Product Datasheet

TXNIP Antibody (JY2) - Azide and BSA Free NBP1-54578

Unit Size: 0.1 mg

Store at -20C. Avoid freeze-thaw cycles.



Reviews: 3 Publications: 38

Protocols, Publications, Related Products, Reviews, Research Tools and Images at: www.novusbio.com/NBP1-54578

Updated 10/23/2024 v.20.1

Earn rewards for product reviews and publications.

Submit a publication at www.novusbio.com/publications Submit a review at www.novusbio.com/reviews/destination/NBP1-54578



NBP1-54578

TXNIP Antibody (JY2) - Azide and BSA Free

| Product Information | | |
|-----------------------------|---|--|
| Unit Size | 0.1 mg | |
| Concentration | 1.0 mg/ml | |
| Storage | Store at -20C. Avoid freeze-thaw cycles. | |
| Clonality | Monoclonal | |
| Clone | JY2 | |
| Preservative | No Preservative | |
| Isotype | IgG1 | |
| Purity | Protein A or G purified | |
| Buffer | PBS | |
| Product Description | | |
| Host | Mouse | |
| Gene ID | 10628 | |
| Gene Symbol | TXNIP | |
| Species | Human, Mouse, Rat | |
| Reactivity Notes | Use in Mouse reported in scientific literature (PMID:34576095). Please note that this antibody is reactive to Mouse and derived from the same host, Mouse. Additional Mouse on Mouse blocking steps may be required for IHC and ICC experiments. Please contact Technical Support for more information. | |
| Immunogen | Human recombinant TXNIP | |
| Product Application Details | | |
| Applications | Western Blot, Flow Cytometry, Immunohistochemistry, Immunohistochemistry- Frozen, Immunohistochemistry-Paraffin, Immunoprecipitation, Proximity Ligation Assay, CyTOF-ready, Knockout Validated | |
| Recommended Dilutions | Western Blot 1 ug/ml, Flow Cytometry 2-5 ug/0.1x10^6 cells, Immunohistochemistry, Immunoprecipitation 2ug/200ul of cell extract from 5x10^6 cells, Immunohistochemistry-Paraffin 1:100-1:500, Immunohistochemistry-Frozen reported by customer review, Proximity Ligation Assay, CyTOF-ready, Knockout Validated reported in scientific literature (Brocker et al) | |

Images

Immunohistochemistry-Frozen: TXNIP Antibody (JY2) [NBP1-54578] -TXNIP in mouse brain. Antibody dilution: 1:100, incubated overnight in 5%BSA + 0.2% Triton X 100. Image from verified customer review.









Western Blot: TXNIP Antibody (JY2) [NBP1-54578] - AMPK mediates anti-pyroptotic effects of Exendin-4. (a) ROS determination by FACS. The left arrow indicated the ROS-negative population and the right pointed the positive. (b) Transcription activity of TXNIP in cardiomyocytes. (c) Western blot. (d) RNA silencing of TXNIP in cardiomyocytes. (e) IL-1 ELISA with TXNIP RNAi. (f) Caspase-1 activity assay with TXNIP RNAi. (g) Quantification of pAMPK/AMPK with CC treatment. (h) IL-1 ELISA with CC treatment. (i) Caspase-1 activity assay with CC treatment. Values are the mean SEM of 3 samples per group.0.05,0.01,0.005, and0.001. Exendin-4 Protects against Hyperglycemia-Induced Cardiomyocyte Pyroptosis via the AMPK-TXNIP Pathway. *J Diabetes Res* (2019)

Immunohistochemistry-Paraffin: TXNIP Antibody (JY2) [NBP1-54578] -Formalin fixed and paraffin embedded tissue section of mouse kidney using TXNIP antibody (clone JY2) at 1:250 dilution. The signal was developed using HRP-conjugated secondary antibody and DAB reagent which followed counterstaining of the cell nuclei with hematoxylin. This TXNIP antibody generated a diffused cytoplasmic signal in the cells of various tubules and glomeruli.

Immunohistochemistry-Paraffin: TXNIP Antibody (JY2) [NBP1-54578] -Formalin fixed and paraffin embedded tissue section of mouse kidney using TXNIP antibody (clone JY2) at 1:100 dilution. The signal was developed using HRP-conjugated secondary antibody and DAB reagent which followed counterstaining of the cell nuclei with hematoxylin. This TXNIP antibody generated a diffused cytoplasmic signal in the cells of various tubules with negligible staining in glomeruli.

Flow Cytometry: TXNIP Antibody (JY2) [NBP1-54578] - An intracellular stain was performed on RH-30 cells with TXNIP (JY2) Antibody NBP1-54578F (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 5 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to FITC.











