

A21647

Leader in Biomolecular Solutions for Life Science



VEGF Rabbit pAb

Catalog No.: A21647

Basic Information

Observed MW

17kDa/45kDa

Calculated MW

27kDa

Category

Polyclonal Antibody

Applications

WB,IF/ICC,ELISA

Cross-Reactivity

Human,Mouse

Background

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. The levels of VEGF are increased during infection with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), thus promoting inflammation by facilitating recruitment of inflammatory cells, and by increasing the level of angiopoietin II (Ang II), one of two products of the SARS-CoV-2 binding target, angiotensin-converting enzyme 2 (ACE2). In turn, Ang II facilitates the elevation of VEGF, thus forming a vicious cycle in the release of inflammatory cytokines.

Recommended Dilutions

WB	1:500 - 1:1000
IF/ICC	1:50 - 1:200

Immunogen Information

Gene ID

7422

Swiss Prot

P15692

Immunogen

A synthetic peptide corresponding to a sequence within amino acids 51-327 of human VEGF (NP_001020541.2).

Synonyms

VPF; VEGF; MVCD1

Contact



www.abclonal.com

Product Information

Source

Rabbit

Isotype

IgG

Purification

Affinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.01% thimerosal, 50% glycerol, pH 7.3.

Validation Data

