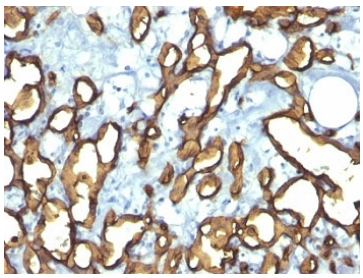
CD34 Antibody [clone HPCA1/763] (V2998)

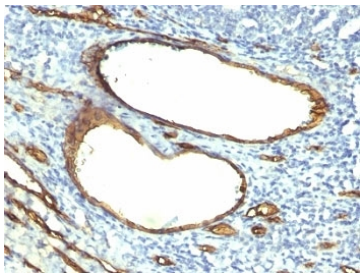
Catalog No.	Formulation	Size
V2998-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2998-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2998SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2998IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

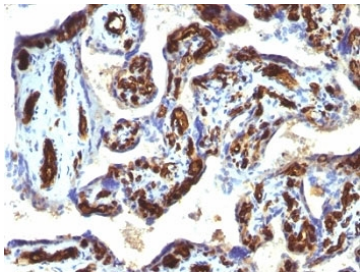
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, lambda
Clone Name	HPCA1/763
Purity	Protein G affinity chromatography
UniProt	P28906
Localization	Cell surface
Applications	Immunohistochemistry (FFPE) : 0.25-0.5ug/ml for 30 min at RT
Limitations	This CD34 antibody is available for research use only.



IHC: Formalin-fixed, paraffin-embedded human angiosarcoma stained with CD34 antibody (HPCA1/763)



IHC: Formalin-fixed, paraffin-embedded human tonsil stained with CD34 antibody (HPCA1/763)



IHC: Formalin-fixed, paraffin-embedded human placenta stained with CD34 antibody (HPCA1/763)

Description

CD34 antibody clone HPCA1/763 is a monoclonal antibody that detects CD34, a transmembrane glycoprotein expressed on hematopoietic stem and progenitor cells, endothelial cells, and certain mesenchymal populations. CD34 functions as a cell adhesion molecule and plays a key role in maintaining stem cell niches, promoting progenitor migration, and regulating vascular integrity. Because of its restricted expression pattern, CD34 is one of the most widely used markers in hematology, stem cell biology, and vascular research. NSJ Bioreagents provides this antibody for oncology, immunology, and developmental biology studies.

The antibody produces strong membranous staining on hematopoietic progenitors in bone marrow and cord blood, enabling reliable identification of stem and progenitor populations. In clinical hematology and research, CD34 detection has become the gold standard for stem cell enumeration during bone marrow transplantation. Clone HPCA1/763 provides reproducible staining that allows precise monitoring of stem cell populations for both experimental and therapeutic purposes.

In vascular biology, CD34 is expressed on endothelial cells lining blood vessels. This antibody highlights vascular structures in tissue samples, making it an essential tool for studies of angiogenesis, vascular remodeling, and endothelial biology. Researchers rely on CD34 detection to quantify microvessel density, a parameter that correlates with tumor progression, prognosis, and therapeutic response in oncology.

In oncology, CD34 antibody clone HPCA1/763 has been widely applied to classify tumors of vascular origin such as hemangiomas and angiosarcomas. Its detection helps distinguish vascular neoplasms from other tumors and supports assessment of tumor angiogenesis. In leukemias, CD34 serves as a marker of blast cells, aiding diagnosis and monitoring of disease progression. This makes the antibody a valuable component of diagnostic panels in hematopathology.

In developmental biology, CD34 expression has been studied as an early marker of stem and progenitor cells during embryogenesis. Detection with this antibody supports research into lineage specification, hematopoietic development, and stem cell microenvironments. It has also been used to explore mesenchymal stromal cell subsets in regenerative medicine.

Beyond oncology and hematology, CD34 is relevant in wound healing and tissue regeneration studies, where progenitor cells contribute to repair processes. The antibody provides a reliable means of identifying progenitor activity in both experimental and translational settings.

Validated in tissue-based and cell-based systems, CD34 antibody clone HPCA1/763 consistently provides strong membranous staining with minimal background. Alternate names include hematopoietic progenitor cell antigen antibody, vascular endothelial marker antibody, and stem cell surface protein antibody.

Application Notes

Optimal dilution of the CD34 antibody should be determined by the researcher.

1. Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10mM Citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min.
2. 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 CD34 antibody.

Storage

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

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