Product Datasheet

TBK1 Antibody (108A429) - BSA Free
NB100-56705SS

Unit Size: 0.025 mg

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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Reviews: 2 Publications: 31

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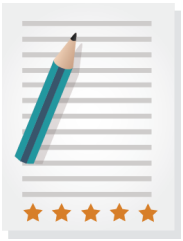
Updated 9/9/2025 v.20.1



NB100-56705SS

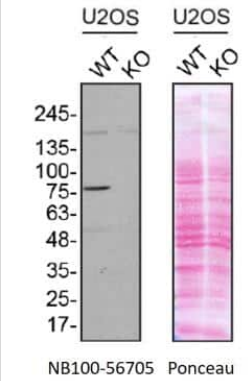
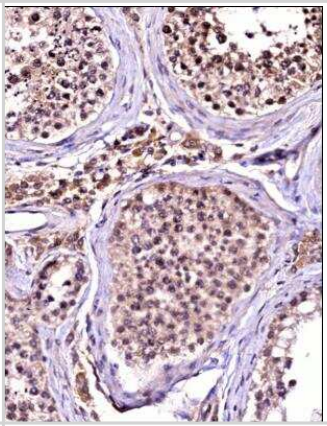
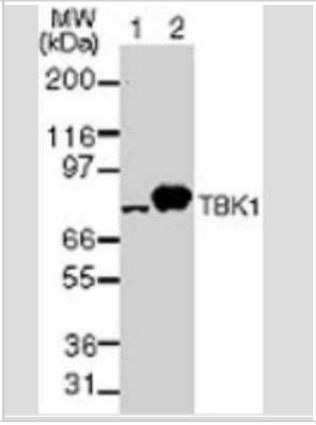
TBK1 Antibody (108A429) - BSA Free

Product Information	
Unit Size	0.025 mg
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	108A429
Preservative	0.05% Sodium Azide
Isotype	IgG1 Kappa
Purity	Protein G purified
Buffer	PBS
Target Molecular Weight	84 kDa

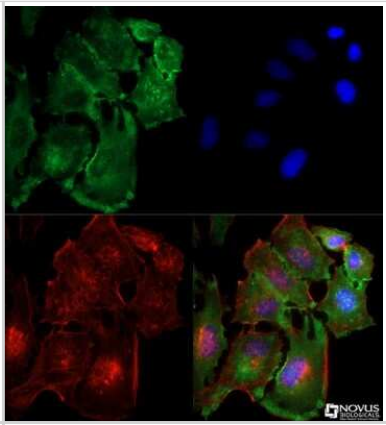
Product Description	
Description	Novus Biologicals Knockout (KO) Validated Mouse TBK1 Antibody (108A429) - BSA Free (NB100-56705) is a monoclonal antibody validated for use in IHC, WB, Flow, ICC/IF, Simple Western and IP. Anti-TBK1 Antibody: Cited in 30 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Mouse
Gene ID	29110
Gene Symbol	TBK1
Species	Human, Mouse, Rat, Bovine, Canine
Immunogen	A synthetic peptide corresponding to amino acids 563-577 (YYQFKKDKAERRLAYC) of human TBK1 was used as immunogen for this antibody (NP_037386).

Product Application Details	
Applications	Western Blot, Simple Western, Immunohistochemistry-Paraffin, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunoprecipitation, Knockout Validated
Recommended Dilutions	Western Blot 1-2 ug/ml, Simple Western 10 ug/ml, Immunohistochemistry 1:10-1:500, Immunocytochemistry/ Immunofluorescence 1:20, Immunoprecipitation, Immunohistochemistry-Paraffin 1:10-1:500, Knockout Validated
Application Notes	In Western Blot this antibody detects a band at 80 kDa. In Simple Western only 10 - 15 uL of the recommended dilution is used per data point. See Simple Western Antibody Database for Simple Western validation: Tested in Daudi and Raw 2647 lysate 0.5 mg/mL, separated by Size, antibody dilution of 10 ug/mL. Separated by Size-Wes, Sally Sue/Peggy Sue.

