

Product Datasheet

CD133 Antibody - BSA Free

NB120-16518

Unit Size: 0.1 mg

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

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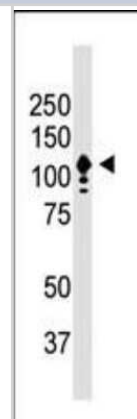
NB120-16518

CD133 Antibody - BSA Free

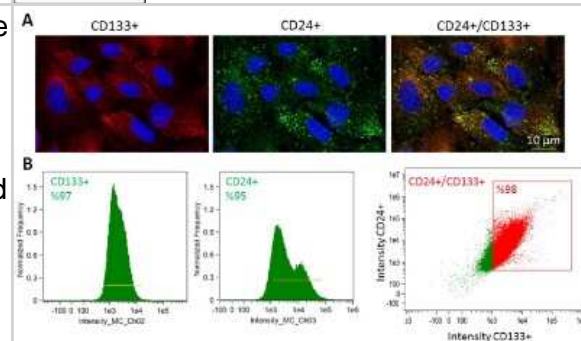
Product Information	
Unit Size	0.1 mg
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS
Product Description	
Host	Rabbit
Gene ID	8842
Gene Symbol	PROM1
Species	Human, Mouse, Rat, Porcine
Reactivity Notes	porcine reactivity reported in scientific literature (PMID: 29352176).
Marker	Stem Cell Marker
Specificity/Sensitivity	CD133 - Hematopoietic Stem Cell Marker
Immunogen	Synthetic peptide corresponding to a C-terminal region of CD133 (within amino acids 750-865).
Product Application Details	
Applications	Western Blot, ELISA, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Chromatin Immunoprecipitation (ChIP)
Recommended Dilutions	Western Blot 1:500-1:1000, Flow Cytometry 1:10-1:1000, ELISA 1:1000, Immunohistochemistry 1:100-1:250, Immunocytochemistry/ Immunofluorescence 1:100, Immunohistochemistry-Paraffin 1:100-1:250, Immunohistochemistry-Frozen, Chromatin Immunoprecipitation (ChIP)
Application Notes	Detects a band of approximately 120 kDa (predicted molecular weight: 97 kDa). IHC: Citrate buffer antigen retrieval required. ICC/IF: Fix with 3% paraformaldehyde for 20 min at RT. Optimal dilutions/concentrations should be determined by the end user. Use in IHC-Frozen reported in scientific literature (PMID: 29352176).

Images

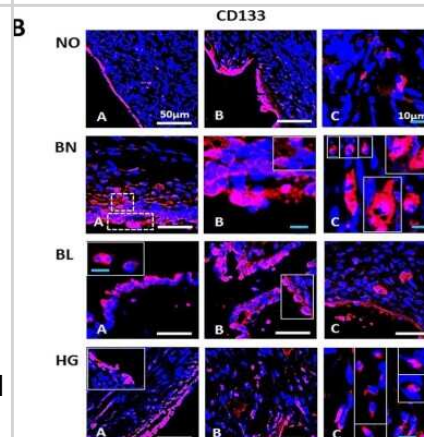
Western Blot: CD133 Antibody - BSA Free [NB120-16518] - Predicted band size : 97 kDa recognizes 97 kDa human CD133 in Y79 cells. Band is at ~120 kDa due to protein glycosylation.



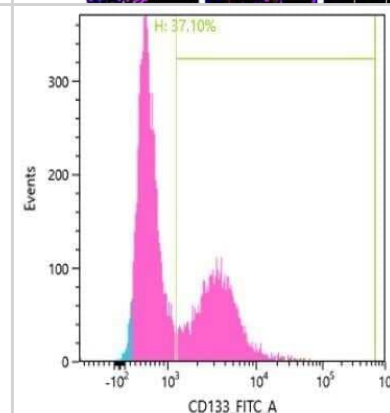
Immunocytochemistry/Immunofluorescence: CD133 Antibody - BSA Free [NB120-16518] - Characterization of Scattered tubular-like cells (STCs) isolated from pig kidneys. A) Representative immunofluorescence staining (original magnification 40X) for the STC surface markers CD133 NB120-16518G (red) and CD24 (green) in isolated swine STCs. B) Flow cytometry analysis of isolated STCs showing that 97% of cells expressed CD133, 95% CD24, and 98% were double-positive for CD133 and CD24 (n = 3 each). Image collected and cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/31614781/>) licensed under a CC-BY license.



