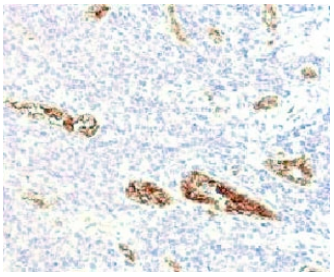
von Willebrand Factor Antibody / Megakaryocyte Lineage Marker Antibody [clone WFA52-2] (V7082)

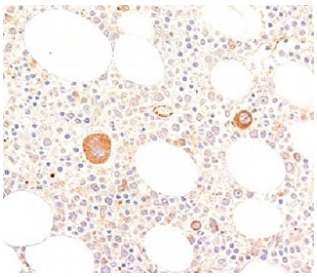
Catalog No.	Formulation	Size
V7082-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7082-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7082SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	WFA52-2
Purity	Protein G purified
Gene ID	7450
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This von Willebrand Factor antibody is available for research use only.



von Willebrand Factor Antibody / Megakaryocyte Lineage Marker Antibody. Immunohistochemistry analysis of human pancreas tissue shows HRP-DAB brown staining of endothelial cells lining vascular channels, with strong signal observed in vessel-associated regions. In addition to vascular endothelium, staining highlights scattered large cells consistent with megakaryocytic lineage features, supporting detection of platelet-producing cell populations. Endothelial-lined vessels and megakaryocyte-associated elements are clearly distinguished from surrounding pancreatic parenchymal cells. Clone WFA52-2 enables visualization of both vascular structures and megakaryocyte-related signal within tissue. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min.



von Willebrand Factor Antibody / Megakaryocyte Lineage Marker Antibody. Immunohistochemistry analysis of human bone marrow tissue shows HRP-DAB brown staining of scattered large megakaryocytes within the hematopoietic environment, characterized by strong cytoplasmic signal in morphologically distinct cells. Additional staining is observed in endothelial cells lining marrow vascular channels. The pattern highlights platelet-producing megakaryocytic lineage cells among surrounding hematopoietic populations, clearly distinguishing them from smaller marrow cells. Clone WFA52-2 enables visualization of megakaryocytes and associated vascular structures within bone marrow. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min.

Description

Von Willebrand factor (VWF) is a large secreted glycoprotein encoded by the VWF gene and synthesized primarily by vascular endothelial cells and megakaryocytes. von Willebrand Factor Antibody / Megakaryocyte Lineage Marker Antibody recognizes a protein that is actively produced within platelet-forming cells, making it highly relevant for identifying megakaryocytic lineage populations in hematopoietic tissue. VWF antibody, also referred to as von Willebrand factor antibody or factor VIII-related antigen antibody, is widely used in marrow-based studies where distinguishing platelet-producing cells from other hematopoietic lineages is essential.

Megakaryocytes are large, specialized cells responsible for platelet production within the bone marrow. These cells undergo a unique maturation process characterized by polyploidization, cytoplasmic expansion, and proplatelet formation. During this differentiation program, VWF is synthesized and incorporated into platelet precursor structures, linking megakaryocyte biology directly to hemostatic function. von Willebrand Factor Antibody is therefore particularly useful for detecting megakaryocytes and related lineage cells within complex marrow environments.

In bone marrow tissue, megakaryocytes are interspersed among diverse hematopoietic populations, including erythroid, myeloid, and lymphoid cells. While their large size and multilobulated nuclei provide morphological clues, protein-level markers such as VWF add an additional layer of specificity for lineage identification. VWF expression within these cells allows clear distinction of megakaryocytic populations from surrounding marrow elements, supporting accurate interpretation of cellular composition and lineage distribution.

VWF produced in megakaryocytes is packaged into platelet alpha-granules and contributes to the functional properties of circulating platelets. This establishes a direct connection between megakaryocyte differentiation and platelet-mediated hemostasis. Detection of VWF in these cells therefore reflects not only lineage identity but also the molecular preparation of platelets for adhesive and coagulation-related functions. This dual relevance strengthens its value in studies examining platelet biogenesis and hematopoietic specialization.

In experimental systems, VWF staining within marrow or cultured hematopoietic cells can reveal the presence, distribution, and relative abundance of megakaryocytic populations. This is particularly useful in studies of thrombopoiesis, lineage commitment, and hematopoietic differentiation pathways. Because VWF is not broadly expressed across all marrow cell types, its detection provides a focused readout of platelet-producing compartments within heterogeneous cellular environments.

von Willebrand Factor Antibody / Megakaryocyte Lineage Marker Antibody is especially suited for research centered on megakaryocyte identification, platelet lineage biology, and bone marrow cell characterization. By highlighting a protein that is integral to platelet-producing cells, it enables clear visualization of megakaryocytic populations and supports detailed analysis of hematopoietic lineage structure and function.

Application Notes

Variations in protocols, secondaries and substrates may require the von Willebrand Factor Antibody / Megakaryocyte Lineage Marker Antibody to be titered for optimal performance.

Immunogen

A recombinant human protein fragment was used as the immunogen for this von Willebrand Factor Antibody / Megakaryocyte Lineage Marker Antibody.

Storage

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

Alternate Names

VWF megakaryocyte marker antibody, von Willebrand factor platelet lineage antibody, megakaryocytic marker antibody, VWF marrow megakaryocyte antibody, platelet producing cell marker antibody

Copyright © NSJ Bioreagents. All rights reserved.