Product Datasheet

Vinculin Antibody (hVIN-1)
NB600-1293

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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Reviews: 1 Publications: 16

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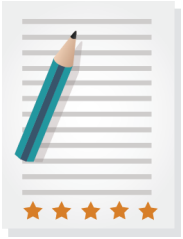
Updated 9/9/2025 v.20.1



NB600-1293

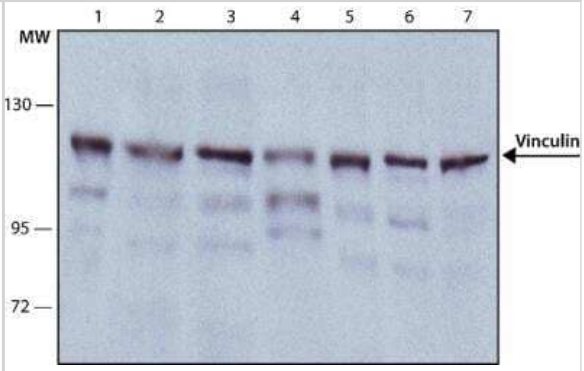
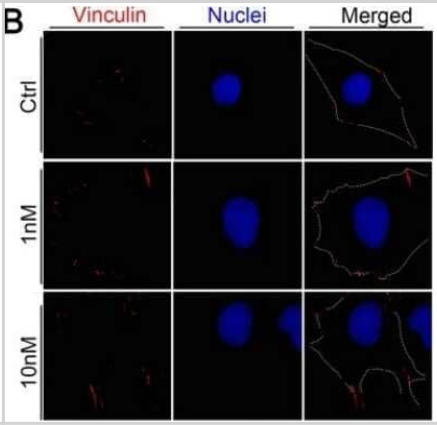
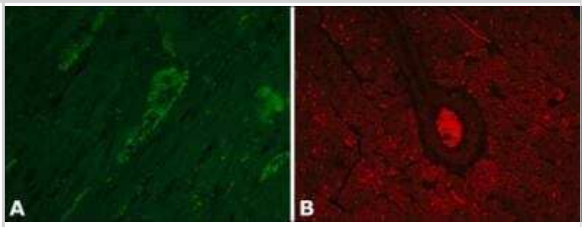
Vinculin Antibody (hVIN-1)

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	Monoclonal
Clone	hVIN-1
Preservative	0.09% Sodium Azide
Isotype	IgG1
Purity	Unpurified
Buffer	Ascites
Target Molecular Weight	116 kDa

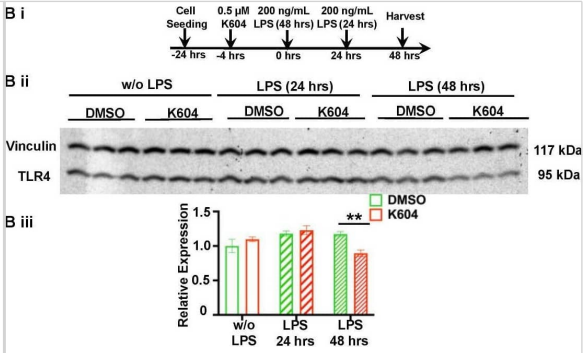
Product Description	
Description	Novus Biologicals Mouse Vinculin Antibody (hVIN-1) (NB600-1293) is a monoclonal antibody validated for use in IHC, WB, ICC/IF and Simple Western. Anti-Vinculin Antibody: Cited in 13 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Mouse
Gene ID	7414
Gene Symbol	VCL
Species	Human, Mouse, Rat, Amphibian, Bovine, Canine, Chicken, Turkey
Reactivity Notes	Frog (100%). Please note that this antibody is reactive to Mouse and derived from the same host, Mouse. Mouse-On-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 questions.
Marker	Focal Adhesion Marker
Specificity/Sensitivity	Specifically labels vinculin at cell-cell and cell-substrate contacts. Shows cross-reactivity with smooth muscle metavinculin.
Immunogen	Purified human vinculin from uterus.

Product Application Details	
Applications	Western Blot, Simple Western, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Single Cell Western
Recommended Dilutions	Western Blot 1:200 - 1:400, Simple Western, Immunohistochemistry 1:10 - 1:500, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry-Frozen 1:10 - 1:500, Single Cell Western 1:30
Application Notes	See Simple Western Antibody Database for Simple Western validation: tested in HeLa lysate; separated by size; antibody dilution of 1:5; matrix was 12-230 kDa. Single Cell Western reported by an internal validation on treated LNCap cells at a 1:30 dilution

