Product Datasheet

TAZ/WWTR1 Antibody - BSA Free
NB110-58359

Unit Size: 0.1 ml

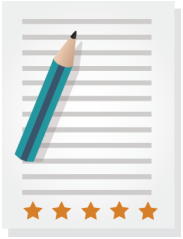
Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

www.novusbio.com technical@novusbio.com

Reviews: 1 Publications: 20

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/NB110-58359

Updated 9/9/2025 v.20.1



NB110-58359

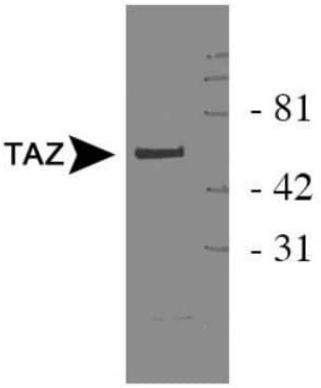
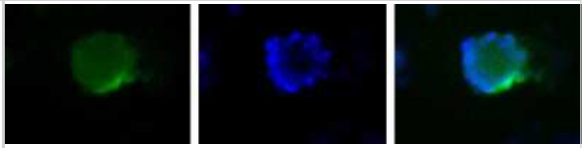
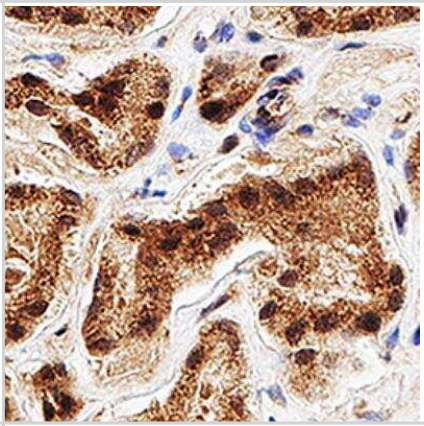
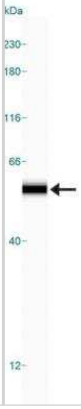
TAZ/WWTR1 Antibody - BSA Free

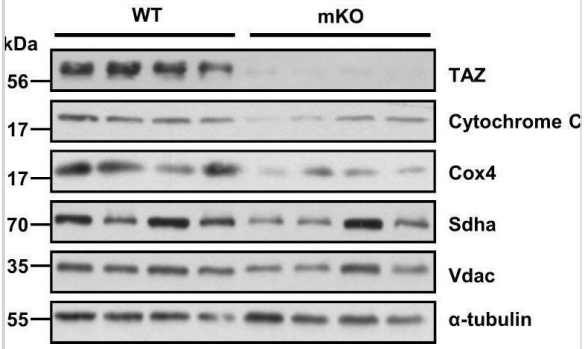
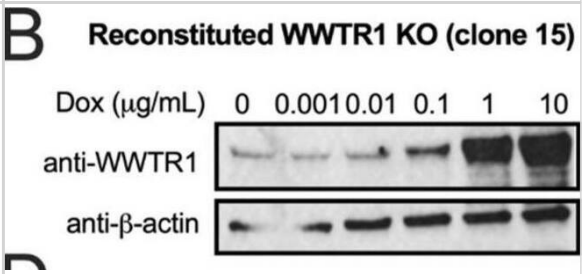
Product Information	
Unit Size	0.1 ml
Concentration	1.0 mg/ml
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS

Product Description	
Description	Novus Biologicals Rabbit TAZ/WWTR1 Antibody - BSA Free (NB110-58359) is a polyclonal antibody validated for use in IHC, WB, ICC/IF, Simple Western, IP and ChIP. Anti-TAZ/WWTR1 Antibody: Cited in 20 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	25937
Gene Symbol	WWTR1
Species	Human, Mouse, Rat
Immunogen	Synthetic peptides made to the human TAZ protein. These peptides were selected for the lack of homology to YAP protein. [UniProt# Q9GZV5]

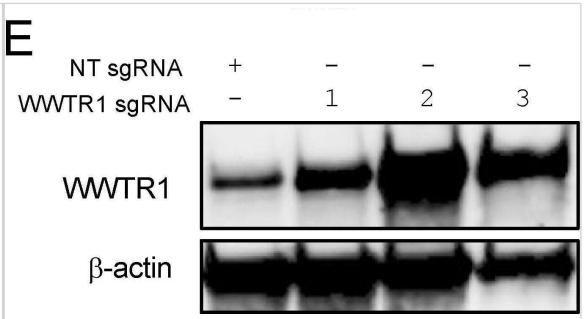
Product Application Details	
Applications	Western Blot, Simple Western, Immunohistochemistry-Paraffin, Chromatin Immunoprecipitation, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunoprecipitation, Proximity Ligation Assay, Chromatin Immunoprecipitation (ChIP)
Recommended Dilutions	Western Blot 1:1000-1:5000, Simple Western 1:100, Chromatin Immunoprecipitation reported in scientific literature (PMID 25587023), Immunohistochemistry 1:500, Immunocytochemistry/ Immunofluorescence 1:50-1:200, Immunoprecipitation 1:100, Immunohistochemistry-Paraffin 1:500. Use reported in scientific literature (PMID 25587023), Proximity Ligation Assay reported in scientific literature (PMID 25587023), Chromatin Immunoprecipitation (ChIP)
Application Notes	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 HeLa lysate 0.5 mg/mL, separated by Size, antibody dilution of 1:100, apparent MW was 58 kDa. Separated by Size-Wes, Sally Sue/Peggy Sue.

