Product Datasheet

PIEZO1 Antibody (2-10)
NBP2-75617

Unit Size: 100 ul

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

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Reviews: 1 Publications: 15

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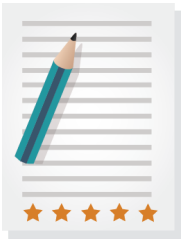
Updated 9/9/2025 v.20.1



NBP2-75617

PIEZO1 Antibody (2-10)

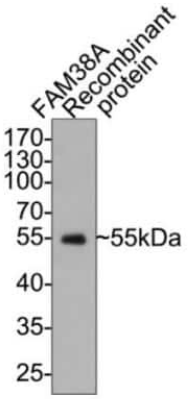
Product Information	
Unit Size	100 ul
Concentration	2 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	2-10
Preservative	0.05% Sodium Azide
Isotype	IgG2a
Purity	Protein A purified
Buffer	PBS (pH7.4), 0.2% BSA, 50% Glycerol
Target Molecular Weight	287 kDa

Product Description	
Description	Novus Biologicals Mouse PIEZO1 Antibody (2-10) (NBP2-75617) is a monoclonal antibody validated for use in IHC, WB, ICC/IF and Simple Western. Anti-PIEZO1 Antibody: Cited in 13 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Mouse
Gene ID	9780
Gene Symbol	PIEZO1
Species	Human, Mouse, Rat, Porcine
Reactivity Notes	Porcine reactivity reported from a verified customer review. Mouse blocking reagent may be needed for IHC and ICC experiments to reduce high background signal. You can find these reagents under catalog numbers PK-2200-NB and MP-2400-NB. Please contact Technical Support if you have any. Please note that this antibody is reactive to Mouse and derived from the same host, Mouse. Mouse-On-questions.
Immunogen	Recombinant protein within Human PIEZO1 aa 1275-1540 / 2521. (SwissProt: Q92508 Human)

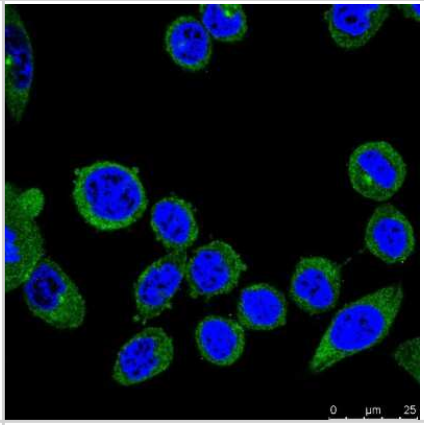
Product Application Details	
Applications	Western Blot, Simple Western, Immunohistochemistry-Paraffin, Electron Microscopy, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry
Recommended Dilutions	Western Blot 1:500-1:2000, Simple Western 1:50, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence 1:100, Immunohistochemistry-Paraffin 1:200-1:600, Electron Microscopy Reported in scientific literature (PMID:34489534)
Application Notes	See Simple Western Antibody Database for Simple Western validation: separated by Size, antibody dilution of 1:50

Images

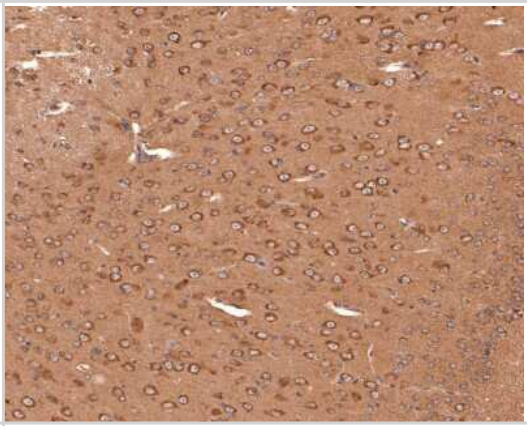
Western Blot: PIEZO1 Antibody (2-10) [NBP2-75617] - Analysis of FAM38A/PIEZO1 on recombinant protein with Mouse anti-FAM38A/PIEZO1 antibody at 1/500 dilution. Lysates/proteins at 50 ng/Lane. Exposure time: 1 minute; 10% SDS-PAGE gel. Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody at 1/500 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Mouse IgG - HRP Secondary Antibody at 1:100,000 dilution was used for 1 hour at room temperature.



