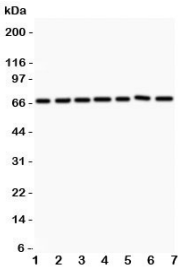
ANG1 Antibody / Angiopoietin 1 Antibody (R31547)

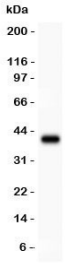
Catalog No.	Formulation	Size
R31547	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
Gene ID	284
Applications	Western blot: 0.5-1ug/ml
Limitations	This ANG1 Antibody / Angiopoietin 1 Antibody is available for research use only.



ANG1 Antibody Multi-Cell Line WB. Western blot analysis of Lane 1: HeLa, Lane 2: MCF-7, Lane 3: COLO320, Lane 4: A549, Lane 5: HEPG2, Lane 6: 293T, and Lane 7: SW620 cell lysates using ANG1 Antibody / Angiopoietin 1 Antibody. A band is detected at approximately 57-75 kDa across all tested samples, consistent with Angiopoietin 1 / ANGPT1. The observed molecular weight range reflects variable glycosylation of this secreted vascular growth factor, which is known to influence SDS-PAGE migration. ANGPT1 functions as a ligand for the TEK/TIE2 receptor and plays an important role in endothelial cell survival, vascular stabilization, angiogenic remodeling, and maintenance of blood vessel integrity. The detected expression pattern is consistent with the broad involvement of ANGPT1 signaling in cellular pathways associated with vascular regulation and tissue homeostasis.



Western blot testing of ANG1 antibody and recombinant human protein (0.5ng)

Description

Angiopoietin 1 (ANGPT1), commonly referred to as ANG1, is a secreted glycoprotein growth factor encoded by the ANGPT1 gene and functions as a major ligand for the TEK/TIE2 receptor. The ANG1 Antibody is designed for studies of vascular biology, endothelial cell signaling, and angiogenic regulation. ANG1 is produced by multiple stromal and mesenchymal cell populations and contributes to communication between vascular support cells and endothelial cells. Through activation of TEK/TIE2 signaling, ANG1 helps maintain vascular integrity and promotes maturation of blood vessels.

ANG1 antibody, also known as Angiopoietin 1 antibody, ANGPT1 antibody, and Angiopoietin-1 antibody in the literature, detects a secreted growth factor involved in regulation of endothelial cell survival and vascular stability. This ANG1 antibody recognizes a protein that plays an important role in maintaining normal vessel architecture and limiting excessive vascular permeability. The protein has been extensively studied in developmental vascular biology as well as in pathologic conditions involving abnormal blood vessel formation and remodeling.

ANG1 functions within a complex signaling network that regulates angiogenesis and vascular homeostasis. Binding of ANG1 to the TEK/TIE2 receptor activates intracellular signaling pathways that support endothelial cell survival, strengthen cell-cell junctions, and facilitate interactions between endothelial cells and perivascular support cells. These effects contribute to stabilization of blood vessels and help maintain functional vascular networks under both physiologic and pathologic conditions.

Abnormal regulation of ANGPT1 signaling has been investigated in cardiovascular disease, inflammatory disorders, tumor biology, and tissue regeneration. Because the balance between vascular growth and vascular stabilization is critical for normal tissue function, ANG1 remains an important target in studies of endothelial biology and angiogenesis. Researchers frequently evaluate ANG1 expression when examining mechanisms that influence vessel maturation, vascular permeability, and endothelial cell behavior.

Published studies have utilized ANG1 antibodies in investigations of angiopoietin signaling and vascular regulation. An ANG1 antibody can support research involving angiogenesis, vascular remodeling, endothelial signaling, tissue repair, and TEK/TIE2 pathway biology. General antibody-based approaches may be used to evaluate ANG1 expression in a variety of research applications. NSJ Bioreagents offers this ANG1 antibody to support studies of vascular growth factor signaling and blood vessel homeostasis.

Researchers investigating angiopoietin signaling, endothelial cell regulation, and vascular remodeling may also wish to explore our Angiopoietin 1 Antibody page featuring this important vascular growth factor and its role in angiogenesis.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the ANG1 Antibody / Angiopoietin 1 Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Human partial recombinant protein (AA 16-350) was used as the immunogen for this ANG1 antibody.

Storage

After reconstitution, the ANG1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

ANGPT1 antibody, Angiopoietin-1 antibody, TEK ligand antibody, TIE2 receptor ligand antibody, Angiogenic factor antibody

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