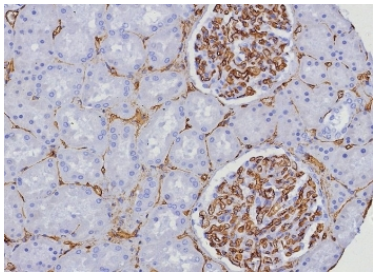
CD34 Antibody / Endothelial Cell Marker Antibody [clone HPCA1/8333R] (V4800)

Catalog No.	Formulation	Size
V4800-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4800-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4800SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

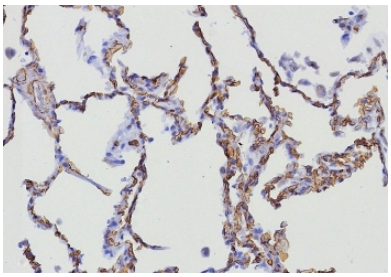
Recombinant RABBIT MONOCLONAL

Bulk quote request

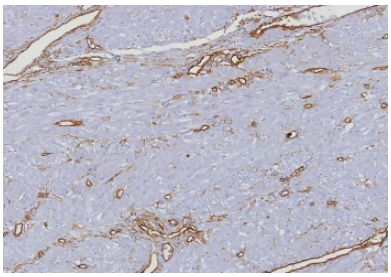
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	HPCA1/8333R
Purity	Protein A/G affinity
UniProt	P28906
Localization	Cell surface
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This CD34 Antibody / Endothelial Cell Marker Antibody is available for research use only.



CD34 Antibody Kidney IHC HPCA1/8333R. Immunohistochemistry analysis of CD34 expression in FFPE human kidney tissue using an Endothelial Cell Marker Antibody, clone HPCA1/8333R, demonstrates membranous HRP-DAB brown staining in vascular endothelial cells within glomerular capillary tufts and peritubular microvessels, clearly outlining endothelial-lined luminal structures, while renal tubular epithelial cells remain largely negative. The staining pattern supports precise identification of endothelial cells and visualization of renal vascular architecture. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



CD34 Antibody Lung IHC HPCA1/8333R. Immunohistochemistry analysis of CD34 expression in FFPE human lung tissue using an Endothelial Cell Marker Antibody, clone HPCA1/8333R, demonstrates membranous HRP-DAB brown staining in vascular endothelial cells lining alveolar capillaries and small vessels, outlining delicate microvascular networks within alveolar septa, while pneumocytes remain largely negative. The staining pattern supports clear identification of endothelial cells and visualization of pulmonary microvascular architecture. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



CD34 Antibody Uterus IHC HPCA1/8333R. Immunohistochemistry analysis of CD34 expression in FFPE human uterus tissue using an Endothelial Cell Marker Antibody, clone HPCA1/8333R, demonstrates membranous HRP-DAB brown staining in vascular endothelial cells outlining small vessels and capillary networks within the endometrial stroma and myometrial tissue, while surrounding stromal and smooth muscle cells remain largely negative. The staining pattern supports clear identification of endothelial cells and visualization of uterine vascular architecture. 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 sialomucin glycoprotein encoded by the CD34 gene and is widely expressed on vascular endothelial cells as well as hematopoietic stem and progenitor cells. It plays a key role in cell adhesion, migration, and maintenance of vascular integrity and is considered a defining marker of endothelial cell identity. CD34 Antibody / Endothelial Cell Marker Antibody is widely used to identify endothelial cells within tissues, where it enables precise visualization of vascular structures and localization of endothelial-lined compartments.

CD34 antibody, also known as vascular endothelial marker antibody or angiogenesis marker antibody, produces a characteristic membranous staining pattern in endothelial cells that line blood vessels. This staining outlines capillaries, small vessels, and larger vascular channels with high clarity, allowing direct identification of endothelial cell boundaries and luminal surfaces. The continuous membranous signal enables clear discrimination of endothelial cells from surrounding stromal, epithelial, and immune cell populations within complex tissue environments.

This CD34 Antibody / Endothelial Cell Marker Antibody is uniquely positioned for defining endothelial cell populations, where the primary goal is accurate identification rather than quantification or functional analysis. CD34-positive endothelial cells can be readily distinguished based on both morphology and staining pattern, appearing as elongated, vessel-forming cells arranged in continuous tubular structures. This allows researchers to map vascular organization and identify endothelial compartments across a wide range of tissues.

In normal tissues, CD34 staining reveals well-organized vascular networks with uniform vessel architecture, including regularly spaced capillaries and clearly defined vascular channels. These patterns reflect stable endothelial organization and can serve as a reference for comparison with altered vascular states. The ability to consistently visualize these structures supports studies of tissue organization and vascular distribution.

In disease contexts, endothelial cell organization may become disrupted, and CD34 staining can reveal alterations in vessel morphology, distribution, and density. Although this page focuses on endothelial identification rather than specific biological processes, the clear visualization of endothelial cells allows indirect observation of structural changes associated with pathology.

While CD34 expression may also be detected in hematopoietic progenitor cells depending on tissue context, its most consistent and morphologically distinct localization remains within vascular endothelial cells. Interpretation of CD34 staining therefore relies on both signal localization and anatomical context to accurately identify endothelial populations.

Overall, CD34 Antibody / Endothelial Cell Marker Antibody HPCA1/8333R provides robust and consistent detection of endothelial cells, enabling clear identification of vascular structures and supporting detailed analysis of tissue architecture and cellular localization.

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 / Endothelial Cell Marker Antibody should be determined by the researcher.

Immunogen

Recombinant full-length human HPCA1 protein 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 endothelial cell marker antibody, vascular endothelial marker antibody, CD34 endothelial antibody, CD34 vessel lining marker antibody, CD34 endothelial identification antibody

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