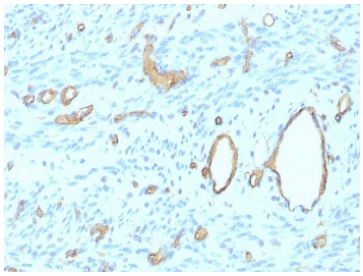
CD34 Antibody / Microvessel Density Marker Antibody [clone rHPCA1/8500] (V4793)

Catalog No.	Formulation	Size
V4793-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4793-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4793SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Recombinant | MOUSE MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, lambda
Clone Name	rHPCA1/8500
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 / Microvessel Density Marker Antibody is available for research use only.



CD34 Antibody Uterus IHC rHPCA1/8500. Immunohistochemistry analysis of CD34 expression in FFPE human uterus tissue using a Microvessel Density Marker Antibody, clone rHPCA1/8500, demonstrates distinct membranous HRP-DAB brown staining in endothelial cells outlining capillaries and small vessels, enabling clear identification and enumeration of microvascular structures within the tissue, while surrounding stromal and epithelial cells remain largely negative. The staining pattern supports accurate assessment of microvessel density and vascular distribution. 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 and hematopoietic progenitor cells. It functions in cell adhesion and vascular organization and serves as a key marker of endothelial identity. CD34 Antibody / Microvessel Density Marker Antibody is widely used to quantify vascular structures within tissues, providing a reliable and reproducible method for assessing microvessel density in both normal and disease settings.

CD34 antibody, also known as endothelial marker antibody or angiogenesis marker antibody, produces distinct membranous staining that outlines capillaries and small vessels with high clarity. This clear delineation of endothelial-lined luminal structures enables accurate identification and counting of microvessels within defined regions of interest. The consistent staining pattern supports reproducible quantification across samples, which is essential for comparative analysis.

This CD34 Antibody / Microvessel Density Marker Antibody is uniquely positioned for vascular quantification, where precise enumeration of vessels is required rather than visualization of structural dynamics. Microvessel density analysis relies on identifying discrete CD34-positive vascular profiles and counting them within standardized fields, and the sharp membranous staining produced by CD34 supports accurate scoring without ambiguity from surrounding tissue components.

In tumor tissues, microvessel density is a widely used metric reflecting angiogenic activity and vascular supply. Increased numbers of CD34-positive vessels are often observed in aggressive or rapidly growing tumors, and quantitative assessment of these vessels provides insight into tumor biology and vascular remodeling. CD34 staining enables consistent identification of these vascular profiles, supporting standardized analysis across studies.

In addition to oncology, microvessel density analysis using CD34 is applied in studies of tissue repair, fibrosis, and vascular adaptation, where changes in vessel number reflect underlying biological processes. The ability to reliably detect and count endothelial cells across different tissues enhances its utility in diverse experimental models.

Overall, CD34 Antibody / Microvessel Density Marker Antibody rHPCA1/8500 provides clear and reproducible detection of endothelial cells, enabling accurate quantification of microvascular structures and supporting analysis of vascular density across a wide range of research applications.

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 / Microvessel Density Marker Antibody should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 100-300) from the human protein was used as the immunogen for the recombinant CD34 antibody.

Storage

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

Alternate Names

CD34 microvessel density antibody, CD34 vascular density marker antibody, CD34 endothelial quantification antibody, CD34 angiogenesis quantification antibody, CD34 vessel counting antibody