Images

Western Blot: TAZ/WWTR1 Antibody [NB110-58359] - Detection of TAZ on HEK 293 cell lysate using NB110-58359.	
Immunocytochemistry/Immunofluorescence: TAZ/WWTR1 Antibody [NB110-58359] - Detection of TAZ (Green) in HepG2 cells using NB110-58359. Nuclei (Blue) are counterstained with Hoecsht 33258.	
Immunohistochemistry-Paraffin: TAZ/WWTR1 Antibody [NB110-58359] - IHC analysis of formalin fixed paraffin-embedded (FFPE) human kidney using TAZ/WWTR1 antibody at 1:500 on a Bond Rx autostainer (Leica Biosystems). The assay involved 20 minutes of heat induced antigen retrieval (HIER) using 10mM sodium citrate buffer (pH 6.0) and endogenous peroxidase quenching with peroxide block. The sections were incubated with primary antibody for 30 minutes and Bond Polymer Refine Detection (Leica Biosystems) with DAB was used for signal development followed by counterstaining with hematoxylin. Whole slide scanning and capturing of representative images was performed using Aperio AT2 (Leica Biosystems). Nuclear and cytoplasmic staining was observed. Staining was performed by Histowiz.	
Simple Western: TAZ/WWTR1 Antibody [NB110-58359] - Simple Western lane view shows a specific band for TAZ in 0.5 mg/ml of HeLa lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.	

Immunoprecipitation: TAZ/WWTR1 Antibody - BSA Free [NB110-58359] - TAZ knockout in muscle decreases mitochondrial mass, respiration, & exercise ability. b Proteins of gastrocnemius muscle of WT & mKO mice analysed via immunoblotting for detection of mitochondrial marker proteins. Alpha-tubulin used as loading control. Representative data shown & experiment performed twice w/ similar results. Image collected & cropped by CiteAb from following publication (https://pubmed.ncbi.nlm.nih.gov/35115527), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	
RhoV and WWTR1 enhance ZIKV infection in A549 cells. Reconstituted (A) RhoV or (B) WWTR1 A549 KO clones were treated with different amounts of Dox (0, 0.001, 0.01, 0.1, 1, and 10 ug/mL) for 24 h to induce the expression of N-terminally V5-tagged RhoV or WWTR1 through the ePiggyBac transposon system. RhoV, WWTR1, and β-actin (loading control) protein expression was determined by immunoblotting with V5, WWTR1, and β-actin antibodies. The data are representative of two independent experiments. Reconstituted (C) RhoV or (D) WWTR1 A549 KO clones were treated with or without 1 ug/mL of Dox for 24 h prior to 1 h adsorption with ZIKV (MOI = 1 PFU/cell) and harvested at 12, 18, 24, and 48 h.p.i. to quantify infection levels. Dox was added back to the media during the course of infection. ZIKV infected cells were then fixed and permeabilized to stain with the pan-flavivirus envelope antibody prior to flow cytometry analysis. Infection levels of cells treated with Dox were normalized to that of the respective untreated condition (no Dox) at each timepoint and reported as fold change in ZIKV infection. The data are combined from three independent experiments. (E,F) Supernatant of infected cells from (C,D) was collected at 12, 18, 24, and 48 h.p.i. and titered on Vero cells by plaque assay. The data are representative of three independent experiments. Asterisks indicate statistically significant differences (two-way ANOVA and Sidak's multiple comparisons test: *, $p < 0.05$; **, $p < 0.01$; ****, $p < 0.0001$). Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/34834920), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	

