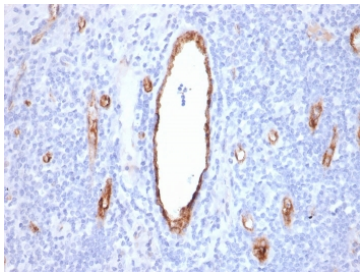
vWF Antibody / Vascular Permeability Marker Antibody [clone VWF/2480] (V8164)

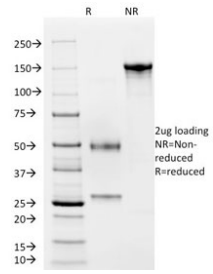
Catalog No.	Formulation	Size
V8164-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8164-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8164SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	VWF/2480
Purity	Protein G affinity chromatography
UniProt	P04275
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This vWF antibody is available for research use only.



vWF Antibody / Vascular Permeability Marker Antibody. Immunohistochemistry analysis of human tonsil tissue shows HRP-DAB brown staining of endothelial cells outlining vascular channels within lymphoid tissue. The staining highlights continuous vessel linings with localized variation in signal intensity along the endothelial surface, consistent with differences in endothelial activation state and barrier function. Vessel-associated signal is clearly distinguished from surrounding lymphoid cells, enabling visualization of vascular compartments and assessment of endothelial integrity within the tissue. Clone VWF/2480 enables evaluation of vascular structure together with permeability-associated endothelial response. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free vWF Antibody / Vascular Permeability Marker Antibody (clone VWF/2480) as confirmation of integrity and purity.

Description

Von Willebrand factor (VWF) is a secreted glycoprotein encoded by the VWF gene and synthesized primarily by vascular endothelial cells and megakaryocytes. vWF Antibody / Vascular Permeability Marker Antibody recognizes a protein that is closely associated with endothelial cells and their functional role in maintaining vascular barrier integrity. VWF antibody, also referred to as von Willebrand factor antibody or factor VIII-related antigen antibody, is widely used in studies examining endothelial barrier function, vascular leakage, and permeability-related changes in tissue.

Endothelial cells form a selective barrier that regulates the movement of fluids, proteins, and cells between the bloodstream and surrounding tissue. Disruption of this barrier can result in increased vascular permeability, leading to edema, inflammatory infiltration, and altered tissue homeostasis. Because VWF is synthesized and stored within endothelial cells and released during activation, its presence and distribution can reflect changes in endothelial state associated with barrier dysfunction.

In conditions where vascular permeability is increased, endothelial cells often undergo structural and functional changes, including junctional disruption, cytoskeletal rearrangement, and altered secretion of mediators. VWF release is frequently associated with these activation states, linking endothelial response to changes in vascular barrier properties. Detection of VWF can therefore provide insight into regions where endothelial cells are responding to stimuli that impact permeability.

Within tissue sections, VWF staining highlights endothelial-lined vessels and can reveal areas where vascular organization or signal intensity differs across regions. In permeability-related studies, these differences may correspond to localized endothelial activation or altered barrier function. The ability to visualize vascular structures alongside changes in VWF-associated signal supports interpretation of how vascular compartments respond to physiological or pathological conditions.

Vascular permeability plays a central role in inflammation, tumor biology, ischemia, and tissue injury. Increased permeability can facilitate immune cell trafficking, nutrient exchange, and, in some contexts, pathological leakage that contributes to disease progression. Because endothelial cells are the primary regulators of this barrier, markers that reflect endothelial presence and activation are valuable tools for studying these processes. VWF provides a biologically relevant readout that connects endothelial identity with functional vascular response.

vWF Antibody / Vascular Permeability Marker Antibody is especially suited for studies focused on endothelial barrier function and vascular leakage. By highlighting endothelial-lined structures and providing insight into activation-associated changes, it supports investigation of permeability dynamics, vascular response to injury, and the regulation of barrier integrity across a wide range of biological systems.

Application Notes

Optimal dilution of the vWF Antibody / Vascular Permeability Marker Antibody should be determined by the researcher.

Immunogen

A recombinant full-length human protein was used as the immunogen for this vWF Antibody / Vascular Permeability

Marker Antibody.

Storage

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

Alternate Names

VWF vascular permeability antibody, vWF endothelial barrier marker antibody, vascular leakage marker antibody, VWF vessel permeability antibody, endothelial barrier function antibody