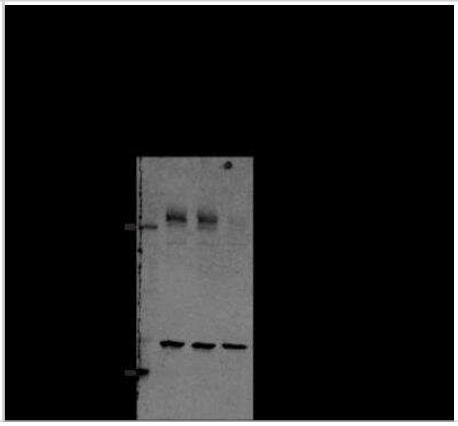
Immunocytochemistry/Immunofluorescence: PIEZO1 Antibody (2-10) [NBP2-75617] - Analysis of Siha cells labeling FAM38A/PIEZO1 with Mouse anti-PIEZO1 antibody at 1/100 dilution. Cells were fixed in 4% paraformaldehyde for 30 minutes, permeabilized with 0.1% Triton X-100 in PBS for 15 minutes, and then blocked with 2% BSA for 30 minutes at room temperature. Cells were then incubated with Mouse anti-PIEZO1 antibody at 1/100 dilution in 2% BSA overnight at 4 . Goat Anti-Mouse IgG H&L (iFluor(TM) 488) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

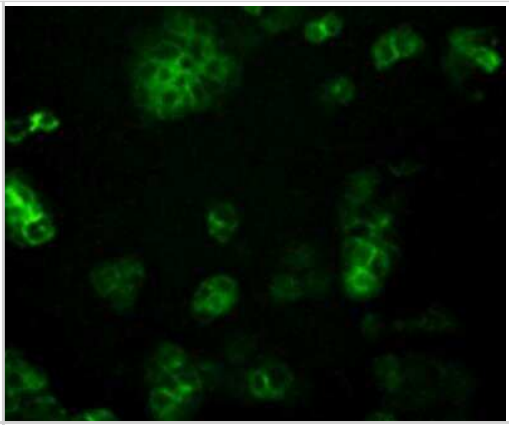
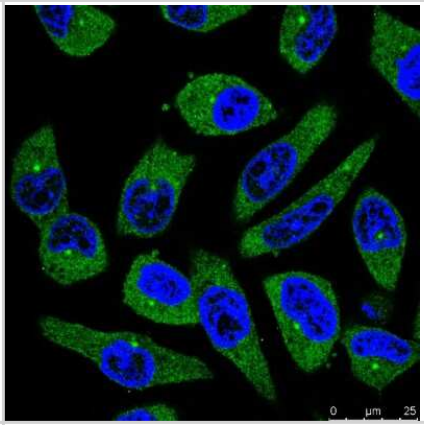
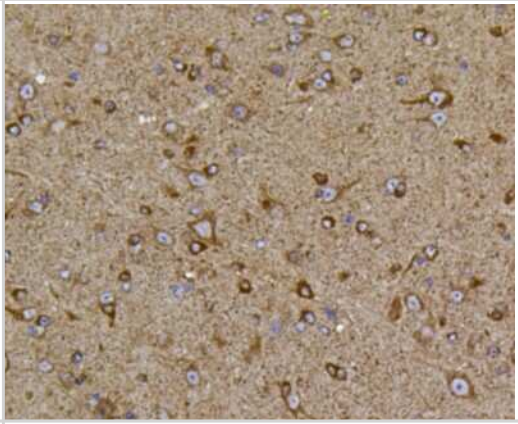


Immunohistochemistry-Paraffin: PIEZO1 Antibody (2-10) [NBP2-75617] - Analysis of paraffin-embedded mouse brain tissue with Mouse anti-FAM38A/PIEZO1 antibody at 1/200 dilution. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH2O and PBS, and then probed with the primary antibody at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

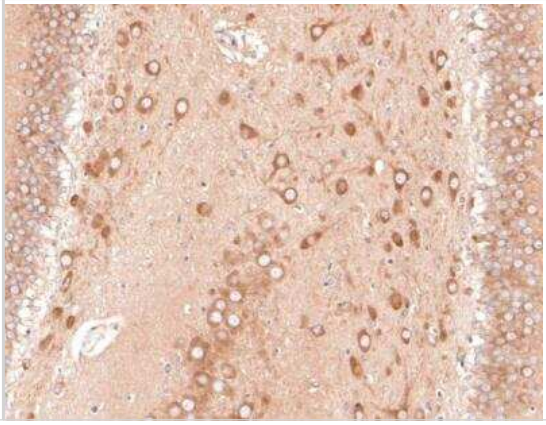


Western Blot: PIEZO1 Antibody (2-10) [NBP2-75617] - Porcine endocardial endothelium lysate. Control, mock transfected and Piezo1 siRNA transfected with alpha-actinin as loading control. WB image submitted by a verified customer review.



