

Cat. Number : MDAB00010

## Anti Vascular Endothelial Growth Factor Monoclonal Antibody

### DATA SHEET

**Host:** Mouse  
**Abbre:** VEGFA  
**Immunogen:** Synthetic peptide of human VEGFA  
**Clonality:** Monoclonal  
**Isotype:** IgG  
**Synonyms:** CDH5  
**Entrez Gene:** -  
**Swiss Prot:** [P15692](#)  
**Dilution:** WB 1:1000-1:5000, ELISA 1:5000-1:10000, IHC-P 1:100-500  
**Purification:** Antigen affinity purification.  
**Buffer:** PBS with 0.05% NaN<sub>3</sub> and 40% Glycerol, pH7.4  
**Storage:** Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

**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.

**Size:** 100ul

**Concentration:** 1.3ug/ul

**Applications:** WB (1:1000-1:5000), ELISA (1:5000-1:10000), IHC-P (1:100-500)

**Cellular Localization:**

Secreted. 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.

**Research Areas:**

Cancer, Cardiovascular, Metabolism, Developmental Biology, Signal Transduction, Cardiovascular, Signal Transduction

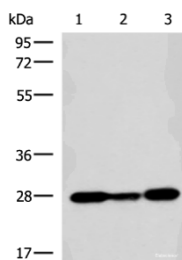
**Predicted Cross Reactive Species:**

Human  
Mouse

For research use only. Not intended for diagnostic or therapeutic use

### REFERENCE OF PUBLICATION

### IMAGES



Western blot analysis of 293T K562 NIH/3T3 cell lysates using VEGFA Polyclonal Antibody at dilution of 1:1150