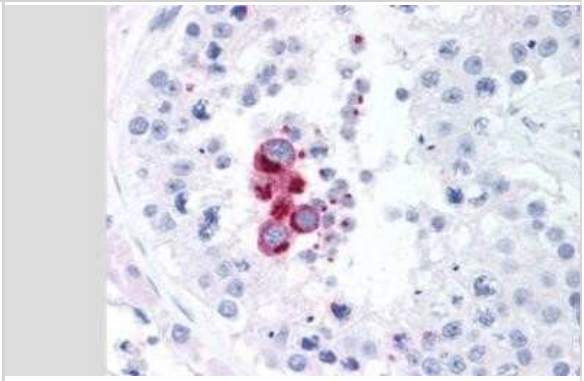
Images

Western Blot: TBK1 Antibody (108A429) [NB100-56705] - Western blot using lysates from U20S parental cell line and TBK1 knockout U20S cell line (KO), collected in RIPA buffer. Nitrocellulose membrane was probed with Mouse Anti-Human/Mouse/Rat TBK1 Monoclonal Antibody (Catalog # NB100-56705) at 1 ug/ul O/N at 4C, followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody and ECL detection. A specific band at 83 kDa was detected for TBK1 in the parental U20S cell line, but is not detectable in knockout U20S cell line. The Ponceau stained transfers of each blot are shown to confirm equal protein loading. Image, protocol and testing courtesy of YCharOS Inc. (ycharos.com).	
Simple Western: TBK1 Antibody (108A429) [NB100-56705] - 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	
Immunohistochemistry-Paraffin: TBK1 Antibody (108A429) [NB100-56705] - 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) [NB100-56705] - Analysis using Azide and BSA Free version of NB100-56705. Lysate from 293 cells untransfected (lane 1) and transfected with human TBK1 cDNA (lane 2) probed with TBK1 antibody at 2 ug/ml.	

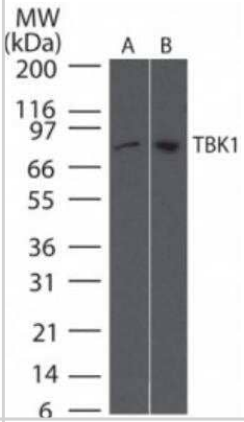
Immunocytochemistry/Immunofluorescence: TBK1 Antibody (108A429) [NB100-56705] - Antibody was tested in HeLa cells with DyLight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and DyLight 550 (red). A dilution of 1:10 was used. Image objective 40x.



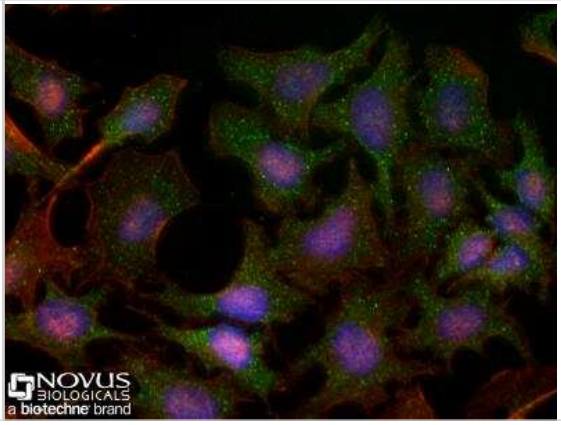
Immunohistochemistry-Paraffin: TBK1 Antibody (108A429) [NB100-56705] - Immunohistochemistry: TBK1 Antibody (108A429) - Azide and BSA Free [NBP2-33243] - Staining on human testis (Formalin-Fixed Paraffin-Embedded (FFPE)) Image from the Azide and BSA Free version of this antibody.



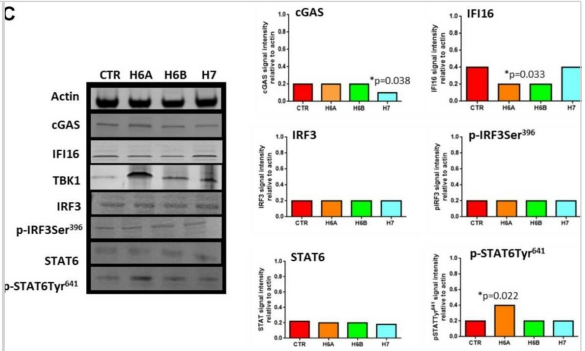
Western Blot: TBK1 Antibody (108A429) [NB100-56705] - Analysis of Human Daudi (A) and mouse RAW (B) cell lysate probed with TBK1 antibody at 2 ug/ml.



Immunocytochemistry/Immunofluorescence: TBK1 Antibody (108A429) [NB100-56705] - 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.



