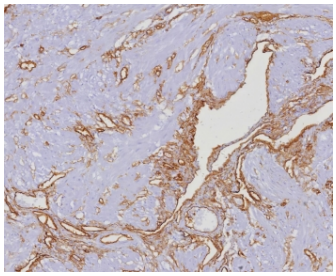
CD34 Antibody / Hematopoietic Stem Cell Marker Antibody [clone HPCA1/4393R] (V4801)

Catalog No.	Formulation	Size
V4801-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4801-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4801SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	HPCA1/4393R
Purity	Protein A/G affinity
UniProt	P28906
Localization	Cell Surface
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This CD34 Antibody / Hematopoietic Stem Cell Marker Antibody is available for research use only.



CD34 Antibody Uterus IHC HPCA1/4393R. Immunohistochemistry analysis of CD34 expression in FFPE human uterus tissue using a Hematopoietic Stem Cell Marker Antibody, clone HPCA1/4393R, demonstrates membranous HRP-DAB brown staining in vascular endothelial cells outlining small vessels and capillary networks within the stromal compartment, while surrounding uterine stromal and smooth muscle cells remain largely negative. The staining pattern highlights endothelial-lined structures and reflects CD34 expression within vascular-associated compartments, consistent with its role as a marker of progenitor and endothelial cell populations. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

Description

Cluster of Differentiation 34 (CD34) is a transmembrane glycoprotein encoded by the CD34 gene and is widely expressed on hematopoietic stem and progenitor cells as well as vascular endothelial cells. It plays a central role in cell adhesion, migration, and maintenance of stem cell niches within the bone marrow and other hematopoietic environments. CD34 Antibody / Hematopoietic Stem Cell Marker Antibody is widely used to identify early-stage hematopoietic cells, where it enables detection of stem and progenitor populations within tissues and cellular systems.

CD34 antibody, also known as progenitor cell marker antibody or hematopoietic marker antibody, is strongly associated with undifferentiated cell populations. CD34 expression is typically restricted to early hematopoietic stages and decreases as cells undergo lineage commitment and differentiation, making it a reliable indicator of stem and progenitor cell identity. This expression pattern allows researchers to distinguish early hematopoietic compartments from more mature cell populations.

This CD34 Antibody / Hematopoietic Stem Cell Marker Antibody is uniquely positioned for identifying stem cell populations, where accurate recognition of early progenitor cells is critical for understanding cellular hierarchy and differentiation pathways. CD34-positive cells can be detected within bone marrow, spleen, and other hematopoietic tissues, where they are typically localized within specialized microenvironments that support stem cell maintenance.

In tissue-based analysis, CD34 staining of hematopoietic compartments may reveal dispersed or clustered populations of progenitor cells depending on the biological context. These cells often lack the organized structural arrangement seen in endothelial staining, and their identification relies on both localization and morphological features in addition to marker expression.

CD34 is widely used in studies of hematopoiesis, where it supports investigation of stem cell distribution, lineage progression, and cellular differentiation. Changes in CD34-positive cell populations can reflect alterations in hematopoietic activity, providing insight into developmental and disease-associated processes.

Because CD34 is also expressed on vascular endothelial cells, careful interpretation of staining is required to distinguish stem cell populations from vascular structures. This distinction is typically made based on anatomical context and cellular morphology, with endothelial cells forming organized vessel structures and progenitor cells appearing as discrete cellular populations.

Overall, CD34 Antibody / Hematopoietic Stem Cell Marker Antibody HPCA1/4393R provides reliable detection of stem and progenitor cell populations, supporting studies of hematopoiesis, cellular differentiation, and stem cell biology across a range of experimental systems.

This antibody is part of our CD34 antibody collection, supporting research into stem cell biology, endothelial markers, and tumor angiogenesis.

Application Notes

Optimal dilution of the CD34 Antibody / Hematopoietic Stem Cell Marker Antibody should be determined by the researcher.

Immunogen

A synthetic peptide corresponding to a portion of human CD34 protein (within amino acids 285-385) was used as the immunogen for the CD34 antibody.

Storage

Aliquot the CD34 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

CD34 stem cell marker antibody, hematopoietic progenitor marker antibody, CD34 progenitor cell antibody, CD34 stem cell detection antibody, CD34 hematopoiesis marker antibody

Copyright © NSJ Bioreagents. All rights reserved.