A genome-wide CRISPR activation ZIKV screen in cells defective in IFN signaling. (A) Schematic flow of the CRISPR activation screen setup and conditions. STAT1−/− fibroblasts were transduced with lentiviruses carrying the SAM complex followed by the sgRNA library upregulating all known human gene isoforms. After antibiotic selection, these cells were challenged with ZIKV (strain: PRVABC59) at MOI of 0.5 PFU/cell and incubated for 14 days. Genomic DNA of mock-infected and ZIKV-infected cells was extracted, amplified, sequenced, and bioinformatically analyzed to determine potential antiviral and proviral candidate genes from the sgRNAs enriched or depleted in surviving cells, respectively. (B,C) Scatter plots showing negative selection of sgRNAs targeting the top candidate genes identified by MAGeCK VISPR, a quality control and analysis workflow for CRISPR screens, compared with other sgRNAs in the library after ZIKV infection (p-value < 0.001 and false discovery rate (FDR) < 0.05). (D) RhoV mRNA levels were measured by RT-qPCR in STAT1−/− fibroblasts transduced with lentiviruses carrying RhoV promoter targeting sgRNAs 1, 2, and 3. mRNA fold changes relative to the RhoV mRNA levels in NT sgRNA transduced STAT1−/− fibroblasts are shown. The data are from one independent experiment performed in triplicate. (E) WWTR1 protein expression in STAT1−/− fibroblasts transduced with lentiviruses carrying WWTR1 promoter targeting sgRNAs 1, 2, and 3 as well as NT sgRNA was determined by immunoblotting using WWTR1 antibody. β-actin serves as a loading control. The data are from one experiment. Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/34834920), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Kegelman CD, Nijsure MP, Moharrer Y et al. YAP and TAZ Promote Periosteal Osteoblast Precursor Expansion and Differentiation for Fracture Repair Journal of Bone and Mineral Research 2021-01-01 [PMID: 32835424]

Felix Yemanyi, VijayKrishna Raghunathan Lysophosphatidic Acid and IL-6 Trans-signaling Interact via YAP/TAZ and STAT3 Signaling Pathways in Human Trabecular Meshwork Cells Investigative Ophthalmology & Visual Science 2020-11-20 [PMID: 33216119]

Felix Yemanyi, Janice Vranka, Vijay Krishna Raghunathan Crosslinked Extracellular Matrix Stiffens Human Trabecular Meshwork Cells Via Dysregulating β-catenin and YAP/TAZ Signaling Pathways Investigative Ophthalmology & Visual Science 2020-08-24 [PMID: 32832971]

Leonard BC, Park S, Kim S et al. Mice Deficient in TAZ (Wwtr1) Demonstrate Clinical Features of Late-Onset Fuchs' Endothelial Corneal Dystrophy Investigative ophthalmology & visual science 2023-04-03 [PMID: 37074694] (IHC, Human)

Wu M, Matar DY, Yu Z et al. Continuous NPWT Regulates Fibrosis in Murine Diabetic Wound Healing Pharmaceutics 2022-10-06 [PMID: 36297560] (IHC-P, Mouse)

Hwang JH, Kim KM, Oh HT et al. TAZ links exercise to mitochondrial biogenesis via mitochondrial transcription factor A Nature communications 2022-02-03 [PMID: 35115527] (Chemotaxis, Mouse)

Das A, Adhikary S, Chowdhury AR Et al. Leveraging Substrate Stiffness to Promote Stem Cell Asymmetric Division via Mechanotransduction-Polarity Protein Axis and Its Bayesian Regression Analysis Rejuvenation Res 2022-03-22 [PMID: 35316074] (ICC/IF)

Details:
Citation using the Texas Red version of this antibody.

Luu A, Yao Z, Ramachandran S Et al. A CRISPR Activation Screen Identifies an Atypical Rho GTPase That Enhances Zika Viral Entry Viruses 2021-10-20 [PMID: 34834920]

Van Sciver N, Ohashi M, Pauly NP Et al. Hippo signaling effectors YAP and TAZ induce Epstein-Barr Virus (EBV) lytic reactivation through TEADs in epithelial cells PLoS pathogens 2021-08-01 [PMID: 34339458] (WB, Human)

Li W, Zhao J, Wang J et al. ROCK-TAZ signaling axis regulates mechanical tension-induced osteogenic differentiation of rat cranial sagittal suture mesenchymal stem cells J. Cell. Physiol. 2020-01-22 [PMID: 31970784] (WB, IP, Rat)

Kegelman CD, Coulombe JC, Jordan KM et al. YAP and TAZ Mediate Osteocyte Perilacunar/Canalicular Remodeling J. Bone Miner. Res. 2019-10-14 [PMID: 31610061] (Mouse)

Hwang JH, Kim AR, Kim KM et al. TAZ couples Hippo/Wnt signalling and insulin sensitivity through Irs1 expression. Nat Commun 2019-01-24 [PMID: 30679431] (Chemotaxis, Mouse)

