Product Datasheet

CD34 Antibody
NB600-1071SS

Unit Size: 0.025 ml

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

Publications: 13

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NB600-1071SS

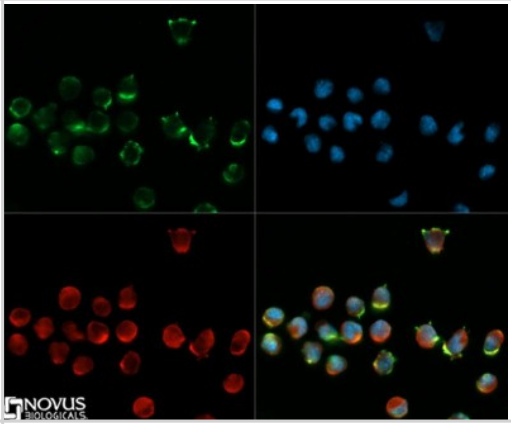
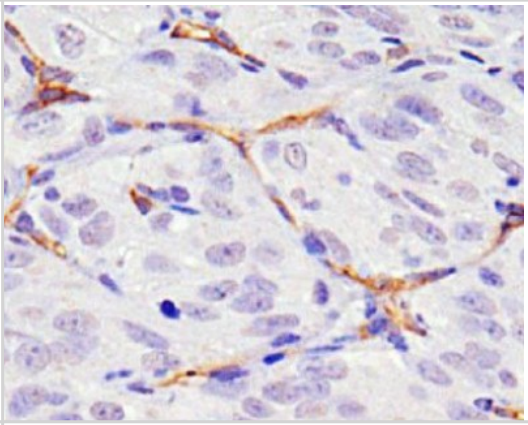
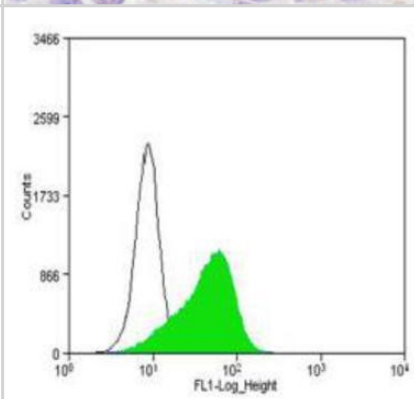
CD34 Antibody (MEC 14.7)

Product Information	
Unit Size	0.025 ml
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	MEC 14.7
Preservative	0.05% Sodium Azide
Isotype	IgG2a
Purity	Protein G purified
Buffer	Tris-glycine, 150 mM NaCl

Product Description	
Host	Rat
Gene ID	947
Gene Symbol	CD34
Species	Mouse
Species Reactivity	Mouse.
Marker	Hematopoietic Stem Cell Marker
Immunogen	murine transformed endothelioma cell line t-end.

Product Application Details	
Applications	Western Blot, ELISA, Flow Cytometry, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Immunoprecipitation
Recommended Dilutions	ELISA 1:100-1:2000, Flow Cytometry 1 ug per million cells, Immunocytochemistry/Immunofluorescence 1:100-1:1000, Immunohistochemistry 1:250, Immunohistochemistry-Frozen 1:250, Immunohistochemistry-Paraffin 1:250, Immunoprecipitation 1:10-1:500, Western Blot 1:250
Application Notes	This CD34 (MEC 14.7) antibody is useful for Immunohistochemistry (on both paraffin-embedded and frozen sections), Flow Cytometry, Immunocytochemistry/Immunofluorescence, Western blot, Immunoprecipitation and ELISA. Antigen retrieval is required for IHC-Paraffin.

Images

Immunocytochemistry/Immunofluorescence: CD34 Antibody (MEC 14.7) [NB600-1071] - CD34 antibody was tested in WEHI-3 cells with Dylight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and Dylight 550 (red).	
Immunohistochemistry: CD34 Antibody (MEC 14.7) [NB600-1071] - Immunohistochemical analysis of CD34 on mouse renal cancer xenograft.	
Flow Cytometry: CD34 Antibody (MEC 14.7) [NB600-1071] - CD34 (MEC 14.7) antibody was tested at 1:250 in WEHI-3 cells with DyLight 488 (green) alongside a matched isotype control (black).	

Publications

Scheerer N, Dehne N, Stockmann C et al. Myeloid hypoxia-inducible factor-1alpha is essential for skeletal muscle regeneration in mice. J Immunol 2013 Jul 1 [PMID: 23729446] (IHC-P, Mouse)

Savi? R, He X, Fiel I, Schuchman EH. Recombinant Human Acid Sphingomyelinase as an Adjuvant to Sorafenib Treatment of Experimental Liver Cancer. PLoS One 2013 May 28 [PMID: 23724146] (IHC-P, Mouse)

Lee YS, Morinaga H, Kim JJ et al. The Fractalkine/CX3CR1 System Regulates beta Cell Function and Insulin Secretion. Cell 2013 Apr 11 [PMID: 23582329] (IHC-P, Mouse)

Huang YS, Li IH, Chueh SH et al. Mesenchymal stem cells from rat olfactory bulbs can differentiate into cells with cardiomyocyte characteristics. J Tissue Eng Regen Med 2013 Feb 4 [PMID: 23378029]

