

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.

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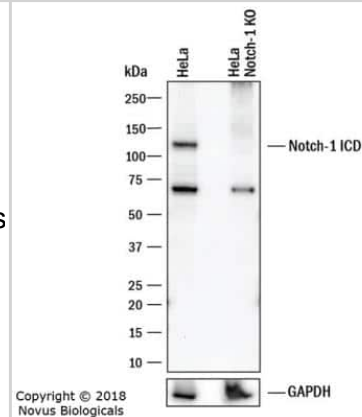
NB100-78486

Notch-1 Antibody (mN1A) - BSA Free

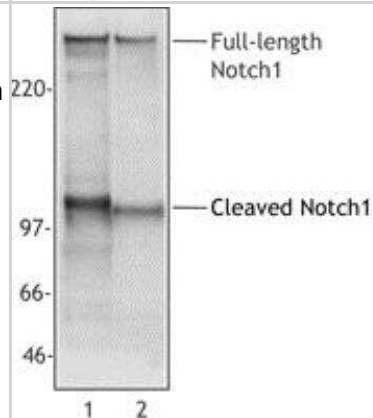
Product Information	
Unit Size	0.1 ml
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	mN1A
Preservative	0.05% Sodium Azide
Isotype	IgG1 Kappa
Purity	Protein G purified
Buffer	PBS
Target Molecular Weight	272.505 kDa
Product Description	
Description	Novus Biologicals Knockout (KO) Validated Mouse Notch-1 Antibody (mN1A) - BSA Free (NB100-78486) is a monoclonal antibody validated for use in IHC, WB, Flow, ICC/IF and IP. Anti-Notch-1 Antibody: Cited in 10 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
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, Immunohistochemistry-Paraffin, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, 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	<p>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.</p> <p>This antibody is CyTOF ready.</p>

Images

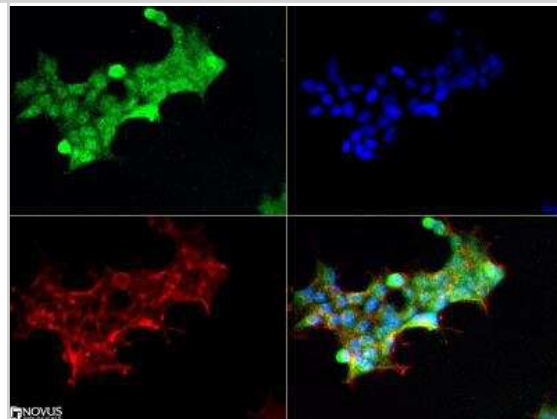
Western Blot: Notch-1 Antibody (mN1A) [NB100-78486] - Lysates of HeLa human cervical epithelial carcinoma parental cell line and Notch-1 knockout (KO) HeLa cell line. PVDF membrane was probed with 2.0 ug/mL of Mouse Anti-Human Notch-1 Monoclonal Antibody (Catalog # NB100-78486) followed by HRP-conjugated 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.



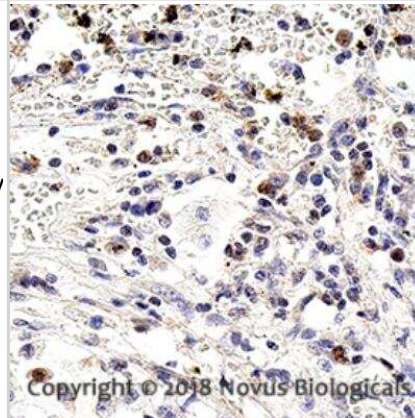
Western Blot: Notch-1 Antibody (mN1A) [NB100-78486] - Cell extracts from Jurkat (Lane 1) or mouse thymocytes (Lane 2) were analyzed with monoclonal anti-NOTCH1 antibody. The mN1A antibody recognizes both mouse and human 270 kDa full-length NOTCH1 and 110-120 kDa cleaved NOTCH 1 (NICD).



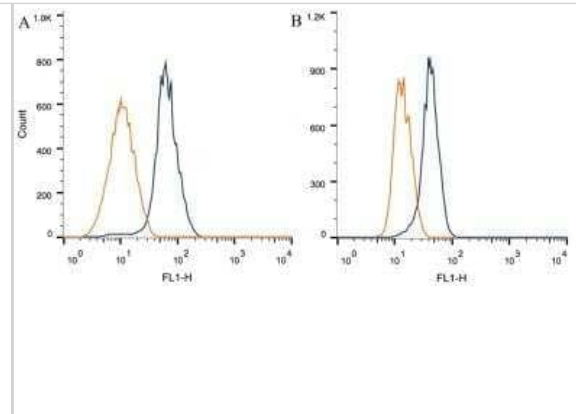
Immunocytochemistry/Immunofluorescence: Notch-1 Antibody (mN1A) [NB100-78486] - The Notch1 Antibody was tested in HEK293 cells at a 1:50 dilution with DyLight 488 (Green). Actin was counterstained with Phalloidin 568 (Red) and cells were mounted in DAPI Fluoromount (Blue).



