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VEGFA Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12184c

Product Information

Application	WB, E
Primary Accession	P15692
Other Accession	NP_001020537.2, NP_001020538.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32234
Calculated MW	43597
Antigen Region	140-168

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 E~~Use at an assay dependent concentration.
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 therapeutic procedures.

Protein Information

Name	VEGFA
Synonyms	VEGF
Function	[N-VEGF]: Participates in the induction of key genes involved in the response

	to hypoxia and in the induction of angiogenesis such as HIF1A (PubMed:35455969). Involved in protecting cells from hypoxia- mediated cell death (By similarity).
Cellular Location	[N-VEGF]: Cytoplasm. Nucleus. Note=Cytoplasmic in normoxic conditions and localizes to the nucleus under hypoxic conditions [Isoform L-VEGF189]: Endoplasmic reticulum. Golgi apparatus. Secreted, extracellular space, extracellular matrix [Isoform VEGF165]: Secreted
Tissue Location	Higher expression in pituitary tumors than the pituitary gland. [Isoform VEGF165]: Widely expressed. [Isoform VEGF206]: Not widely expressed.

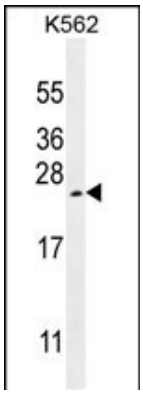
Background

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. 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.

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) :

Images



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).

Citations

- G Protein α Subunit 14 Mediates Fibroblast Growth Factor 2-Induced Cellular Responses in Human Endothelial Cells.