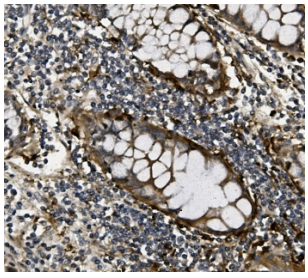
VEGF Antibody / Angiogenesis Growth Factor Antibody (R31500)

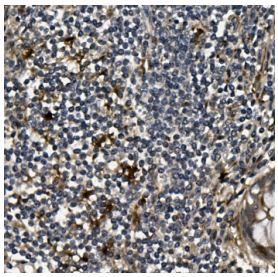
Catalog No.	Formulation	Size
R31500	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

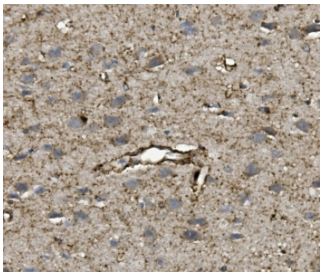
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
Gene ID	7422
Localization	Cytoplasmic, cell surface and extracellular (secreted)
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Flow cytometry: 1-3ug/million cells
Limitations	This VEGF Antibody / Angiogenesis Growth Factor Antibody is available for research use only.



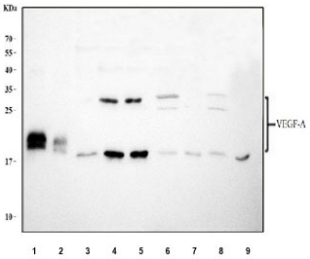
VEGF Antibody Human Cancer IHC. Immunohistochemical staining of FFPE human rectal cancer tissue using VEGF Antibody. HIER was performed by boiling tissue sections in pH 6 citrate buffer for 20 minutes prior to staining. An HRP-conjugated secondary antibody with DAB substrate was used for detection. VEGF Antibody, an Angiogenesis Growth Factor Antibody, demonstrates strong cytoplasmic staining in tumor cells, consistent with VEGF expression associated with tumor angiogenesis, vascular remodeling, and hypoxia-regulated cancer progression pathways.



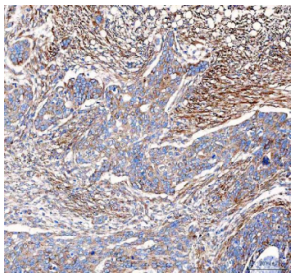
VEGF Antibody Human Rectal Cancer IHC. Immunohistochemical staining of FFPE human rectal cancer tissue using VEGF Antibody. HIER was performed by boiling tissue sections in pH 6 citrate buffer for 20 minutes prior to staining. An HRP-conjugated secondary antibody with DAB substrate was used for detection. VEGF Antibody, an Angiogenesis Growth Factor Antibody, demonstrates cytoplasmic staining in tumor and stromal-associated cells, consistent with the role of VEGF in tumor angiogenesis, endothelial cell signaling, and vascular remodeling within the cancer microenvironment.



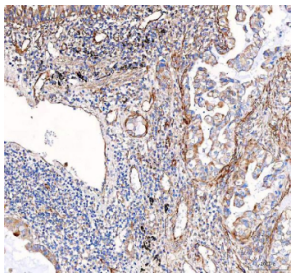
VEGF Antibody Rat Brain IHC. Immunohistochemical staining of FFPE rat brain tissue using VEGF Antibody. HIER was performed by boiling tissue sections in pH 6 citrate buffer for 20 minutes prior to staining. An HRP-conjugated secondary antibody with DAB substrate was used for detection. VEGF Antibody, an Angiogenesis Growth Factor Antibody, demonstrates cytoplasmic staining in neuronal and glial cell populations, consistent with the role of VEGF in vascular regulation, neurovascular signaling, and tissue remodeling processes within the central nervous system.



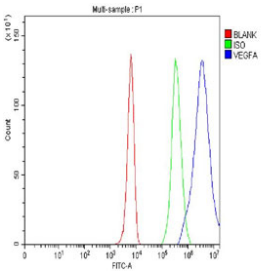
VEGF Antibody Human, Mouse and Rat WB. Western blot analysis of recombinant VEGF protein, human cell lysates, rat samples, and mouse samples using VEGF Antibody. Lane 1: 20 ng recombinant VEGF protein, Lane 2: 10 ng recombinant VEGF protein, Lane 3: human U-87 MG, Lane 4: human K562, Lane 5: human U-251, Lane 6: rat brain, Lane 7: rat C6, Lane 8: mouse brain, Lane 9: mouse Neuro-2a cell lysate. An HRP-conjugated secondary antibody with ECL substrate was used for detection. VEGF Antibody, an Angiogenesis Growth Factor Antibody, detects VEGF-A bands corresponding to the expected ~19-22 kDa monomer and ~38-44 kDa dimer forms, supporting analysis of VEGF expression in angiogenesis, vascular signaling, and tumor biology research.