STING pathway analysis. (A) STING mRNA relative expression in uninfected (CTR), HHV-6A, HHV-6B or HHV-7 infected NK92 cells 3d.p.i. □p values Student t test; (B) Western Blot analysis for house-keeping actin (upper blot) and STING (lower blot) expression in uninfected (CTR), HHV-6A, HHV-6B or HHV-7 infected NK92 cells 3d.p.i. For stimulation of the cytoplasmic DNA sensing pathways, we used 2′,3′-cGAMP. The molecular weights were determined by protein ladder (14.4-97.4kDa) (BioRad). Actin was evidenced at 44kDa, STING 35kDa. The images were acquired by Geliance 600 (Perkin Elmer, MA, United States). The complete Western Blots are reported in Supplementary Figure S3. □p value Student t test. The histogram represents the STING band intensity in relation with the corresponding actin band. (C) Western Blot analysis for house-keeping actin (upper blot) and cGas, IFI16, TBK1, IRF3, pIRF3Ser396, STAT6, pSTAT6Tyr641 (lower blots) expression in uninfected (CTR), HHV-6A, HHV-6B or HHV-7 infected NK92 cells 3 d.p.i. The molecular weights were determined by protein ladder (25-250kDa; 14.4-97.4 kDa). Actin was evidenced at 44kDa, cGas at 68kDa, IFI16 at 100kDa, TBK1 at 80kDa, IRF3 at 55kDa, STAT6 at 120kDa. The histogram represents the STING band intensity in relation with the corresponding actin band. □p value Student t test. The images were acquired by Geliance 600 (Perkin Elmer, MA, United States). The complete Western Blots are reported in Supplementary Figure S3. (D) HHV-6A infected NK92 cells were characterized by immunofluorescence for STING [anti-STING PE Ab (Clone T3-680)], STAT6 [anti-STAT6 FITC (Clone D-1)] and gp116 (Clone 6A5) expression. (Nikon Eclipse TE2000S) equipped with a digital camera. Original magnification 100×. Uninfected NK92 cells were used as control. Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/32140147), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Gulen MF, Samson N, Keller A et al. cGAS-STING drives ageing-related inflammation and neurodegeneration Nature 2023-08-01 [PMID: 37532932]

Details:
scRNA-seq

Qiu W, Zhang Q, Zhang R et Al. N(6)-methyladenosine RNA modification suppresses antiviral innate sensing pathways via reshaping double-stranded RNA Nat Commun 2021-03-11 [PMID: 33707441]

Hage A, Bharaj P, van Tol S et al. The RNA helicase DHX16 recognizes specific viral RNA to trigger RIG-I-dependent innate antiviral immunity Cell reports 2022-03-08 [PMID: 35263596] (WB)

Arner EN, Westcott JM, Hinz S et al. AXL-TBK1 driven nuclear AKT3 promotes metastasis bioRxiv 2022-01-01 (FLOW, Mouse)

Xing J, Zhang A, Du Y et al. Identification of poly(ADP-ribose) polymerase 9 (PARP9) as a noncanonical sensor for RNA virus in dendritic cells Nature communications 2021-05-11 [PMID: 33976210] (WB, Mouse)

Deng M, Tam JW, Wang L et al. TRAF3IP3 negatively regulates cytosolic RNA induced anti-viral signaling by promoting TBK1 K48 ubiquitination Nat Commun 2020-05-04 [PMID: 32366851] (IP, Rat)

Shi D, Chen M, Liu L et al. Anti-influenza A virus mechanism of three representative compounds from Flos Trollii via TLRs signaling pathways J Ethnopharmacol 2020-01-28 [PMID: 32004628] (WB, Mouse)

van Tol S, Atkins C, Bharaj P et al. VAMP8 Contributes to the TRIM6-Mediated Type I Interferon Antiviral Response during West Nile Virus Infection J. Virol. 2020-01-06 [PMID: 31694946] (WB)

Wuerth JD, Habjan M, Wulle J et al. NSs protein of Sandfly fever Sicilian phlebovirus counteracts interferon induction by masking the DNA-binding domain of interferon regulatory factor 3. J. Virol. 2018-09-19 [PMID: 30232186] (WB, Human)

Gulen MF, Koch U, Haag SM et al. Signalling strength determines proapoptotic functions of STING Nat Commun 2017-09-05 [PMID: 28874664] (WB)

Kwon D, Park E, Sesaki H, Kang SJ et al. Carbonyl cyanide 3-chlorophenylhydrazone (CCCP) suppresses STING-mediated DNA sensing pathway through inducing mitochondrial fission Biochem. Biophys. Res. Commun. 2017-08-30 [PMID: 28859978] (WB)

Ogasawara N, Sasaki M, Itoh Y et al. Rebamipide suppresses TLR-TBk1 signaling pathway resulting in regulating IRF3/7 and IFN-alpha/beta reduction. J Clin Biochem Nutr. [PMID: 21373269] (WB, Human)

More publications at http://www.novusbio.com/NB100-56705

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