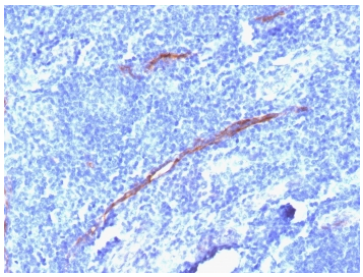
CD34 Antibody / Angiogenesis Marker Antibody [clone HPCA1/1806R] (V3477)

Catalog No.	Formulation	Size
V3477-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3477-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3477SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3477IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

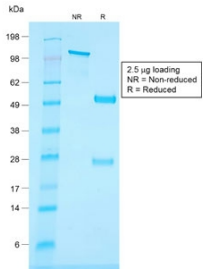
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Rat
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	HPCA1/1806R
Purity	Protein A affinity chromatography
UniProt	P28906
Localization	Cell surface
Applications	Flow Cytometry : 0.5-1ug/million cells Immunohistochemistry (FFPE) : 2-4ug/ml for 30 min at RT
Limitations	This CD34 Antibody / Angiogenesis Marker Antibody is available for research use only.



CD34 Antibody Tonsil IHC HPCA1/1806R. Immunohistochemistry analysis of CD34 expression in FFPE human tonsil using an Angiogenesis Marker Antibody, clone HPCA1/1806R, demonstrates membranous HRP-DAB brown staining in endothelial cells forming elongated and branching vascular structures within lymphoid tissue, highlighting active microvascular networks, while surrounding lymphocytes remain largely negative. The staining pattern supports visualization of vascular architecture associated with angiogenic processes. Required HIER: boil tissue sections in 10mM Tris with 1mM EDTA, pH 9, for 10-20 min followed by cooling at RT for 20 min.



SDS-PAGE analysis of purified, BSA-free recombinant CD34 Antibody / Angiogenesis Marker Antibody (clone HPCA1/1806R) as confirmation of integrity and purity.

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 stem and progenitor cells. It plays a central role in cell adhesion and migration within vascular niches and is closely associated with endothelial activation and vessel formation. CD34 Antibody / Angiogenesis Marker Antibody is widely used to study angiogenesis, where it enables visualization of newly forming vascular structures and dynamic changes in endothelial organization within tissues.

CD34 antibody, also known as endothelial marker antibody or vascular endothelial marker antibody, highlights endothelial cells involved in vessel sprouting and network expansion. During angiogenesis, endothelial cells proliferate and migrate to form branching microvascular structures, and CD34 expression remains prominent along these developing vessels. In tissue sections, this results in distinct membranous staining outlining fine capillary sprouts, elongating vessel segments, and interconnected vascular networks associated with active angiogenesis.

This CD34 Antibody / Angiogenesis Marker Antibody is uniquely positioned for analysis of vascular growth and remodeling, where structural changes in vessel density, branching complexity, and spatial distribution reflect biological activity. CD34-positive endothelial cells can be visualized forming irregular and expanding networks, allowing direct assessment of angiogenic processes in both physiological and pathological contexts.

In tumor tissues, angiogenesis is a critical driver of growth and progression, and CD34 staining reveals dense networks of tumor-associated vessels with increased branching and irregular morphology. These vascular patterns differ from normal tissue organization and provide insight into angiogenic activity within the tumor microenvironment. The ability to visualize these changes supports studies of tumor vascularization and endothelial dynamics.

Beyond oncology, CD34 is widely used to investigate angiogenesis in wound healing, developmental biology, and regenerative processes, where new vessel formation is required for tissue repair and remodeling. CD34 staining allows clear identification of expanding vascular networks and supports comparison of angiogenic activity across experimental conditions.

Overall, CD34 Antibody / Angiogenesis Marker Antibody provides robust detection of endothelial cells participating in vessel formation, enabling detailed visualization of angiogenic structures, branching networks, and vascular remodeling across a wide range of biological 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 recombinant CD34 Antibody / Angiogenesis Marker Antibody should be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Recombinant full-length human protein was used as the immunogen for the recombinant CD34 antibody.

Storage

Store the recombinant CD34 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

CD34 angiogenesis marker antibody, CD34 vascular growth marker antibody, endothelial angiogenesis antibody, CD34 vessel formation antibody, CD34 vascular remodeling antibody