

VEGFA Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12184c

Specification

VEGFA Antibody (Center) - Product Information

Application	WB,E
Primary Accession	P15692
Other Accession	NP_001020537.2 , NP_001020538.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Antigen Region	140-168

VEGFA Antibody (Center) - Additional Information

Gene ID 7422

Other Names

Vascular endothelial growth factor A,
VEGF-A, Vascular permeability factor, VPF,
VEGFA, VEGF

Target/Specificity

This VEGFA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 140-168 amino acids from the Central region of human VEGFA.

Dilution

WB~1:1000

Format

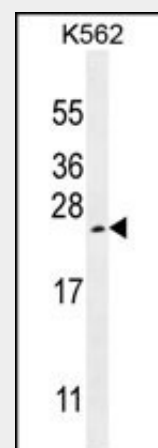
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

VEGFA Antibody (Center) is for research use only and not for use in diagnostic or



VEGFA Antibody (Center) (Cat. #AP12184c) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the VEGFA antibody detected the VEGFA protein (arrow).

VEGFA Antibody (Center) - Background

This gene is a member of the PDGF/VEGF growth factor family and encodes a protein that is often found as a disulfide linked homodimer. This protein is a glycosylated mitogen that specifically acts on endothelial cells and has various effects, including mediating increased vascular permeability, inducing angiogenesis, vasculogenesis and endothelial cell growth, promoting cell migration, and inhibiting apoptosis. Elevated levels of this protein is linked to POEMS syndrome, also known as Crow-Fukase syndrome. Mutations in this gene have been associated with proliferative and nonproliferative diabetic retinopathy. Alternatively spliced transcript variants, encoding either freely secreted or cell-associated isoforms, have been characterized.

therapeutic procedures.

VEGFA Antibody (Center) - Protein Information

Name VEGFA

Synonyms VEGF

Function

Growth factor active in angiogenesis, vasculogenesis and endothelial cell growth. Induces endothelial cell proliferation, promotes cell migration, inhibits apoptosis and induces permeabilization of blood vessels. Binds to the FLT1/VEGFR1 and KDR/VEGFR2 receptors, heparan sulfate and heparin. NRP1/Neuropilin-1 binds isoforms VEGF-165 and VEGF-145. Isoform VEGF165B binds to KDR but does not activate downstream signaling pathways, does not activate angiogenesis and inhibits tumor growth. Binding to NRP1 receptor initiates a signaling pathway needed for motor neuron axon guidance and cell body migration, including for the caudal migration of facial motor neurons from rhombomere 4 to rhombomere 6 during embryonic development (By similarity).

Cellular Location

Secreted. Note=VEGF121 is acidic and freely secreted. VEGF165 is more basic, has heparin- binding properties and, although a significant proportion remains cell-associated, most is freely secreted. VEGF189 is very basic, it is cell- associated after secretion and is bound avidly by heparin and the extracellular matrix, although it may be released as a soluble form by heparin, heparinase or plasmin

Tissue Location

Isoform VEGF189, isoform VEGF165 and isoform VEGF121 are widely expressed. Isoform VEGF206 and isoform VEGF145 are not widely expressed. A higher level expression seen in pituitary tumors as compared to the pituitary gland

There is also evidence for the use of non-AUG (CUG) translation initiation sites upstream of, and in-frame with the first AUG, leading to additional isoforms.

VEGFA Antibody (Center) - References

Shrivastava-Ranjan, P., et al. J. Virol. 84(21):11227-11234(2010)
Kim, Y.H., et al. Gynecol. Oncol. 119(2):232-236(2010)
Yang, Y., et al. Exp. Biol. Med. (Maywood) 235(10):1204-1211(2010)
Huez, I., et al. Mol. Endocrinol. 15(12):2197-2210(2001)
Tee, M.K., et al. Biochem. J. 359 (PT 1), 219-226 (2001) :

VEGFA Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

VEGFA Antibody (Center) - Citations

- [Inhibition of ATM reverses EMT and decreases metastatic potential of cisplatin-resistant lung cancer cells through JAK/STAT3/PD-L1 pathway.](#)
- [G Protein \$\alpha\$ Subunit 14 Mediates Fibroblast Growth Factor 2-Induced Cellular Responses in Human Endothelial Cells.](#)