

Basic Information

Product Name	Anti-VEGF/VEGFA Antibody
Gene Name	Vegfa
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB, ELISA
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.
Immunogen	E.coli-derived mouse VEGF/Vegfa recombinant protein (Position: E38-R214).
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	27 kDa
Dilution Ratios	Western blot (WB):1:500-2000 ELISA: 1:100-1000

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

Vascular endothelial growth factor A (VEGF-A) is a protein that in humans is encoded by the VEGFA gene. It is mapped to 17 C; 17 22.79 cM. 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.

Reference

Anti-VEGF/VEGFA Antibody被引用在16文献中。

Selected Validation Data

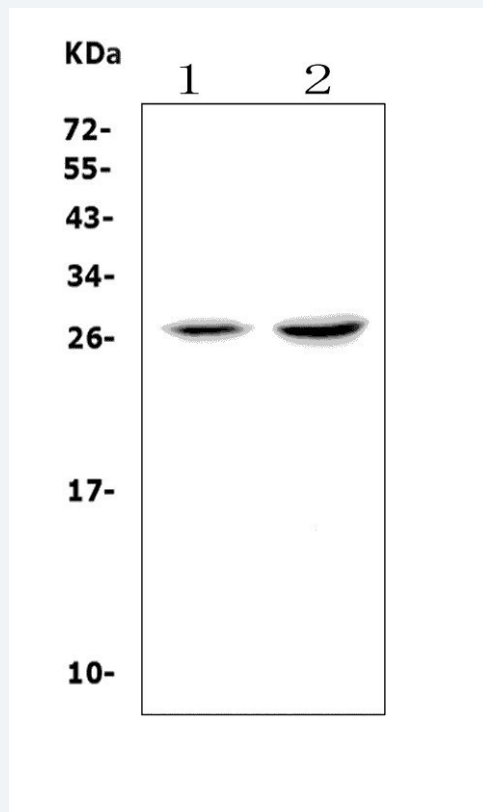


Figure 1. Western blot analysis of VEGF/VEGFA using anti-VEGF/VEGFA antibody (A00045-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat thymus tissue lysates,

Lane 2: mouse thymus tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-VEGF/VEGFA antigen affinity purified polyclonal antibody (A00045-2) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for VEGF/VEGFA at approximately 27 kDa. The expected band size for VEGF/VEGFA is at 25 kDa.