Page 4 of 6 v.20.1 Updated 10/23/2024

| Immunoprecipitation: TXNIP Antibody (JY2) [NBP1-54578] - Txnip/VDUP1 from Raji with NBP1-54578 (1) or mouse IgG1 (2). | kDa 1 2 97- 66- 45- 30- ↓ IgG light chain |
|--|--|
| Western Blot: TXNIP Antibody (JY2) - Azide and BSA Free [NBP1- | HG - + + + |
| determination by FACS. The left arrow indicated the ROS-negative | EXE + - |
| population & the right pointed the positive. (b) Transcription activity of | u + |
| TXNIP in cardiomyocytes. (c) Western blot. (d) RNA silencing of TXNIP in cardiomyocytes. (e) IL-1 β ELISA with TXNIP RNAi. (f) Caspase-1 | TXNIP — — — — |
| activity assay with TXNIP RNAi. (g) Quantification of pAMPK/AMPK with CC treatment. (h) IL-1β ELISA with CC treatment. (i) Caspase-1 activity | рамрк — — — — |
| assay with CC treatment. Values are the mean \pm SÉM of 3 samples per group. $\Box p < 0.05$, $\Box \Box p < 0.01$, $\Box \Box \Box p < 0.005$, & $\Box \Box \Box \Box p < 0.001$. Image | |
| collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/31886288), licensed under a CC-BY | GAPDH |
| license. Not internally tested by Novus Biologicals. | (c) |



Publications

Ismael S, Nasoohi S, Yoo A et al. Tissue Plasminogen Activator Promotes TXNIP-NLRP3 Inflammasome Activation after Hyperglycemic Stroke in Mice Molecular Neurobiology 2020-06-01 [PMID: 32172516]

Lim JO, Lee SJ, Kim WI et al. Melatonin Alleviates Silica Nanoparticle-Induced Lung Inflammation via Thioredoxin-Interacting Protein Downregulation Antioxidants (Basel) 2021-11-04 [PMID: 34829636]

Ismael S, Nasoohi S, Yoo A et al. Verapamil as an Adjunct Therapy to Reduce tPA Toxicity in Hyperglycemic Stroke: Implication of TXNIP/NLRP3 Inflammasome Molecular Neurobiology 2021-08-01 [PMID: 33847912]

Kim, J;Lim, J;Yoo, ID;Park, S;Moon, JS; TXNIP contributes to induction of pro-inflammatory phenotype and caspase-3 activation in astrocytes during Alzheimer's diseases Redox biology 2023-05-06 [PMID: 37172394] (Immunohistochemistry-Paraffin, Human)

Singh G Role of Glucose-induced Transcription Factor Signalling and Mitochondrial Epigenetics in Stress Tolerant Wood Frog, Rana sylvatica Thesis 2022-12-16 (Immunoprecipitation, Western Blot, Amphibian)

Details: Wood Frog

Singh G, Storey KB TXNIP shuttling - a key molecular link in regulating inflammation and mitochondrial dysfunction in freeze tolerant wood frogs Gene 2023-01-07 [PMID: 36627089] (WB, Amphibian)

Patrick Devlin Inflammatory Response Following Hemorrhagic Stroke: The Role of Cytokines University of Tennessee Health Science Center 2022-11-07 (WB, Mouse)

Ismael S, Patrick D, Salman M et al. Verapamil inhibits TXNIP-NLRP3 inflammasome activation and preserves functional recovery after intracerebral hemorrhage in mice Neurochemistry international 2022-10-14 [PMID: 36244583] (WB, IF/IHC, Mouse)

Details:

Dilution used in WB 1:1000, in IHC 1:100

Girdhar K, Thakur S, Gaur P et al. Design, synthesis, and biological evaluation of a small molecule oral agonist of the glucagon-like-peptide-1 receptor Journal of Biological Chemistry 2022-04-01 [PMID: 35378127] (WB, Mouse)

Tsubaki H, Mendsaikhan A, Buyandelger U et al. Localization of Thioredoxin-Interacting Protein in Aging and Alzheimer's Disease Brains NeuroSci 2022-03-31 (IF/IHC, WB, Human)

Salman M, Ismael S, Lexiao L Et al. Acute Hyperglycemia Exacerbates Hemorrhagic Transformation after Embolic Stroke and Reperfusion with tPA: A Possible Role of TXNIP-NLRP3 Inflammasome Journal of stroke and cerebrovascular diseases : the official journal of National Stroke Association 2021-11-27 [PMID: 34847489] (WB, Mouse)

Salman M, Ismael S, Li L Et al. Endothelial Thioredoxin-Interacting Protein Depletion Reduces Hemorrhagic Transformation in Hyperglycemic Mice after Embolic Stroke and Thrombolytic Therapy Pharmaceuticals (Basel, Switzerland) 2021-09-27 [PMID: 34681207] (WB, Mouse)

More publications at http://www.novusbio.com/NBP1-54578





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@biotechne.com Orders: nb-customerservice@bio-techne.com General: novus@novusbio.com

Products Related to NBP1-54578

| NBP1-84784PEP | TXNIP Recombinant Protein Antigen |
|------------------|---|
| NBP1-97005-0.5mg | Mouse IgG1 Isotype Control (MG1) |
| NB720-B | Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin] |
| HAF007 | Goat anti-Mouse IgG Secondary Antibody [HRP] |

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/NBP1-54578

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

www.novusbio.com