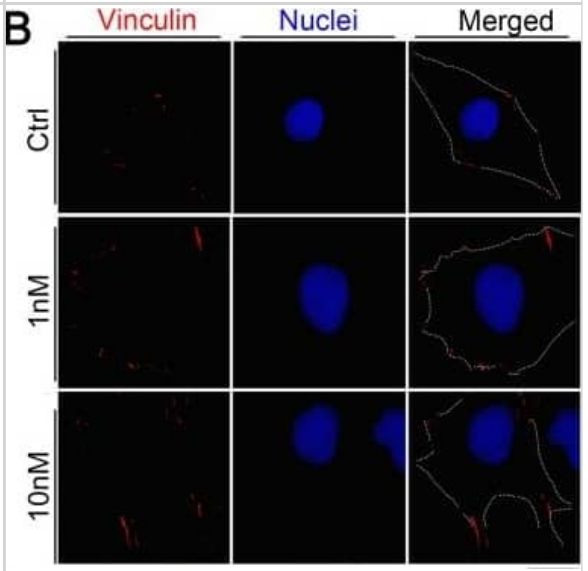
Images

Western Blot: Vinculin Antibody (hVIN-1) [NB600-1293] - Cell line lysates were separated on SDS-PAGE and probed with 1:200 Monoclonal Anti-Vinculin Clone: hVIN-1. The antibody was developed using Goat Anti-Mouse IgG-Peroxidase and a chemiluminescent substrate. Lanes: 1.HeLa 2.COS7 3.NIH-3T3 4.RAT2 5.CHO 6.MDBK 7.MDCK	
Immunocytochemistry/Immunofluorescence: Vinculin Antibody (hVIN-1) [NB600-1293] - Immunofluorescence images of LM8 cells treated with 0 nM, 1 nM, or 10 nM eribulin and stained for vinculin (red) and nucleus (blue) (left). Dotted line shows the cell shape. Scale bar: 10 um. Quantitative analysis of the area of vinculin staining (right). Values are mean +/- SEM (less than or equal to 30 cells per group). **P < 0.01. Image collected and cropped by CiteAb from the following publication (//pubmed.ncbi.nlm.nih.gov/30719211/) licensed under a CC-BY license.	
Immunohistochemistry: Vinculin Antibody (hVIN-1) [NB600-1293] - Enhanced Validation-By Independent Antibodies: Immunohistochemistry. Formalin-fixed, paraffin-embedded Rat Heart sections stained with 15 ug/mL Anti-Vinculin antibody produced in Rabbit (Cat. No. V4139) (A). The antibody was developed using Anti-Rabbit IgG (whole molecule)-FITC antibody produced in Goat (Cat. No. F9887), and 15 ug/mL Monoclonal Anti-Vinculin antibody produced in Mouse, Clone: hVIN1 (Cat. No. V9131) (B). The antibody was developed using Rabbit Anti-Mouse IgG-Cy3 conjugate antibody. Results: Two Anti-Vinculin antibodies, V4139 (A) and V9131 (B), target different regions of Vinculin show similar staining profiles between the two antibodies, demonstrating Independent Antibody Verification.	

A1B decreases TLR4 protein content in microglia chronically treated with LPS. (A) N9 cells seeded at 1 × 105 cells per well on poly-d-lysine-coated glass cover slides in 6-well plates were pre-treated for 4 h with DMSO or with 0.5 uM K-604, then exposed with or without 200 ng/mL LPS for 24 h. Double immunofluorescence staining for TLR4 and for the plasma membrane marker N-cadherin was then performed. (i) Timeline of the experiment. (ii) Representative images demonstrating TLR4 distribution in N9 cells. (iii) Quantification of total TLR4 relative fluorescence intensity per cell, n = 15 cells/treatment group. (iv) Quantification of IM/PM TLR4 fluorescence intensity ratio. A total of 15 cells per group were analyzed. The TLR4 signals overlapping with that of N-cadherin are considered as TLR4 at the PM, while those not overlapping are considered as TLR4 at the IM. (B) N9 microglial cells were seeded at 2 × 105 cells per well onto 6-well plates in RPMI-1640 with 10% serum. N9 cells were treated with DMSO (control group) or 0.5 uM K-604 for 4 h, then treated with or without 200 ng/mL LPS for 24 and 48 h. At different time points, cells were harvested for protein isolation and TLR4 Western blot analyses. n = 3 replicates. Vinculin was used as the protein loading control. (i) Timeline of experiment. (ii) Western blot. (iii) Quantitation of Western blot. * p < 0.05; ** p < 0.01; **** p < 0.0001. Image collected and cropped by CiteAb from the following open publication (https://www.mdpi.com/1422-0067/24/6/5616), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Reduction of directionality and focal adhesion turnover by low eribulin concentrations(A) Effect of eribulin on MTOC directionality during wound healing. Percentage of cells with MTOC facing the wound (bottom). Values are mean +/- SEM (n = 3) **P < 0.01. (B) immunofluorescence images of LM8 cells treated with 0 nM, 1 nM, or 10 nM eribulin and stained for vinculin (red) and nucleus (blue) (left). Dotted line shows the cell shape. Scale bar: 10 µm. Quantitative analysis of the area of vinculin staining (right). Values are mean +/- SEM (≥30 cells per group). **P < 0.01. (C) Immunofluorescence images of LM8 cells treated with 0 nM, 1 nM, or 10 nM eribulin and stained for Tyr397-phosphorylated FAK (green), actin (red), and nucleus (blue) (left). Dotted line shows the cell shape. Scale bar: 10 µm. Quantitative analysis of the area of Tyr397-phosphorylated FAK staining (right). Values are mean +/- SEM (≥30 cells per group). *P < 0.05. Eribulin treatment shrank the Tyr397-phosphorylated FAK staining area in a dose-dependent manner. (D) Western blot of Tyr397-phosphorylated FAK in LM8 cells treated with eribulin (top). Quantitative densitometric analysis of the ratio of Tyr397-phosphorylated FAK to total FAK (bottom). Values are mean +/- SEM (n = 3). *P < 0.05. (E) Immunofluorescence images of LM8 cells treated with 0 nM or 10 nM eribulin and stained for APC (red), α-tubulin (green), and nucleus (blue). Scale bar: 10 µm. Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/30719211), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Shimo T, Hasegawa J, Yoshioka K et al. Effect of chemical modification on the exon-skipping activity of heteroduplex oligonucleotides. Molecular Therapy. Nucleic Acids 2025-03-11 [PMID: 40034207]

