Product Datasheet

Notch-1 Antibody (mN1A) - BSA Free
NB100-78486

Unit Size: 0.1 ml

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

Reviews: 2 Publications: 10

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
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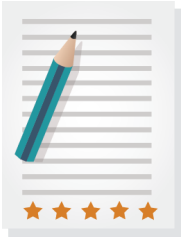
Updated 10/23/2024 v.20.1



NB100-78486

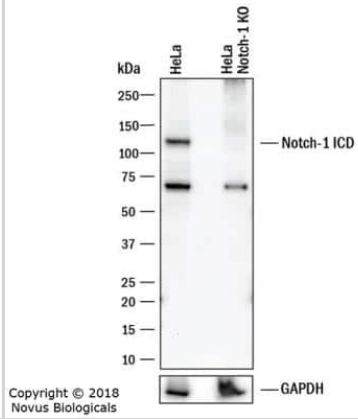
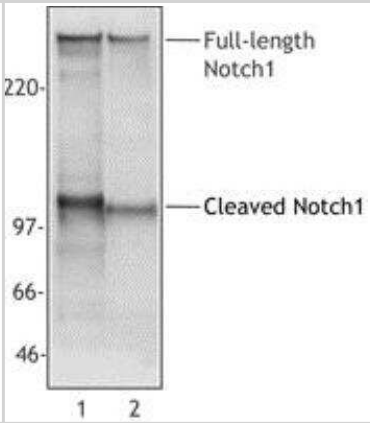
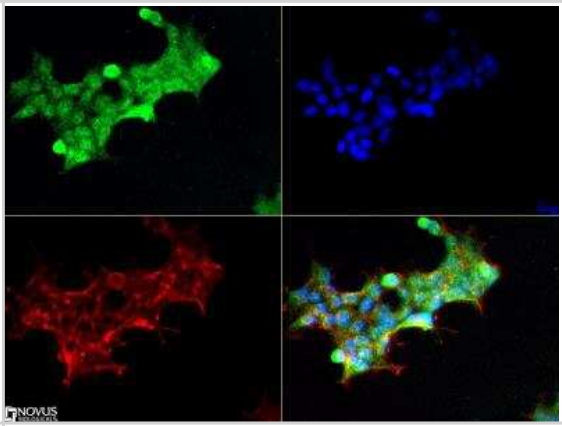
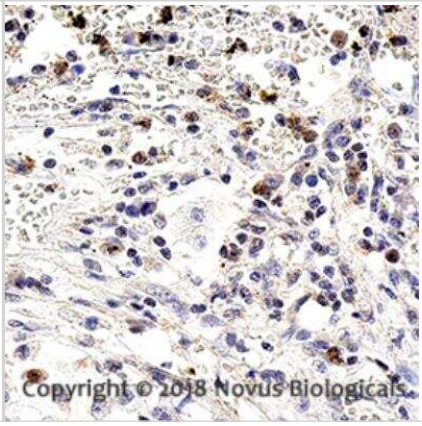
Notch-1 Antibody (mN1A) - BSA Free

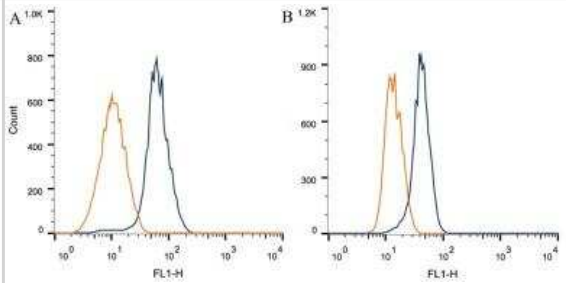
Product Information	
Unit Size	0.1 ml
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	mN1A
Preservative	0.05% Sodium Azide
Isotype	IgG1 Kappa
Purity	Protein G purified
Buffer	PBS
Target Molecular Weight	272.505 kDa

Product Description	
Host	Mouse
Gene ID	4851
Gene Symbol	NOTCH1
Species	Human, Mouse, Rat (Negative)
Reactivity Notes	Does not recognize rat Notch1.
Specificity/Sensitivity	Does not cross-react with Notch 2, 3, or 4.
Immunogen	Mouse Notch1 protein [Uniprot: Q01705]

Product Application Details	
Applications	Western Blot, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunoprecipitation, CyTOF-ready, Knockout Validated
Recommended Dilutions	Western Blot 1 - 2 ug/mL, Flow Cytometry 1 ug per million cells, Immunohistochemistry 1:10 - 1:500, Immunocytochemistry/ Immunofluorescence 1:50 - 1:100, Immunoprecipitation 1:10 - 1:100, Immunohistochemistry-Paraffin 1:10 - 1:500, CyTOF-ready, Knockout Validated
Application Notes	The mN1A monoclonal antibody reacts with the intracellular domain of mouse and human Notch1 and has been reported to have highest affinity for activated intracellular Notch1 and lower affinity for full-length unprocessed/heterodimeric Notch1 forms. This antibody is CyTOF ready.

