

Product Datasheet

TRPA1 Antibody NB100-91319

Unit Size: 0.1 ml

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

www.novusbio.com



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Publications: 8

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Updated 9/9/2025 v.20.1

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NB100-91319

TRPA1 Antibody

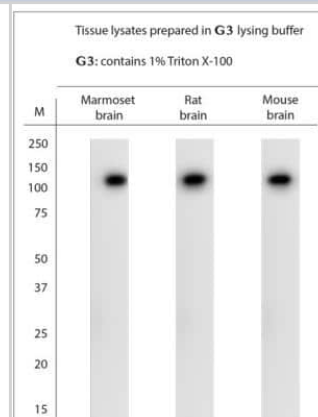
| Product Information | |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Unit Size | 0.1 ml |
| Concentration | This product is unpurified. The exact concentration of antibody is not quantifiable. |
| Storage | Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles. |
| Clonality | Polyclonal |
| Preservative | No Preservative |
| Reconstitution Instructions | Reconstitute in 0.1 ml of sterile water. Centrifuge to remove any insoluble material. Glycerol may be added (1:1) for additional stability. Please note the sample size is provided in reconstituted format. |
| Isotype | IgG |
| Purity | Unpurified |
| Buffer | Lyophilized from whole antisera |
| Target Molecular Weight | 128 kDa |

| Product Description | |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description | Novus Biologicals Rabbit TRPA1 Antibody (NB100-91319) is a polyclonal antibody validated for use in IHC, WB and ICC/IF. Anti-TRPA1 Antibody: Cited in 8 publications. All Novus Biologicals antibodies are covered by our 100% guarantee. |
| Host | Rabbit |
| Gene ID | 8989 |
| Gene Symbol | TRPA1 |
| Species | Human, Mouse, Rat, Monkey |
| Reactivity Notes | Marmoset |
| Immunogen | A synthetic peptide from rat TRPA1 conjugated to blue carrier protein was used as the antigen. The peptide is homologous in mouse. |

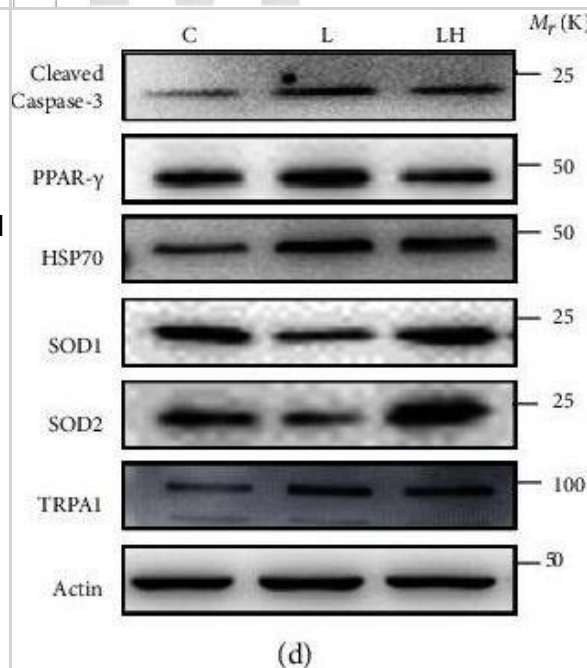
| Product Application Details | |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Applications | Western Blot, Immunohistochemistry-Paraffin, Immunocytochemistry/Immunofluorescence, Immunohistochemistry |
| Recommended Dilutions | Western Blot 1:1000, Immunohistochemistry 1 : 300 - 1 : 2000, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry-Paraffin 1:2000 |
| Application Notes | Use in Immunocytochemistry/immunofluorescence reported in scientific literature (PMID: 30707612). |

Images

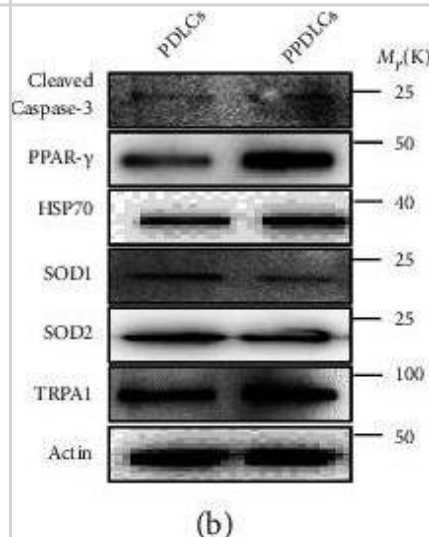
Western Blot: TRPA1 Antibody [NB100-91319] - Tissue lysates.
Blocking: 1% LFDM for 30 min at RT; primary antibody: dilution 1:6000
incubated overnight at 4C.