Immunohistochemistry: CD133 Antibody - BSA Free [NB120-16518] - Immunostaining for CD133 (NB120-16518) in normal ovarian and tumor tissue sections. Staining of CD133 in OSE layer (A, B) as well as cortex (C) reveals specific CD133+ cells with relatively higher cell numbers in BL and HG. Area within dotted lines in BN OSE (A) are magnified in (B) while elliptical/spindle shaped CD133+ cells in cortex from various fields were represented in the composite image in (C) of BN and HG. Large CD133+ cells in cortex were also observed. White scale bar = 50 μ m; blue scale bar = 10 μ m. Secondary antibody employed was conjugated with Alexa fluor 568 and tissue sections were counterstained with nucleus specific dye DAPI. Image collected and cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/30121075/>) licensed under a CC-BY license.



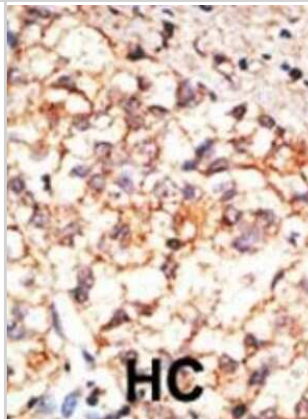
Flow Cytometry: CD133 Antibody - BSA Free [NB120-16518] - Flow Cytometry: CD133 Antibody [DyLight 488] [NB120-16518G] - Flow Cytometry: CD133 Antibody (DyLight488) [NB120-16518G] - Rat bone marrow cells were stained with CD133 (1:100) antibody (20 minutes at 4C), fixed, and then analyzed. Image using the DyLight 488 form of this antibody.



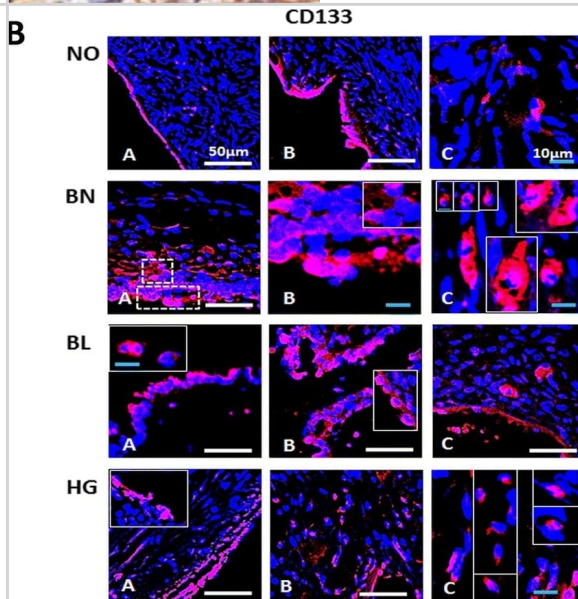
Chromatin Immunoprecipitation: CD133 Antibody - BSA Free [NB120-16518] - [NB 120-16518] - Staining CD133 in Bone Marrow Mononuclear Cells by Immunofluorescence.



Immunohistochemistry-Paraffin: CD133 Antibody - BSA Free [NB120-16518] - Staining of CD133 in human hepatocarcinoma (HC) tissue. NB120-16518 was peroxidase-conjugated to the secondary antibody, followed by AEC staining.



Immunostaining for CD133 in normal ovarian and tumor tissue sections: [A] Mouse monoclonal anti-CD133 antibody was localized in both OSE (A, B) and ovarian cortex (C, D) by immunohistochemistry. Region between dotted boxes in A, C is magnified in B, D respectively. Polar staining of CD133 is obvious in OSE layer especially in NO, BL and HG ovaries. BL ovaries exhibit multi-layered OSE. Cortex comprised of CD133+ cells arranged in clusters with elongated/spindle shaped morphology in NO and BN ovaries. BL ovarian cortex harbours single spherical cell clusters distributed throughout. HG comprised more of large CD133+ cells in OSE and few clusters in the cortex per field focussed. Insets include magnified images of cells from different fields. Scale bar = 100 um (A, C) and 25 um (B, D) respectively. [B] Immunofluorescence staining of CD133 in OSE layer (A, B) as well as cortex (C) reveals specific CD133+ cells with relatively higher cell numbers in BL and HG. Area within dotted lines in BN OSE (A) are magnified in (B) while elliptical/spindle shaped CD133+ cells in cortex from various fields were represented in the composite image in (C) of BN and HG. Large CD133+ cells in cortex were also observed. White scale bar = 50 um; blue scale bar = 10 um. Secondary antibody employed was conjugated with Alexa fluor 568 and tissue sections were counterstained with nucleus specific dye DAPI Image collected and cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/30121075>), licensed under a CC-BY licence.



