

VEGFA Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO2227a

Specification

VEGFA Antibody - Product Information

Application	E, WB, FC
Primary Accession	P15692
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	27kDa KDa

Description

This gene is a member of the PDGF/VEGF growth factor family. It encodes a heparin-binding protein, which exists as a disulfide-linked homodimer. This growth factor induces proliferation and migration of vascular endothelial cells, and is essential for both physiological and pathological angiogenesis. Disruption of this gene in mice resulted in abnormal embryonic blood vessel formation. This gene is upregulated in many known tumors and its expression is correlated with tumor stage and progression. Elevated levels of this protein are found in patients with POEMS syndrome, also known as Crow-Fukase syndrome. Allelic variants of this gene have been associated with microvascular complications of diabetes 1 (MVCD1) and atherosclerosis. Alternatively spliced transcript variants encoding different isoforms have been described. There is also evidence for alternative translation initiation from upstream non-AUG (CUG) codons resulting in additional isoforms. A recent study showed that a C-terminally extended isoform is produced by use of an alternative in-frame translation termination codon via a stop codon readthrough mechanism, and that this isoform is antiangiogenic. Expression of some isoforms derived from the AUG start codon is regulated by a small upstream open reading frame, which is located within an internal ribosome entry site.

Immunogen

Purified recombinant fragment of human VEGFA (AA: 207-371) expressed in E. Coli.

Formulation

Purified antibody in PBS with 0.05% sodium azide

VEGFA Antibody - Additional Information

Gene ID 7422

Other Names

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

Dilution

E~~1/10000
WB~~1/500 - 1/2000
FC~~1/200 - 1/400

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

VEGFA Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

VEGFA Antibody - 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.

VEGFA Antibody - 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](#)