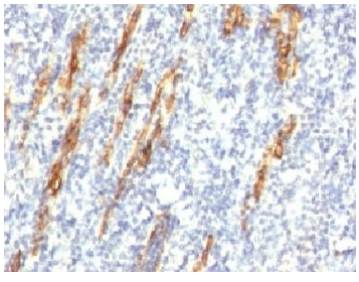
CD34 Antibody Cocktail [clone QBEnd/10 + HPCA1/763] (V2999)

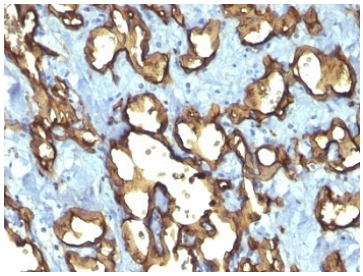
Catalog No.	Formulation	Size
V2999-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2999-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2999SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2999IHC-7ML	Prediluted 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

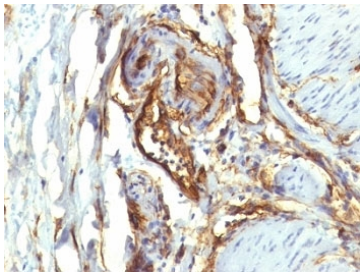
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, lambda
Clone Name	QBEnd/10 + HPCA1/763
Purity	Protein G affinity chromatography
UniProt	P28906
Localization	Cell surface
Applications	Flow Cytometry : 0.5-1ug/million cells Immunofluorescence : 0.5-1ug/ml Immunohistochemistry (FFPE) : 0.25-0.5ug/ml for 30 min at RT
Limitations	This CD34 antibody cocktail is available for research use only.



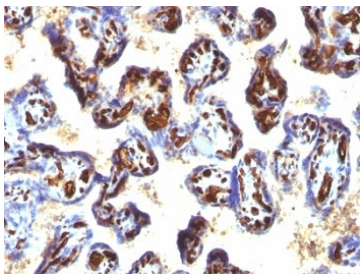
IHC: Formalin-fixed, paraffin-embedded human tonsil stained with CD34 antibody (QBEnd/10 + HPCA1/763)



IHC: Formalin-fixed, paraffin-embedded human angiosarcoma stained with CD34 antibody (QBEnd/10 + HPCA1/763)



IHC: Formalin-fixed, paraffin-embedded human colon carcinoma stained with CD34 antibody (QBEnd/10 + HPCA1/763)



IHC: Formalin-fixed, paraffin-embedded human placenta stained with CD34 antibody (QBEnd/10 + HPCA1/763)

Description

CD34 is a transmembrane glycoprotein that functions as a cell surface marker for hematopoietic stem and progenitor cells. It belongs to the sialomucin family of proteins and is heavily glycosylated, contributing to its role in mediating cell adhesion and signaling. CD34 is most prominently expressed in early hematopoietic stem cells, vascular endothelial cells, and certain fibroblast populations. A CD34 antibody is widely used to identify stem cells, study hematopoietic differentiation, and characterize vascular biology.

Functionally, CD34 serves as an adhesion molecule that regulates interactions between stem cells and their bone marrow microenvironment. Its expression is transient during differentiation, making it a reliable marker to distinguish undifferentiated progenitor cells from mature blood cells. A CD34 antibody allows researchers to trace lineage commitment, monitor stem cell populations, and explore bone marrow transplantation applications.

CD34 is also significant in vascular research. It is expressed on endothelial cells and contributes to angiogenesis, vascular repair, and tissue regeneration. In pathology, CD34 expression has been linked to tumor angiogenesis, where it is used as a marker to assess microvessel density in cancers. Employing a CD34 antibody enables researchers to study both normal vascular biology and disease-associated neovascularization.

NSJ Bioreagents offers a high-quality CD34 antibody validated for applications including flow cytometry, immunohistochemistry, and western blotting. Selecting a CD34 antibody from NSJ Bioreagents provides researchers with a dependable tool for hematopoietic, vascular, and cancer-related studies.

Application Notes

Optimal dilution of the CD34 antibody cocktail 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

A detergent solubilized vesicular suspension prepared from human term placenta (QBEnd/10) and recombinant full-length human protein (HPCA1/763) were used as the immunogen for the CD34 antibody cocktail.

Storage

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