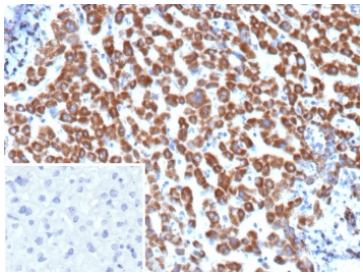
Angiopoietin 1 Antibody / Vascular Growth Factor Antibody [clone ANGPT1/3651] (V5719)

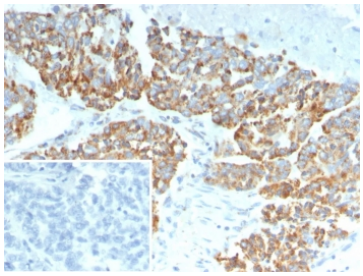
Catalog No.	Formulation	Size
V5719-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5719-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5719SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

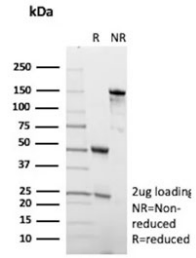
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	ANGPT1/3651
Purity	Protein G affinity
UniProt	Q15389
Localization	Secreted, Intracellular
Applications	Immunohistochemistry (FFPE): 1-2ug/ml Western blot: 2-4ug/ml
Limitations	This Angiopoietin 1 Antibody / Vascular Growth Factor Antibody is available for research use only.



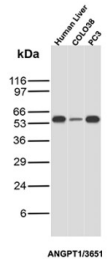
Angiopoietin 1 Antibody Hepatocellular Carcinoma IHC. Immunohistochemistry staining of FFPE human hepatocellular carcinoma tissue using Angiopoietin 1 Antibody demonstrates strong cytoplasmic HRP-DAB brown staining throughout tumor cell populations. The staining pattern is consistent with expression of Angiopoietin 1 / ANGPT1, a vascular growth factor that regulates TEK/TIE2 signaling, vascular stability, and angiogenic remodeling. Clone ANGPT1/3651 highlights robust ANGPT1 expression within neoplastic hepatocytes, supporting the established involvement of angiopoietin signaling pathways in tumor vascularization and tumor microenvironment regulation. Inset: PBS was used in place of the primary antibody as a secondary antibody negative control. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



Angiopoietin 1 Antibody Ovarian Carcinoma IHC. Immunohistochemistry staining of FFPE human ovarian carcinoma tissue using Angiopoietin 1 Antibody demonstrates strong cytoplasmic HRP-DAB brown staining throughout neoplastic epithelial cell populations. The staining pattern is consistent with expression of Angiopoietin 1 / ANGPT1, a vascular growth factor that regulates TEK/TIE2 signaling, endothelial cell stability, and angiogenic remodeling. Clone ANGPT1/3651 highlights robust ANGPT1 expression within tumor cells, supporting the established involvement of angiopoietin signaling pathways in tumor-associated vascular regulation and the ovarian tumor microenvironment. Inset: PBS was used in place of the primary antibody as a secondary antibody negative control. 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 Angiopoietin 1 antibody (clone ANGPT1/3651) as confirmation of integrity and purity.



ANGPT1 Antibody Multi-Sample WB. Western blot analysis of Lane 1: human liver lysate, Lane 2: COLO38 cell lysate, and Lane 3: PC3 cell lysate using ANGPT1 Antibody clone ANGPT1/3651. A band is detected at approximately 57 kDa in all three samples, consistent with the predicted molecular weight of Angiopoietin-1 / ANGPT1. ANGPT1 is a secreted vascular growth factor that signals through the TEK/TIE2 receptor to regulate blood vessel maturation, vascular stability, and endothelial cell survival. The observed signal is consistent with the established expression of ANGPT1 in tissues and cell types involved in angiogenic and vascular regulatory pathways.

Description

Angiopoietin 1 (ANGPT1) is a secreted vascular growth factor encoded by the ANGPT1 gene and serves as a principal ligand for the TEK/TIE2 receptor tyrosine kinase. The Angiopoietin 1 Antibody is useful for investigating angiogenesis, vascular remodeling, and endothelial cell biology. ANGPT1 is synthesized by perivascular cells, smooth muscle cells, fibroblasts, and other stromal populations where it functions as a key regulator of blood vessel maturation and vascular stability. Unlike pro-angiogenic factors that primarily stimulate new vessel formation, Angiopoietin 1 promotes stabilization and long-term maintenance of established vascular networks.

Angiopoietin 1 antibody, also referred to as ANGPT1 antibody, ANG1 antibody, and Angiopoietin-1 antibody in the literature, recognizes a secreted glycoprotein that signals through the TEK/TIE2 pathway to regulate endothelial cell survival, vascular integrity, and vessel maturation. Clone ANGPT1/3651 antibody detects ANGPT1 expression associated with normal vascular development and maintenance. Published studies have established ANGPT1 as a critical mediator of endothelial barrier function, helping maintain vessel quiescence while reducing vascular permeability and inflammatory activation.

The ANGPT1-TEK signaling axis plays a central role in coordinating communication between endothelial cells and surrounding support cells. Activation of TEK by Angiopoietin 1 promotes endothelial cell survival, strengthens intercellular junctions, and supports recruitment of pericytes that stabilize developing blood vessels. These activities are essential during embryonic vascular development and continue to contribute to maintenance of mature vasculature throughout life. Disruption of ANGPT1 signaling has been associated with abnormal vascular permeability, inflammation, and impaired vessel integrity.

ANGPT1 also participates in tissue repair, wound healing, and recovery following vascular injury. Through its effects on endothelial stability and vascular remodeling, the protein contributes to restoration of normal tissue architecture following damage. Because blood vessel formation and maintenance are critical components of tumor growth, cardiovascular disease, and regenerative biology, ANGPT1 remains an important target in studies examining vascular homeostasis and disease progression.

Published studies utilizing clone ANGPT1/3651 antibody have contributed to investigations of Angiopoietin 1 expression and vascular biology. An Angiopoietin 1 antibody can support research involving angiogenesis, endothelial signaling, vascular remodeling, tissue repair, and TEK/TIE2 receptor pathways. General antibody-based approaches may be used to evaluate ANGPT1 expression in a variety of research applications. NSJ Bioreagents offers clone ANGPT1/3651 antibody to support studies of vascular growth factor signaling and endothelial cell regulation.

Researchers studying angiopoietin signaling, vascular growth factors, and tumor-associated angiogenesis may also wish to explore our Angiogenesis Antibodies landing page highlighting key regulators of endothelial cell function and blood vessel formation.

Application Notes

Optimal dilution of the Angiopoietin 1 Antibody / Vascular Growth Factor Antibody should be determined by the researcher.

Immunogen

A portion of amino acids 1-200 from human AGPAT1 protein was used as the immunogen for the Angiopoietin 1 antibody.

Storage

Aliquot the Angiopoietin 1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

ANGPT1 antibody, ANG1 antibody, Angiopoietin-1 antibody, TEK receptor ligand antibody, Vascular maturation factor antibody

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