Fiorina P, Pietramaggiori G, Scherer SS et al. The mobilization and effect of endogenous bone marrow progenitor cells in diabetic wound healing. Cell Transplant;19(11):1369-81. 2010 [PMID: 20977829]

Trempus CS et al. Enrichment for living murine keratinocytes from the hair follicle bulge with the cell surface marker CD34. J Invest Dermatol 120:501-11. 2003 [PMID: 12648211] (IHC, FLOW, ICC/IF)

Branco-Price C, Zhang N, Schnelle M et al. Endothelial Cell HIF-1[alpha] and HIF-2[alpha] Differentially Regulate Metastatic Success. Cancer Cell 1721(1):52-65. 2012 Jan. [PMID: 22264788]

Kalabis J, Oyama K, Okawa T, Nakagawa H, Michaylira CZ, Stairs DB, Figueiredo JL, Mahmood U, Diehl JA, Herlyn M, Rustgi AK. A subpopulation of mouse esophageal basal cells has properties of stem cells with the capacity for self-renewal and lineage specification. J Clin Invest;118(12):3860-9. 2008 Dec. [PMID: 19033657] (FLOW, IHC-P, ICC/IF, Mouse)

Sironi M, Conti A, Bernasconi S, Fra AM, Pasqualini F, Nebuloni M, Lauri E, De Bortoli M, Mantovani A, Dejana E, Vecchi A. Generation and characterization of a mouse lymphatic endothelial cell line. Cell Tissue Res;325(1):91-100. 2006 Jul. [PMID: 16534603]

Zheng Y, Du X, Wang W, Boucher M, Parimoo S, Stenn K. Organogenesis from dissociated cells: generation of mature cycling hair follicles from skin-derived cells. J Invest Dermatol;124(5):867-76. 2005 May. [PMID: 15854024] (IHC-P, Mouse)

Vecchi A, Massimiliano L, Ramponi S, Luini W, Bernasconi S, Bonecchi R, Allavena P, Parmentier M, Mantovani A, Sozzani S. Differential responsiveness to constitutive vs inducible chemokines of immature and mature mouse dendritic cells. J Leukoc Biol;66(3):489-94. 1999 Sep. [PMID: 10496320]

Dong QG, Bernasconi S, Lostaglio S, De Calmanovici RW, Martin-Padura I, Breviario F, Garlanda C, Ramponi S, Mantovani A, Vecchi A. A general strategy for isolation of endothelial cells from murine tissues. Characterization of two endothelial cell lines from the murine lung and subcutaneous sponge implants. Arterioscler Thromb Vasc Biol;17 (8):1599-604. 1997 Aug. [PMID: 9301641] (FLOW, Mouse)

More publications at http://www.novusbio.com/NB600-1071

Procedures

IHC Protocol Specific for CD34 Antibody (MEC 14.7) - Hematopoietic Stem Cell Marker
Immunohistochemistry-paraffin embedded sections

Antigen Unmasking:
Bring slides to a boil in 10 mM sodium citrate buffer pH 6.0 then maintain at a sub-boiling temperature for 10 minutes. Cool slides on bench top for 30 minutes.

Staining:
1. Wash sections in dH2O three times for 5 minutes each.
2. Wash section in wash buffer (1X PBS/0.1% Tween-20 (1X PBST)) for 5 minutes.
3. Block each section with 100-400 ul blocking solution (1X PBST, 5% goat serum) for 1 hour at room temperature.
4. Remove blocking solution and add 100-400 ul primary antibody diluted in 1X PBST, 5% goat serum to each section. Incubate overnight at 4C.
5. Remove antibody solution and wash sections in wash buffer three times for 5 minutes each.
6. Add 100-400 ul biotinylated secondary antibody, diluted in 1X PBST, 5% goat serum. Incubate 30 minutes at room temperature.
7. Remove secondary antibody solution and wash sections three times with wash buffer for 5 minutes each.
8. Add 100-400 ul Striptavidin-HRP reagent to each section and incubate for 30 minutes at room temperature.
9. Wash sections three times in wash buffer for 5 minutes each.
10. Add 100-400 ul DAB substrate to each section and monitor staining closely.
11. As soon as the sections develop, immerse slides in dH2O.
12. Counterstain sections in hematoxylin.
13. Wash sections in dH2O two times for 5 minutes each.
14. Dehydrate sections.
15. Mount coverslips.

Novus Biologicals USA
8100 Southpark Way, A-8
Littleton, CO 80120
USA
Phone: 303.730.1950
Toll Free: 1.888.506.6887
Fax: 303.730.1966
novus@novusbio.com

Novus Biologicals Canada
461 North Service Road West, Unit B37
Oakville, ON L6M 2V5
Canada
Phone: 905.827.6400
Toll Free: 855.668.8722
Fax: 905.827.6402
canada@novusbio.com

Novus Biologicals Europe
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@bio-techne.com

General Contact Information
www.novusbio.com
Technical Support: technical@novusbio.com
Orders: orders@novusbio.com
General: novus@novusbio.com

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.

For more information on our guarantee, please visit www.novusbio.com/guarantee.