VEGF Antibody Human Ovarian Cancer IHC. Immunohistochemical staining of FFPE human ovarian serous adenocarcinoma tissue using VEGF Antibody. HIER was performed by boiling tissue sections in pH 8 EDTA buffer for 20 minutes prior to staining. An HRP-conjugated secondary antibody with DAB substrate was used for detection. VEGF Antibody, an Angiogenesis Growth Factor Antibody, demonstrates cytoplasmic staining in tumor cells and stromal-associated regions, consistent with VEGF expression in tumor angiogenesis, vascular remodeling, and regulation of the cancer microenvironment.



VEGF Antibody Human Lung Cancer IHC. Immunohistochemical staining of FFPE human lung cancer tissue using VEGF Antibody. HIER was performed by boiling tissue sections in pH 8 EDTA buffer for 20 minutes prior to staining. An HRP-conjugated secondary antibody with DAB substrate was used for detection. VEGF Antibody, an Angiogenesis Growth Factor Antibody, demonstrates cytoplasmic staining in tumor cells and surrounding stromal regions, consistent with VEGF expression associated with tumor angiogenesis, endothelial cell signaling, and vascular remodeling within the tumor microenvironment.



VEGF Antibody Human Immune Cell FACS. Flow cytometric analysis of fixed human K562 cells using VEGF Antibody at 1 ug/million cells. Cells were blocked with goat serum and compared against cells alone (red) and isotype control (green). VEGF Antibody, an Angiogenesis Growth Factor Antibody, demonstrates a clear positive shift (blue), confirming VEGF expression in K562 cells and supporting its use for studying angiogenic signaling, hypoxia-regulated growth factor expression, and vascular biology pathways.

Description

VEGF Antibody recognizes vascular endothelial growth factor A (VEGFA), a secreted signaling protein that serves as one of the most important regulators of angiogenesis, vascular development, and endothelial cell function. VEGF promotes blood vessel formation by binding VEGF receptors, primarily VEGFR1 and VEGFR2, on endothelial cells to stimulate proliferation, migration, survival, and vascular permeability. Through these signaling pathways, VEGF controls physiological processes such as embryonic vascular development, tissue repair, and wound healing, while abnormal VEGF activity contributes to disease-associated neovascularization. VEGF Antibody is widely used to investigate angiogenesis, endothelial signaling, tumor vascularization, and hypoxia-driven cellular responses.

VEGF expression is strongly regulated by oxygen availability, with hypoxic conditions activating HIF-mediated transcriptional pathways that increase VEGF production. In cancer biology, tumor cells frequently upregulate VEGF to promote the formation of new blood vessels that supply oxygen and nutrients required for continued tumor growth. Elevated VEGF expression has been reported in many solid tumors and is associated with angiogenesis, tumor progression, metastasis, and changes within the tumor microenvironment. As an Angiogenesis Growth Factor Antibody, VEGF Antibody is an important tool for studying vascular remodeling and cancer-associated angiogenic signaling.

Beyond oncology, VEGF plays important roles in cardiovascular biology, inflammation, retinal vascular disorders, and tissue regeneration. VEGF signaling regulates endothelial barrier function, vascular permeability, and interactions between endothelial cells and surrounding tissues. Multiple VEGF isoforms generated through alternative splicing contribute to differences in localization, receptor binding, and biological activity. Research into VEGF pathways has provided major insight into vascular biology and has supported the development of therapeutic strategies targeting abnormal angiogenesis.

VEGF Antibody, an Angiogenesis Growth Factor Antibody, enables researchers to study VEGFA expression across models of vascular development, cancer progression, inflammation, and tissue remodeling. NSJ Bioreagents offers VEGF antibodies validated across multiple applications, including Western blot, immunohistochemistry, and flow cytometry, supporting investigation of VEGF-mediated signaling pathways, endothelial cell regulation, and mechanisms controlling blood vessel formation.

Explore additional Angiogenesis Antibodies for targets involved in endothelial cell signaling, vascular development, tumor angiogenesis, and blood vessel formation.

Application Notes

The stated application concentrations are suggested starting points. Titration of the VEGF Antibody / Angiogenesis Growth Factor Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Human recombinant protein, A isoform (AA 27-191) was used as the immunogen for this VEGF antibody.

Storage

After reconstitution, the VEGF 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

VEGFA Antibody, Vascular Endothelial Growth Factor Antibody, Vascular Permeability Factor Antibody, VPF Antibody, VEGF-A Antibody, Endothelial Growth Factor Antibody

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