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.

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Publications: 8

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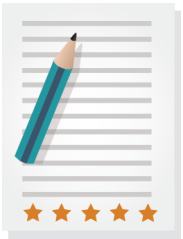
Updated 10/23/2024 v.20.1



NB100-91319

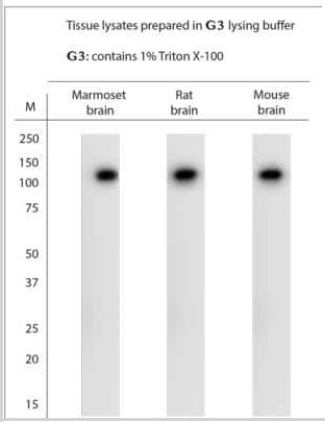
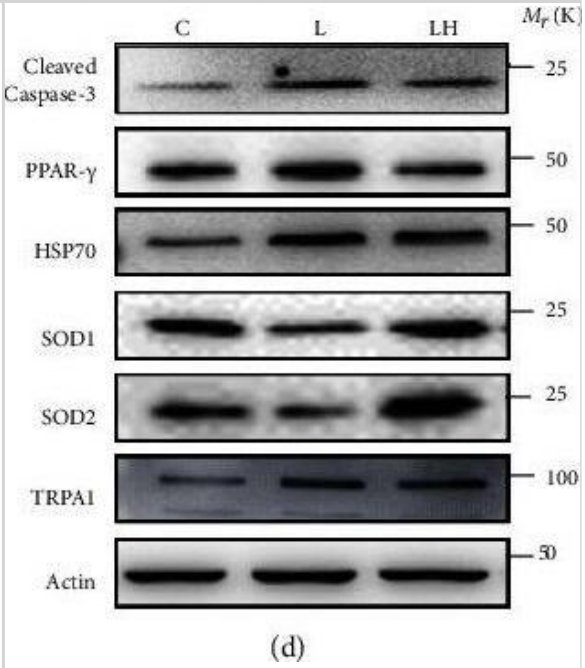
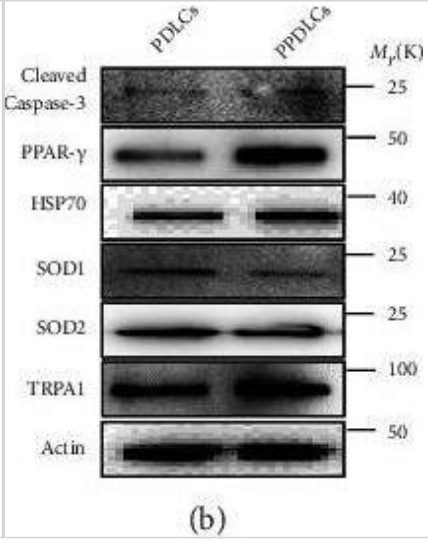
TRPA1 Antibody

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	
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, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
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 μM 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 μM 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 (□P < 0.05, □□P < 0.01, & □□□P < 0.001). Data are presented as the mean ± 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 (□P < 0.05, □□P < 0.01, & □□□P < 0.001). The data are presented as the mean ± 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
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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