Publications

Tarek Niemann, Jonas Joneleit, Jonathan Storm, Tom Nacke, Dirk Wähnert, Christian Kaltschmidt, Thomas Vordemvenne, Barbara Kaltschmidt, Kin Hing William Lau, Tong-Chuan He Analyzing Sex-Specific Dimorphism in Human Skeletal Stem Cells *Cells* 2023-11-22 [PMID: 38067111]

Andreas M. Bapst, Thomas Knöpfel, Karen A. Nolan, Faik Imeri, Claus D. Schuh, Andrew M. Hall, Jia Guo, Dörthe M. Katschinski, Roland H. Wenger Neurogenic and pericytic plasticity of conditionally immortalized cells derived from renal erythropoietin-producing cells *Journal of Cellular Physiology* 2022-01-10 [PMID: 35014036]

Depanwita Saha, Debarpan Mitra, Neyaz Alam, Sagar Sen, Saunak Mitra Mustafi, Pradip K Majumder, Biswanath Majumder, Nabendu Murmu Lupeol and Paclitaxel cooperate in hindering hypoxia induced vasculogenic mimicry via suppression of HIF-1 α -EphA2-Laminin-5 γ 2 network in human oral cancer. *Journal of cell communication and signaling* 2023-09-01 [PMID: 36063341]

Niemann T, Joneleit J, Storm J et al. Analyzing Sex-Specific Dimorphism in Human Skeletal Stem Cells *Cells* 2023-11-22 (ICC/IF, Human)

Iqbal F, Johnston A, Wyse B et al. Combination human umbilical cord perivascular and endothelial colony forming cell therapy for ischemic cardiac injury *npj Regenerative Medicine* 2023-08-25 [PMID: 37626067] (FLOW)

Witte KE, Pfitzenmaier J, Storm J et al. Analysis of Several Pathways for Efficient Killing of Prostate Cancer Stem Cells: A Central Role of NF- κ B REIA *International Journal of Molecular Sciences* 2021-08-18 [PMID: 34445612] (ICC/IF, IHC-P)

Witte KE, Hertel O, Windmüller BA et al. Nanopore Sequencing Reveals Global Transcriptome Signatures of Mitochondrial and Ribosomal Gene Expressions in Various Human Cancer Stem-like Cell Populations *Cancers (Basel)* 2021-03-06 [PMID: 33800955] (ICC/IF)

Ma D, Hou L, Xia H et al. PER2 inhibits proliferation and stemness of glioma stem cells via the Wnt/ β catenin signaling pathway *Oncology Reports* 2020-05-27 [PMID: 32468039]

JSA Schulte Am, BA Windmüller, J Hanewinkel, J Storm, C Förster, L Wilkens, M Krüger, B Kaltschmid, C Kaltschmid Isolation and Characterization of Two Novel Colorectal Cancer Cell Lines, Containing a Subpopulation with Potential Stem-Like Properties: Treatment Options by MYC/NMYC Inhibition *Cancers (Basel)*, 2020-09-10;12(9):. 2020-09-10 [PMID: 32927768] (B/N)

Zhou L, Yang T, Zhao F Et al. Effect of uncultured adipose-derived stromal vascular fraction on preventing urethral stricture formation in rats *Sci Rep* 2022-03-05 [PMID: 35246575] (FLOW, Rat)

Details:

Citation using the PE version of this antibody.

Wamba B, Ghosh P, Mbaveng A, et al. Botanical from Piper capense Fruit Can Help to Combat the Melanoma as Demonstrated by In Vitro and In Vivo Studies *Evid Based Complement Alternat Med* 2021-05-19 [PMID: 34007300]

King P, Wan J, Guo AA et al. Regulation of gliomagenesis and stemness through acid sensor ASIC1a *International journal of oncology* 2021-10-01 [PMID: 34515325] (FLOW, Human)

More publications at <http://www.novusbio.com/NB120-16518>



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Products Related to NB120-16518

HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control
NB120-16518G	CD133 Antibody [DyLight 488]

Limitations

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