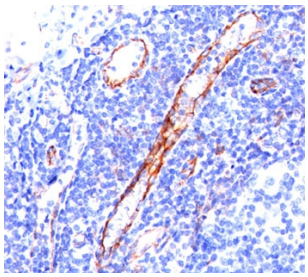
CD31 Antibody C31.3 / Mouse Monoclonal [clone C31.3] (V2220)

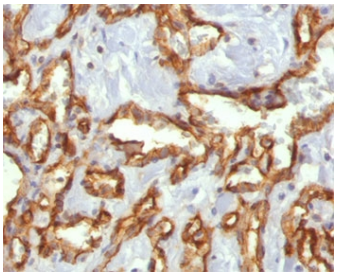
Catalog No.	Formulation	Size
V2220-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2220-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2220SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2220IHC-7ML	Prediluted 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

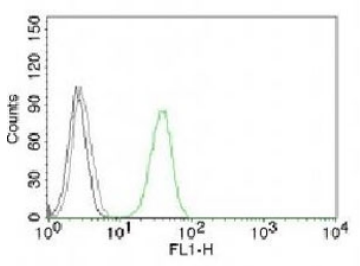
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	C31.3
Purity	Protein G affinity
Buffer	1X PBS, pH 7.4
Gene ID	5175
Localization	Cell surface and cytoplasmic
Applications	Flow cytometry: 1-2ug/10^6 cells Western blot: 1-2ug/ml Immunofluorescence: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This CD31 Antibody C31.3 is available for research use only.



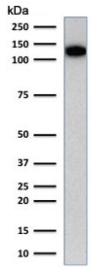
CD31 Antibody C31.3 Immunohistochemistry Analysis. IHC staining of tonsil tissue with CD31 antibody (C31.3).



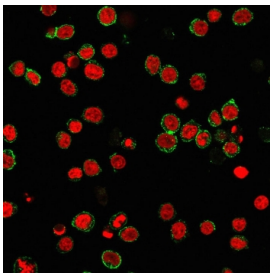
IHC staining of angiocarcinoma with CD31 antibody (C31.3).



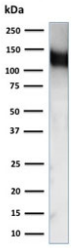
FACS testing of Jurkat cells with Alexa Fluor conjugated CD31 antibody (green) and isotype control (gray).



Western blot testing of human Jurkat cell lysate with CD31 antibody (clone C31.1). Expected molecular weight: 83-130 kDa depending on level of glycosylation.



Immunofluorescent staining of PFA-fixed human Jurkat cells with CD31 antibody (green, clone C31.3) and NucSpot nuclear counterstain (red).



Western blot testing of human ThP-1 cell lysate with CD31 antibody (clone C31.1). Expected molecular weight: 83-130 kDa depending on level of glycosylation.

Description

CD31 antibody C31.3 is a monoclonal antibody that targets platelet endothelial cell adhesion molecule 1, also known as CD31 or PECAM-1. CD31 is a 130 kDa transmembrane glycoprotein expressed on endothelial cells, platelets, monocytes, neutrophils, and selected T cell subsets. It mediates cell adhesion, transmigration, and angiogenesis, making it a central molecule in vascular biology and immune regulation. NSJ Bioreagents supplies CD31 antibody clone C31.3 for use in vascular biology, angiogenesis, inflammation, and cancer studies.

In vascular biology, CD31 antibody C31.3 is widely used as a marker of endothelial cells. It produces distinct membranous staining of blood vessel linings, enabling visualization of vascular networks in tissues. Researchers apply this antibody to study angiogenesis, vascular remodeling, and endothelial integrity in both normal physiology and disease contexts.

In immunology, CD31 antibody C31.3 highlights its role in leukocyte transmigration. CD31 mediates interactions between endothelial cells and immune cells, facilitating diapedesis across the vascular barrier. This antibody has been used to investigate inflammatory processes, autoimmune diseases, and immune surveillance. Its detection helps clarify how CD31 contributes to leukocyte trafficking and immune cell function.

In cancer research, CD31 antibody clone C31.3 is frequently applied to quantify microvessel density in tumors. Angiogenesis is a hallmark of cancer progression, and CD31 detection provides a readout of new vessel formation. This information is valuable for understanding tumor biology and for evaluating the effects of anti-angiogenic therapies.

Beyond oncology and immunology, CD31 antibody C31.3 has applications in cardiovascular research, where endothelial function and platelet interactions are central to vascular health. Studies of atherosclerosis, thrombosis, and vascular injury have employed this antibody to track CD31 expression and distribution.

CD31 antibody clone C31.3 has been validated for use in tissue based and cell based assays, delivering strong and reproducible signals. It is widely cited in literature covering angiogenesis, vascular pathology, and immune regulation. Alternate names include PECAM-1 antibody, platelet endothelial cell adhesion molecule antibody, and endothelial cell marker antibody.

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

Differences in protocols, secondaries and substrates may require the CD31 Antibody C31.3 to be titered for optimal performance.

1. Staining of formalin-fixed tissues requires boiling tissue sections in 1mM EDTA, pH 7.5-8.5, for 10-20 min followed by cooling at RT for 20 minutes.
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 human protein

Storage

Store the CD31 Antibody C31.3 at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

CD31 antibody, PECAM1 antibody, Platelet Endothelial Cell Adhesion Molecule 1 antibody, PECA1 antibody, EndoCAM

antibody

Copyright © NSJ Bioreagents. All rights reserved.