Images

Knockout Validated: Notch-1 Antibody (mN1A) [NB100-78486] - Lysates of HeLa human cervical epithelial carcinoma parental cell line and Notch-1 knockout (KO) HeLa cell line. PVDF membrane was probed with 2.0 ug/mL of Mouse Anti-Human Notch-1 Monoclonal Antibody (Catalog # NB100-78486) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog #HAF018). Specific band was detected for Notch-1 at approximately 110 kDa (as indicated) in the parental HeLa cell line, but is not detectable in the knockout HeLa cell line. This experiment was conducted under reducing conditions.	
Western Blot: Notch-1 Antibody (mN1A) [NB100-78486] - Cell extracts from Jurkat (Lane 1) or mouse thymocytes (Lane 2) were analyzed with monoclonal anti-NOTCH1 antibody. The mN1A antibody recognizes both mouse and human 270 kDa full-length NOTCH1 and 110-120 kDa cleaved NOTCH 1 (NICD).	
Immunocytochemistry/Immunofluorescence: Notch-1 Antibody (mN1A) [NB100-78486] - The Notch1 Antibody was tested in HEK293 cells at a 1:50 dilution with DyLight 488 (Green). Actin was counterstained with Phalloidin 568 (Red) and cells were mounted in DAPI Flouromount (Blue).	
Immunohistochemistry-Paraffin: Notch-1 Antibody (mN1A) [NB100-78486] - Analysis of FFPE human pancreatic cancer using 1:10 dilution of Notch-1 antibody on a Bond Rx autostainer (Leica Biosystems). The assay involved 20 minutes of heat induced antigen retrieval (HIER) using 10mM sodium citrate buffer (pH 6.0) and endogenous peroxidase quenching with peroxide block. The sections were incubated with primary antibody for 30 minutes and Bond Polymer Refine Detection (Leica Biosystems) with DAB was used for signal development followed by counterstaining with hematoxylin. Whole slide scanning and capturing of representative images (20X) was performed using Aperio AT2 (Leica Biosystems). Cytoplasmic staining in epithelial cells was observed. Staining was performed by Histowiz.	

Flow Cytometry: Notch-1 Antibody (mN1A) [NB100-78486] - Intracellular flow cytometric staining of 1 x 10^6 CHO (A) and MCF-7 (B) cells using Notch1 antibody (dark blue). Isotype control shown in orange. An antibody concentration of 1 ug/1x10^6 cells was used.	

Publications

Alghamdi TA, Krentz NAJ, Smith N et al. Zmiz1 is required for mature B-cell function and mass expansion upon high fat feeding Molecular metabolism 2022-10-25 [PMID: 36307047] (WB, Mouse)

Details:
Dilution used in WB 1:200

Gong M, Yan F, Yu L, Li F A dopamine-methacrylated hyaluronic acid hydrogel as an effective carrier for stem cells in skin regeneration therapy Cell death & disease 2022-08-27 [PMID: 36030275] (IHC-Fr, WB, Mouse)

Details:
WB Dilutions: 1:1000; ICC/IF Dilutions: 1:100

Qiu, H, Tang, X Et al. Notch1 Autoactivation via Transcriptional Regulation of Furin, Which Sustains Notch1 Signaling by Processing Notch1-Activating Proteases ADAM10 and Membrane Type 1 Matrix Metalloproteinase. Mol Cell Biol 2015-11-01 [PMID: 26283728] (IF/IHC, Mouse)

Bai J, Khajavi M, Sui L et al. Angiogenic responses in a 3D micro-engineered environment of primary endothelial cells and pericytes Angiogenesis 2020-09-21 [PMID: 32955682] (ICC/IF)

Kang H, Yang K, Xiao L et al. Osteoblast Hypoxia-Inducible Factor-1a Pathway Activation Restrains Osteoclastogenesis via the Interleukin-33-MicroRNA-34a-Notch1 Pathway. Front Immunol. 2017-10-31 [PMID: 29085370] (WB, Mouse)

Singh NK, Kotla S, Kumar R, Rao GN Cyclic AMP Response Element Binding Protein Mediates Pathological Retinal Neovascularization via Modulating DLL4-NOTCH1 Signaling. EBioMedicine 2015-11-01 [PMID: 26870802]

De Strooper B, Annaert W, Cupers P et al. A presenilin-1-dependent gamma-secretase-like protease mediates release of Notch intracellular domain. Nature. 1999-04-08 [PMID: 10206645] (WB, Mouse)

Ray WJ, Yao M, Nowotny P et al. Evidence for a physical interaction between presenilin and Notch. Proc Natl Acad Sci U S A. 1999-03-16 [PMID: 10077672] (WB, IP, Human)

Jundt F et al. Leukemia. 22:1587. 2008-01-01 [PMID: 18449208] (IF/IHC)

Sun H et al. J. Cell Biol. 177:647. 2007-01-01 [PMID: 17502421] (IF/IHC)

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Products Related to NB100-78486

NBL1-13725	Notch-1 Overexpression Lysate
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-43319-0.5mg	Mouse IgG1 Kappa Isotype Control (P3.6.2.8.1)

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