More publications at http://www.novusbio.com/NB110-58359

Procedures

Western Blot Protocol for TAZ/WWTR1 Antibody (NB110-58359)
Western Blot Protocol

1. Perform SDS-PAGE on samples to be analyzed, loading 10-25 ug of total protein per lane.
2. Transfer proteins to PVDF membrane according to the instructions provided by the manufacturer of the membrane and transfer apparatus.
3. Stain the membrane with Ponceau S (or similar product) to assess transfer success, and mark molecular weight standards where appropriate.
4. Rinse the blot TBS -0.05% Tween 20 (TBST).
5. Block the membrane in 5% Non-fat milk in TBST (blocking buffer) for at least 1 hour.
6. Wash the membrane in TBST three times for 10 minutes each.
7. Dilute primary antibody in blocking buffer and incubate overnight at 4C with gentle rocking.
8. Wash the membrane in TBST three times for 10 minutes each.
9. Incubate the membrane in diluted HRP conjugated secondary antibody in blocking buffer (as per manufacturer's instructions) for 1 hour at room temperature.
10. Wash the blot in TBST three times for 10 minutes each (this step can be repeated as required to reduce background).
11. Apply the detection reagent of choice in accordance with the manufacturer's instructions.

Immunocytochemistry/Immunofluorescence Protocol for TAZ/WWTR1 Antibody (NB110-58359)
Immunocytochemistry Protocol

Culture cells to appropriate density in 35 mm culture dishes or 6-well plates.

1. Remove culture medium and wash the cells briefly in PBS. Add 10% formalin to the dish and fix at room temperature for 10 minutes.
2. Remove the formalin and wash the cells in PBS.
3. Permeablize the cells with 0.1% Triton X100 or other suitable detergent for 10 min.
4. Remove the permeablization buffer and wash three times for 10 minutes each in PBS. Be sure to not let the specimen dry out.
5. To block nonspecific antibody binding, incubate in 10% normal goat serum from 1 hour to overnight at room temperature.
6. Add primary antibody at appropriate dilution and incubate overnight at 4C.
7. Remove primary antibody and replace with PBS. Wash three times for 10 minutes each.
8. Add secondary antibody at appropriate dilution. Incubate for 1 hour at room temperature.
9. Remove secondary antibody and replace with PBS. Wash three times for 10 minutes each.
10. Counter stain DNA with DAPi if required.

Immunohistochemistry-Paraffin Protocol for TAZ/WWTR1 Antibody (NB110-58359)
Immunohistochemistry-Paraffin Embedded Sections

Antigen Unmasking:
Bring slides to a boil in 10 mM sodium citrate buffer (pH 6.0) then maintain at a sub-boiling temperature for 10 minutes. Cool slides on bench-top for 30 minutes (keep slides in the sodium citrate buffer at all times).

Staining:
1. Wash sections in deionized water three times for 5 minutes each.
2. Wash sections in PBS for 5 minutes.
3. Block each section with 100-400 ul blocking solution (1% BSA in PBS) for 1 hour at room temperature.
4. Remove blocking solution and add 100-400 ul diluted primary antibody. Incubate overnight at 4 C.
5. Remove antibody solution and wash sections in wash buffer three times for 5 minutes each.
6. Add 100-400 ul HRP polymer conjugated secondary antibody. Incubate 30 minutes at room temperature.
7. Wash sections three times in wash buffer for 5 minutes each.
8. Add 100-400 ul DAB substrate to each section and monitor staining closely.
9. As soon as the sections develop, immerse slides in deionized water.
10. Counterstain sections in hematoxylin.
11. Wash sections in deionized water two times for 5 minutes each.
12. Dehydrate sections.
13. Mount coverslips.

Novus Biologicals USA
10730 E. Briarwood Avenue
Centennial, CO 80112
USA
Phone: 303.730.1950
Toll Free: 1.888.506.6887
Fax: 303.730.1966
nb-customerservice@bio-techne.com

Bio-Techne Canada
21 Canmotor Ave
Toronto, ON M8Z 4E6
Canada
Phone: 905.827.6400
Toll Free: 855.668.8722
Fax: 905.827.6402
canada.inquires@bio-techne.com

Bio-Techne Ltd
19 Barton Lane
Abingdon Science Park
Abingdon, OX14 3NB, United Kingdom
Phone: (44) (0) 1235 529449
Free Phone: 0800 37 34 15
Fax: (44) (0) 1235 533420
info.EMEA@bio-techne.com

General Contact Information
www.novusbio.com
Technical Support: nb-technical@bio-techne.com
Orders: nb-customerservice@bio-techne.com
General: novus@novusbio.com

Products Related to NB110-58359

NB800-PC6	293 Whole Cell Lysate
NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

For more information on our 100% guarantee, please visit www.novusbio.com/guarantee

Earn gift cards/discounts by submitting a review: www.novusbio.com/reviews/submit/NB110-58359

Earn gift cards/discounts by submitting a publication using this product: www.novusbio.com/publications