
Product Name: KD-Validated TANK Binding Kinase 1 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVAb00757**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 83.6kDa

Antigen Information

Gene Name	TBK1 TBK1; TANK Binding Kinase 1; NAK; Serine/Threonine-Protein Kinase TBK1; NF-Kappa-B-
Alternative Names	Activating Kinase; TANK-Binding Kinase 1; T2K; NF-KB-Activating Kinase; EC 2.7.11.1; EC 2.7.11; FTDALS4; IIAE8
Gene ID	29110.0
SwissProt ID	Q9UHD2
Immunogen	A synthesized peptide derived from human NAK/TBK1 (N-term)

Background

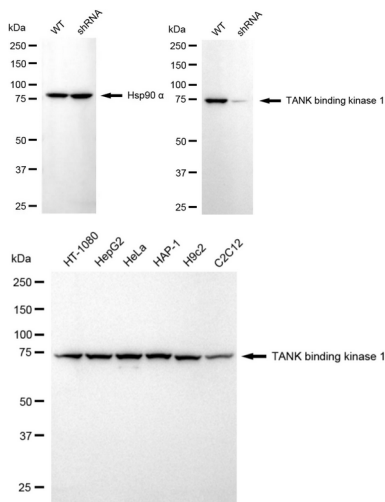
The NF-kappa-B (NFKB) complex of proteins is inhibited by I-kappa-B (IKB) proteins, which inactivate NFKB by trapping it in the

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. The protein encoded by this gene is similar to IKB kinases and can mediate NFKB activation in response to certain growth factors. The protein is also an important kinase for antiviral innate immunity response. [provided by RefSeq, Sep 2021]

Research Area

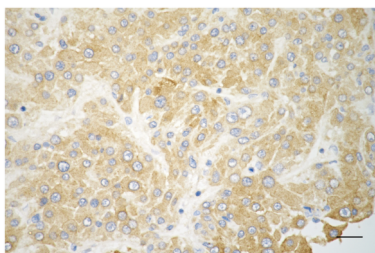
Signal Transduction, Epigenetics and Nuclear Signaling, Neuroscience

Image Data

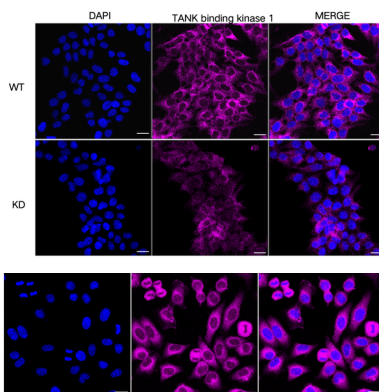


Western blotting analysis using TANK binding kinase 1 antibody (KVA00757). TANK binding kinase 1 expression in wild type (WT) and TANK binding kinase 1 (TBK1) shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with TANK binding kinase 1 antibody (KVA00757, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.

Western blotting analysis using TANK binding kinase 1 antibody (KVA00757). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with TANK binding kinase 1 antibody (KVA00757, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.

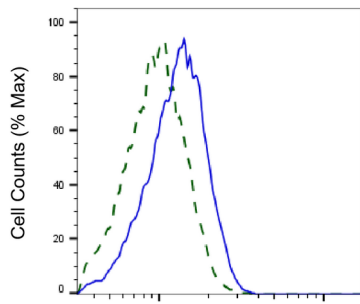


Immunohistochemistry was performed on paraffin-embedded human hepatocarcinoma using TANK binding kinase 1 antibody (KVA00757, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



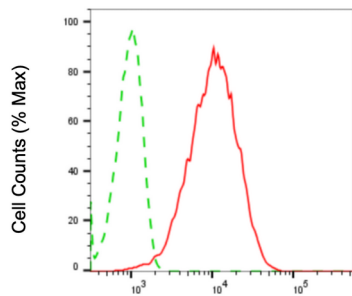
Immunocytochemical staining of HeLa cells using TANK binding kinase 1 antibody (KVA00757, 1:1,000). Top panel: wild-type (WT); Bottom panel: TANK binding kinase 1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; TANK binding kinase 1 was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm.

Immunocytochemical staining of HepG2 cells with TANK binding kinase 1 antibody (KVA00757, 1:1,000). Nuclei were stained blue with DAPI; TANK binding kinase 1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.



TANK binding kinase 1-Alexa Fluor® 647

Validation of TANK binding kinase 1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with TANK binding kinase 1 antibody (KVA00757, 1:2,000) and analyzed using BD flow cytometer.



TANK binding kinase 1-Alexa Fluor® 647

Flow cytometric analysis of TANK binding kinase 1 expression in HepG2 cells using TANK binding kinase 1 antibody (KVA00757, 1:2,000). Green, isotype control; red, TANK binding kinase 1.