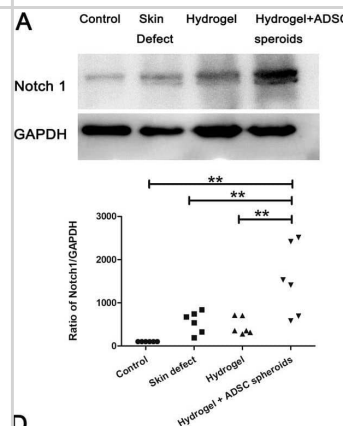
Immunohistochemistry-Paraffin: Notch-1 Antibody (mN1A) [NB100-78486] - Analysis of FFPE human pancreatic cancer using 1:10 dilution of Notch-1 antibody on a Bond Rx autostainer (Leica Biosystems). The assay involved 20 minutes of heat induced antigen retrieval (HIER) using 10mM sodium citrate buffer (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.



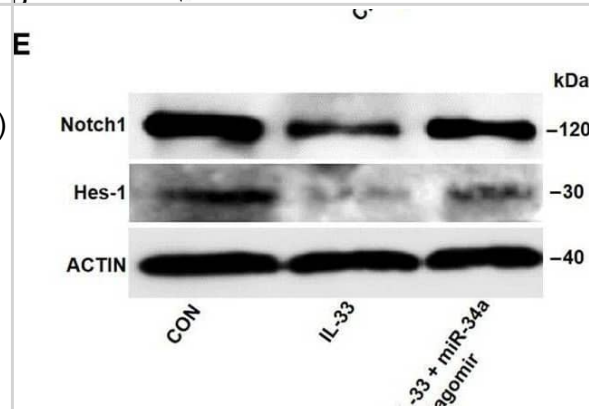
Flow Cytometry: Notch-1 Antibody (mN1A) [NB100-78486] - Intracellular flow cytometric staining of 1×10^6 CHO (A) and MCF-7 (B) cells using Notch1 antibody (dark blue). Isotype control shown in orange. An antibody concentration of $1 \mu\text{g}/1 \times 10^6$ cells was used.



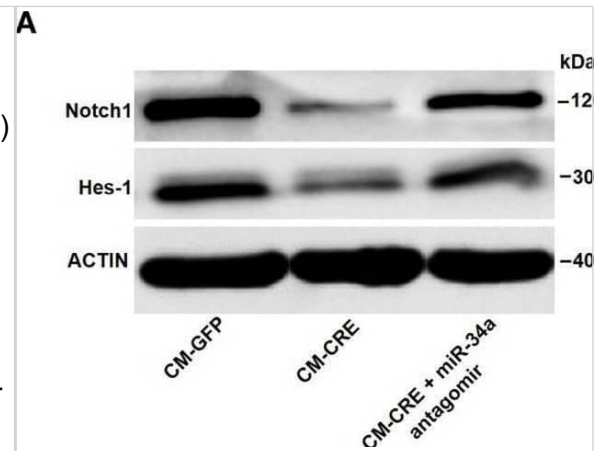
The DA-MeHA hydrogel regulated Notch signaling. A–E DA-MeHA hydrogel-encapsulated spheroids or suspensions of ADSCs upregulated the expression of Notch1 and Notch2 while downregulating the expression of Notch3, Jagged1 and Jagged2. F No significant difference in Hes1 expression was observed among the groups. $n = 4$ samples/group ($*p < 0.05$ and $**p < 0.01$). Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/36030275>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Interleukin-33 (IL-33) decreases bone marrow-derived monocytes (BMMs) osteoclastogenesis by inhibiting Notch1 activity. (A) Western blot analysis of Notch1 and Hes-1 expression in osteoclast progenitors incubated with CM-CRE in the presence of miR-34a-5p antagomir. (B–D) Quantification of Notch1, Jag1, and Hes-1 expression in osteoclast progenitors incubated with CM-CRE in the presence of miR-34a-5p antagomir. (E) Western blot analysis of Notch1 and Hes-1 expression in osteoclast progenitors induced by IL-33 in the presence of miR-34a-5p antagomir. (F–H) Quantification of Notch1, Jag1, and Hes-1 expression in osteoclast progenitors treated with IL-33 in the presence of miR-34a-5p antagomir. (I–K) BMMs osteoclastic formation and tartrate-resistant acid phosphatase (TRAP) activity assay after treatment with 20 ng/ml IL-33 in the presence of Jag-1. Red arrows indicated multinucleated osteoclasts. Scale bars represent 100 μm . (L–O) Quantification of Trap, Cathepsin K, Nfatc1, and C-fos expression in osteoclast progenitors treated with 20 ng/ml IL-33 in the presence of Jag-1. $*P < 0.05$, $**P < 0.01$, $***P < 0.001$. P values were analyzed by one-way ANOVA. Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/29085370>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



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Publications

Thakur V, Thakur V, Wang D et al. Co-inhibition of Notch1 and ChK1 triggers genomic instability and melanoma cell death increasing the lifespan of mice bearing melanoma brain metastasis. *Journal of experimental & clinical cancer research* : CR 2025-05-29 [PMID: 40437523]

Jatko J, Darling C, Kellett M, Bain L Arsenic exposure in drinking water reduces Lgr5 and secretory cell marker gene expression in mouse intestines *Toxicology and Applied Pharmacology* 2021-05-01 [PMID: 33957193]

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
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]
NBP1-43319-0.5mg	Mouse IgG1 Kappa Isotype Control (P3.6.2.8.1)

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