Rabolli C, Longenecker J, Vries I et al. The cardiac METTL3-m6A pathway regulates the systemic response to western diet. JCI Insight 2025-04-24 [PMID: 40272887]

Hasegawa J, Nagata T, Ihara K et al. Heteroduplex oligonucleotide technology boosts oligonucleotide splice switching activity of morpholino oligomers in a Duchenne muscular dystrophy mouse model Nature Communications 2024-09-26 [PMID: 39327422]

X Zhou, S Wahane, MS Friedl, M Kluge, CC Friedel, K Avrampou, V Zachariou, L Guo, B Zhang, X He, RH Friedel, H Zou Microglia and macrophages promote corralling, wound compaction and recovery after spinal cord injury via Plexin-B2 Nat. Neurosci., 2020-03-01;23(3):337-350. 2020-03-01 [PMID: 32112058]

Li H, Huynh TN, Duong MT et al. ACAT1/SOAT1 Blockade Suppresses LPS-Mediated Neuroinflammation by Modulating the Fate of Toll-like Receptor 4 in Microglia International journal of molecular sciences 2023-03-15 [PMID: 36982689] (Western Blot, Mouse)

Ventura E, Xie C, Buraschi S et al. Complexity of progranulin mechanisms of action in mesothelioma Journal of experimental & clinical cancer research : CR 2022-12-05 [PMID: 36471440] (Immunocytochemistry/ Immunofluorescence, Human)

Li Y, Li C, Liu Q et al. Loss of Acta2 in cardiac fibroblasts does not prevent the myofibroblast differentiation or affect the cardiac repair after myocardial infarction Journal of molecular and cellular cardiology 2022-08-22 [PMID: 36007455] (IHC-Fr, Mouse)

Details:
IHC-Fr dilution 1:100

Wu L, Xu Y, Xi K et al. Regulation of macrophage subtype via injectable micro/nano-structured porous microsphere for reprogramming osteoimmune microenvironment Chemical Engineering Journal 2022-07-01 (ICC/IF, Rat)

Costanzo F, Martinez Diez M, Santamaria Nunez G et al. Promoters of ASCL1- and NEUROD1-dependent genes are specific targets of lurbinectedin in SCLC cells EMBO molecular medicine 2022-03-09 [PMID: 35263037] (WB, Human)

Uzureau S, Lecordier L, Uzureau P et Al. APOL1 C-Terminal Variants May Trigger Kidney Disease through Interference with APOL3 Control of Actomyosin Cell Rep 2020-03-17 [PMID: 32187552] (ICC/IF, Human)

Wu L, Gu Y, Liu L et al. Hierarchical micro/nanofibrous membranes of sustained releasing VEGF for periosteal regeneration Biomaterials 2019-10-18 [PMID: 31655445] (ICC/IF, Human)

Miao Q, Hill MC, Chen F et al. SOX11 and SOX4 drive the reactivation of an embryonic gene program during murine wound repair Nat Commun [PMID: 31492871] (ICC/IF, IF/IHC, Human)

More publications at http://www.novusbio.com/NB600-1293

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Products Related to NB600-1293

NBL1-17706	Vinculin Overexpression Lysate
NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB7539	Goat anti-Mouse IgG (H+L) Secondary Antibody [HRP]
NBP1-97005-0.5mg	Mouse IgG1 Isotype Control (MG1)

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.

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