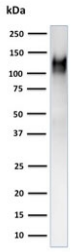
CD31 Antibody Cocktail C31.3 + JC/70A / PECAM-1 Antibody Cocktail [clone C31.3 + JC/70A] (V8880)

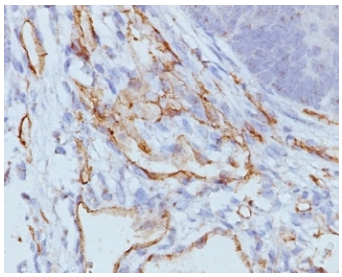
Catalog No.	Formulation	Size
V8880-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V8880-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V8880SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

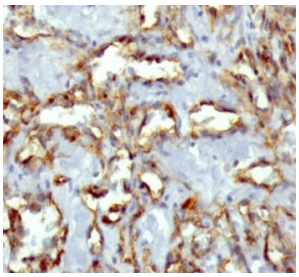
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa + Mouse IgG1, kappa
Clone Name	C31.3 + JC/70A
Purity	Protein A/G affinity
UniProt	P16284
Localization	Cell surface and cytoplasm of endothelial cells
Applications	Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This CD31 Antibody Cocktail C31.3 + JC/70A is available for research use only.



CD31 Antibody Cocktail C31.3 + JC/70A detection of PECAM1 in THP-1 cells by WB. Western blot testing of human THP-1 cell lysate with CD31 Antibody Cocktail C31.3 + JC/70A. A strong predominant band is visible at approximately 120-130 kDa, within the expected 83-130 kDa range reported for CD31/PECAM1 depending on glycosylation. The higher apparent molecular weight relative to the underlying polypeptide is consistent with extensive glycosylation of mature PECAM1. The relatively discrete signal demonstrates recognition of the expected target by this PECAM-1 Antibody Cocktail in human cell lysate.



CD31 Antibody Cocktail C31.3 + JC/70A staining of colon carcinoma vasculature by IHC. Immunohistochemistry of FFPE human colon carcinoma sections using CD31 Antibody Cocktail C31.3 + JC/70A. Strong brown staining outlines vascular endothelial structures within the tumor and adjacent stromal regions, producing clearly defined vessel-associated labeling against the blue nuclear counterstain. The staining pattern is consistent with the characteristic endothelial localization of PECAM1 and demonstrates vascular detection with this PECAM-1 Antibody Cocktail. Heat-induced epitope retrieval was performed using pH 9 Tris-EDTA before testing.



CD31 Antibody Cocktail C31.3 + JC/70A staining of angiosarcoma by IHC. Immunohistochemistry of FFPE human angiosarcoma sections using CD31 Antibody Cocktail C31.3 + JC/70A. Strong brown staining highlights numerous irregular vascular channels and endothelial tumor cells throughout the section. The prominent membrane-associated labeling and complex vascular pattern are consistent with the endothelial differentiation characteristic of angiosarcoma. This image demonstrates robust recognition of PECAM1-positive vascular structures with the PECAM-1 Antibody Cocktail. Heat-induced epitope retrieval was performed using pH 9 Tris-EDTA before testing.

Description

CD31 Antibody Cocktail C31.3 + JC/70A / PECAM-1 Antibody Cocktail recognizes platelet endothelial cell adhesion molecule 1, a transmembrane glycoprotein encoded by the PECAM1 gene. Also known as CD31 or PECAM-1, this protein belongs to the immunoglobulin superfamily of cell adhesion molecules. PECAM1 contains six extracellular immunoglobulin-like domains, a single transmembrane region and a cytoplasmic signaling domain. The protein is prominently expressed by vascular endothelial cells and is also found on platelets, monocytes, neutrophils and subsets of lymphocytes. Its characteristic distribution has established CD31 as an important marker for vascular and endothelial cell research.

PECAM-1 participates in homophilic interactions between adjacent endothelial cells and contributes to the organization and stability of endothelial junctions. Its cytoplasmic region contains immunoreceptor tyrosine-based inhibitory motifs that can undergo phosphorylation and recruit intracellular signaling proteins. Through these adhesive and signaling functions, PECAM1 contributes to vascular integrity, mechanotransduction and endothelial responses to inflammatory stimuli. The CD31 Antibody Cocktail C31.3 + JC/70A combines two monoclonal clones recognizing this biologically important endothelial protein.

CD31 also contributes to leukocyte transendothelial migration by participating in interactions that facilitate movement of immune cells across endothelial junctions. PECAM1 has additional roles in endothelial migration, angiogenesis and vascular remodeling. These functions make the protein relevant to research involving cardiovascular biology, inflammation, tissue repair, vascular development and tumor angiogenesis. Because of its strong association with endothelial cells, PECAM-1 is widely studied as a marker for identifying vascular structures and investigating changes in blood vessel organization and density.

Clones C31.3 and JC/70A have also been used together as a CD31 antibody cocktail in published research, providing an established literature history for this clone combination. Combining the two clones provides a multi-clone approach to PECAM1 recognition while retaining the defined characteristics of monoclonal antibody reagents. NSJ Bioreagents provides this PECAM-1 Antibody Cocktail for researchers investigating endothelial biology and vascular organization. A CD31 Antibody Cocktail C31.3 + JC/70A provides a multi-clone reagent for studying PECAM1 expression, vascular structures and endothelial cell biology.

For a Protein Microarray Validated monoclonal antibody with CD31 as the primary designation, see our CD31 Antibody PECAM1/3527 / PECAM-1 Monoclonal Antibody.

Application Notes

Optimal dilution of the CD31 Antibody Cocktail C31.3 + JC/70A should be determined by the researcher.

Immunogen

Human recombinant CD31 protein (clone C31.3) & membrane preparation of a spleen from a patient with hairy cell leukemia (clone JC/70A) was used as the immunogen for the CD31 Antibody Cocktail C31.3 + JC/70A.

Storage

Aliquot the CD31 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

PECAM-1 antibody, PECAM1 antibody, Platelet Endothelial Cell Adhesion Molecule 1 antibody, PECA1 antibody, EndoCAM antibody, GPIIA antibody

Copyright © NSJ Bioreagents. All rights reserved.