Western Blot: TRPA1 Antibody [NB100-91319] - TRPA1 inhibitor HC030031 significantly ameliorated the oxidative stress & apoptosis levels of Pg.LPS-induced PDLCs. (a) P.g.LPS increased intracellular calcium ion level in a dose-dependent manner (n = 3). (b) Lower HC030031 concentration significantly reversed the increase of intracellular calcium ions, & 10 μ M HC030031 was used in the subsequent experiment (n = 3). (c) Flow cytometry analysis of the control group (PDLCS only, C), L group (PDLCS treated by LPS, L), & LH group (PDLCS treated by 10 μ M HC030031 & LPS, LH) (n = 4). (d, e) Western blot analysis & semiquantitative statistical analysis of oxidative stress, apoptosis, & TRPA1 proteins in in C, L, & LH groups (n = 3). (f) EM images showing endoplasmic reticulum (yellow arrows) & mitochondrial morphology (red arrows) of PDLCs in Ctr, LPS, & LH groups (white stars represent cell nuclei) (n = 4). (g) Quantification of endoplasmic reticulum size, mitochondrial size, mitochondrial number per cell (n = 4), & mitochondrial crista density was analyzed (>100 mitochondria). Data analysis was performed by using one-way ANOVA (\square P < 0.05, $\square\square$ P < 0.01, & $\square\square\square$ P < 0.001). Data are presented as the mean \pm SEM. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/35720191>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Western Blot: TRPA1 Antibody [NB100-91319] - Periodontitis-derived periodontal ligament cells & tissues were at high levels of oxidative stress & apoptosis. (a) The related gene expressions of oxidative stress, apoptosis, & some of the TRP families in healthy & periodontitis-derived periodontal ligament cells (PDLCs & P-PDLCs) (n = 3). (b, c) Western blot & semiquantitative statistical analysis of oxidative stress, apoptosis, & TRPA1 in PDLCs & P-PDLCs. (n = 3). d, Flow cytometry analysis of PDLCs & P-PDLCs (n = 4). (e, f) H&E staining (white star represent immune cell infiltration), immunohistochemistry & immunofluorescence staining, & semiquantitative statistical analysis of periodontitis & healthy derived periodontal ligament tissues (PDLTs & P-PDLTs) (n = 3). Data analysis was performed by using Student's t-test (\square P < 0.05, $\square\square$ P < 0.01, & $\square\square\square$ P < 0.001). The data are presented as the mean \pm SEM. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/35720191>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Zhou T, Li J, Cheng A, Zuo Z Desflurane Post-treatment Reduces Hypoxic-ischemic Brain Injury via Reducing Transient Receptor Potential Ankyrin 1 in Neonatal Rats Neuroscience 2023-05-15 [PMID: 37196978]

Liu Q, Guo S, Huang Y et al. Inhibition of TRPA1 Ameliorates Periodontitis by Reducing Periodontal Ligament Cell Oxidative Stress and Apoptosis via PERK/eIF2 alpha/ATF-4/CHOP Signal Pathway Oxidative medicine and cellular longevity 2022-06-10 [PMID: 35720191] (WB, Human)

Li X, Li X, Chen Y et al. Correlation of vascular change with TRPV1, TRPV4, and TRPA1 in a rat model of inferior gluteal artery perforator flap Wound repair and regeneration : official publication of the Wound Healing Society [and] the European Tissue Repair Society 2022-05-01 [PMID: 35384152]

Duan Z, Zhang J, Li J et al. Inhibition of microRNA-155 Reduces Neuropathic Pain During Chemotherapeutic Bortezomib via Engagement of Neuroinflammation Front Oncol 2020-03-31 [PMID: 32296644] (WB, Rat)

Zhao D, Han DF, Wang SS, et al. Roles of tumor necrosis factor-alpha and interleukin-6 in regulating bone cancer pain via TRPA1 signal pathway and beneficial effects of inhibition of neuro-inflammation and TRPA1 Mol Pain 2019-06-17 [PMID: 31144562] (WB, Rat)

Adam RJ, Xia Z, Pravoverov K et al. Sympatho-excitation in Response to Cardiac and Pulmonary Afferent Stimulation of TRPA1 Channels is Attenuated in Chronic Heart Failure Rats Am. J. Physiol. Heart Circ. Physiol. 2019-02-01 [PMID: 30707612] (WB, ICC/IF, Rat)

Li C, Deng T, Shang Z et al. Blocking TRPA1 and TNF-a Signal Improves Bortezomib-Induced Neuropathic Pain Cell. Physiol. Biochem. 2018-12-06 [PMID: 30522101] (WB, Rat)

Zhang H, Wickley PJ, Sinha S et al. Propofol restores transient receptor potential vanilloid receptor subtype-1 sensitivity via activation of transient receptor potential ankyrin receptor subtype-1 in sensory neurons Anesthesiology 2011-03-01 [PMID: 21364461] (WB, Rat, Mouse)





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Products Related to NB100-91319

| | |
|----------------|-----------------------------------------------------|
| NB100-91319PEP | TRPA1 Antibody Blocking Peptide |
| 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

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