocates to the nucleus and activates target genes. Synthesis of IkBa is autoregulated. IkB proteins are phosphorylated by IkB kinase complex consisting of at least three proteins, IKK1/a, IKK2/b, and IKK3/g. IKK1/a and IKK2/b are phosphorylated by NF-kB-inducing kinase (NIK) and MAP kinase kinase kinase-1 (MEKK1), respectively. Recently, a new IKK family member, TBK1 [(TANK-binding kinase), also known as NAK and T2K] has been identified. TANK (TRAF-associated NF-kB activator) interacts with TBK1 and activates NF-kB in a kinase dependent manner.

Synonyms: NAK; T2K

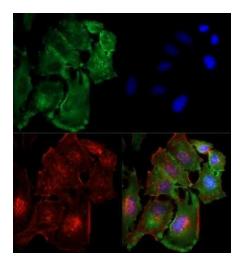
**Note:** In Western Blot this antibody detects a band at 80 kDa.

**Protein Families:** Druggable Genome, Protein Kinase

Protein Pathways: Cytosolic DNA-sensing pathway, RIG-I-like receptor signaling pathway, Toll-like receptor

signaling pathway

# **Product images:**

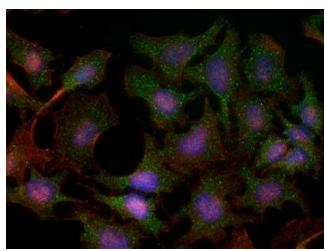


Immunocytochemistry/Immunofluorescence: TBK1 Antibody (108A429) TA336453 - Antibody was tested in HeLa cells with DyLight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and DyLight 550 (red). A dilution of 1:10 was used. Image objective 40x.

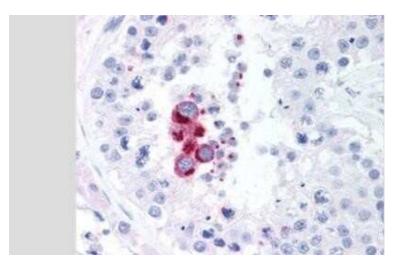




Simple Western: TBK1 Antibody (108A429) TA336453 - Lane view shows a specific band for NAK/TBK1 in 0.5 mg/ml of Daudi (left) and Raw 264.7 (right) lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system. \* Non-specific interaction with the 230 kDa Simple Western standard may be seen with this antibody

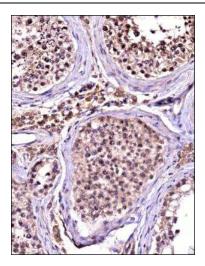


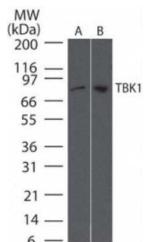
Immunocytochemistry/Immunofluorescence: TBK1 Antibody (108A429) TA336453 - HeLa cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X PBS + 0.05% Triton X-100. The cells were incubated with anti-TBK1 at 20 ug/ml overnight at 4C and detected with an anti-mouse DyLight 488 (Green) at a 1:500 dilution. Actin was detected with Phalloidin 568 (Red) at a 1:200 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.

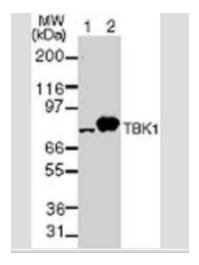


Immunohistochemistry-Paraffin: TBK1 Antibody (108A429) TA336453 - Immunohistochemistry: TBK1 Antibody (108A429) - Azide and BSA Free [NBP2-33243] - Staining on human testis (Formalin-Fixed Paraffin-Embedded (FFPE)) Image from the Azide and BSA Free version of this antibody.









Immunohistochemistry-Paraffin: TBK1 Antibody (108A429) TA336453 - Analysis of FFPE human testis tissue section using Peripheral Node Addressin antibody (clone MECA-79R) at 1:200. The staining was developed with HRP-DAB detection method and the counterstaining was performed using hematoxylin.

Western Blot: TBK1 Antibody (108A429) TA336453 - Analysis of Human Daudi (A) and mouse RAW (B) cell lysate probed with TBK1 antibody at 2 ug/ml.

Western Blot: TBK1 Antibody (108A429) TA336453 - Analysis using Azide and BSA Free version of TA336453. Lysate from 293 cells untransfected (lane 1) and transfected with human TBK1 cDNA (lane 2) probed with TBK1 antibody at 2 ug/ml.