Immunocytochemistry/Immunofluorescence: PIEZO1 Antibody (2-10) [NBP2-75617] - ICC staining Protein PIEZO (green) in A431 cells. Cells were fixed in paraformaldehyde, permeabilized with 0.25% Triton X-100 in PBS.	
Immunocytochemistry/Immunofluorescence: PIEZO1 Antibody (2-10) [NBP2-75617] - Analysis of Hela cells labeling FAM38A/PIEZO1 with Mouse anti-PIEZO1 antibody at 1/100 dilution. Cells were fixed in 4% paraformaldehyde for 30 minutes, permeabilized with 0.1% Triton X-100 in PBS for 15 minutes, and then blocked with 2% BSA for 30 minutes at room temperature. Cells were then incubated with Mouse anti-FAM38A/PIEZO1 antibody at 1/100 dilution in 2% BSA overnight at 4 . Goat Anti-Mouse IgG H&L (iFluor(TM) 488) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.	
Immunohistochemistry-Paraffin: PIEZO1 Antibody (2-10) [NBP2-75617] - Analysis of paraffin-embedded mouse brain tissue using anti-Protein FAM38A antibody. Counter stained with hematoxylin.	
Immunohistochemistry-Paraffin: PIEZO1 Antibody (2-10) [NBP2-75617] - Rat brain tissue with Mouse anti-FAM38A/PIEZO1 antibody at 1/600 dilution. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH2O and PBS, and then probed with the primary antibody at 1/600 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.	

Immunohistochemistry-Paraffin: PIEZO1 Antibody (2-10) [NBP2-75617] - Rat hippocampus tissue with Mouse anti-FAM38A/PIEZO1 antibody at 1/600 dilution. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH2O and PBS, and then probed with the primary antibody at 1/600 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



Publications

Bertaccini G, Casanellas I, Evans E et al. Visualizing PIEZO1 localization and activity in hiPSC-derived single cells and organoids with HaloTag technology Nature Communications 2025-07-01 [PMID: 40593468]

Yu X, Mukwaya V, Wang L et al. Mechano-crosstalk between living and artificial cells Nature Communications 2025-09-29 [PMID: 41022765]

Jinyuan Vero Li, Charles D Cox, Boris Martinac The anchor domain is critical for Piezo1 channel mechanosensitivity Channels 2021-05-11 [PMID: 33975519]

Zhou Z, Li J, Martinac B, Cox C Loss-of-Function Piezo1 Mutations Display Altered Stability Driven by Ubiquitination and Proteasomal Degradation Frontiers in Pharmacology 2021-11-19 [PMID: 34867393]

Zhang ZM, Yu P, Zhou K et al. Hierarchically Porous Implants Orchestrating a Physiological Viscoelastic and Piezoelectric Microenvironment for Bone Regeneration Advanced healthcare materials 2023-07-27 [PMID: 37498795]

Choon Leng So, Mélanie Robitaille, Francisco Sadras, Michael H. McCullough, Michael J. G. Milevskiy, Geoffrey J. Goodhill, Sarah J. Roberts-Thomson, Gregory R. Monteith Cellular geometry and epithelial-mesenchymal plasticity intersect with PIEZO1 in breast cancer cells Communications Biology 2024-04-17 [PMID: 38632473]

Kelley B, Zhang EY, Khalfaoui L et al. Piezo channels in stretch effects on developing human airway smooth muscle American journal of physiology. Lung cellular and molecular physiology 2023-09-12 [PMID: 37697925]

Savadipour A, Nims RJ, Rashidi N et al. Membrane stretch as the mechanism of activation of PIEZO1 ion channels in chondrocytes Proceedings of the National Academy of Sciences of the United States of America 2023-07-25 [PMID: 37459546]

Knoblauch SV, Desai SH, Dombroski JA et al. Chemical Activation and Mechanical Sensitization of Piezo1 Enhance TRAIL-Mediated Apoptosis in Glioblastoma Cells ACS omega 2023-05-16 [PMID: 37214705]

Luu N, Bajpai A, Li R et al. Aging-associated Decline in Vascular Smooth Muscle Cell Mechanosensation is Mediated by Piezo1 Channel bioRxiv : the preprint server for biology 2023-04-29 [PMID: 37163041]

Chen S, Li Z, Chen D et al. Piezo1-mediated mechanotransduction promotes entheseal pathological new bone formation in ankylosing spondylitis Annals of the rheumatic diseases 2022-12-21 [PMID: 36543525]

Yao M, Tijore A, Cheng D et al. Force- and cell state-dependent recruitment of Piezo1 drives focal adhesion dynamics and calcium entry Science advances 2022-11-11 [PMID: 36351022] (ICC/IF, Human)

More publications at http://www.novusbio.com/NBP2-75617

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

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NBP1-96778	Mouse IgG2a Isotype Control (M2A)

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