

Anti-VEGF Antibody
Catalog # ABO10012**Specification**

Anti-VEGF Antibody - Product Information

Application	WB
Primary Accession	Q00731
Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Vascular endothelial growth factor A(VEGFA) detection. Tested with WB in Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-VEGF Antibody - Additional Information

Gene ID 22339

Other Names

Vascular endothelial growth factor A, VEGF-A, Vascular permeability factor, VPF, Vegfa, Vegf

Calculated MW

25283 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Rat, Mouse

Subcellular Localization

Isoform VEGF-1: Secreted.

Tissue Specificity

In developing embryos, expressed mainly in the choroid plexus, paraventricular neuroepithelium, placenta and kidney glomeruli. Also found in bronchial epithelium, adrenal gland and in seminiferous tubules of testis. High expression of VEGF continues in kidney glomeruli and choroid plexus in adults.

Protein Name

Vascular endothelial growth factor A

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃.

Immunogen

E.coli-derived mouse VEGF recombinant protein (Position: A27-R214). Mouse VEGF shares 89.4% and 98.4% amino acid (aa) sequence identity with human and rat VEGF, respectively.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins.

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-VEGF 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](http://www.uniprot.org/citations/35455969)). Involved in protecting cells from hypoxia-mediated cell death (PubMed: [35455969](http://www.uniprot.org/citations/35455969)).

Cellular Location

[N-VEGF]: Cytoplasm {ECO:0000250|UniProtKB:P15692}. Nucleus {ECO:0000250|UniProtKB:P15692} Note=Cytoplasmic in normoxic conditions and localizes to the nucleus under hypoxic conditions. {ECO:0000250|UniProtKB:P15692} [Isoform L-VEGF-2]: Endoplasmic reticulum {ECO:0000250|UniProtKB:P15692}. Golgi apparatus {ECO:0000250|UniProtKB:P15692}. Secreted, extracellular space, extracellular matrix {ECO:0000250|UniProtKB:P15692} [Isoform VEGF-2]: Secreted.

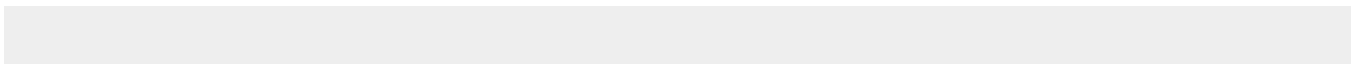
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Anti-VEGF Antibody - Protocols

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](#)

Anti-VEGF Antibody - Images



Western blot analysis of VEGF expression in rat kidney extract (lane 1). VEGF at 27KD was detected using rabbit anti-VEGF Antigen Affinity purified polyclonal antibody (Catalog # ABO10012) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method .

Anti-VEGF Antibody - Background

VEGF, a homodimeric glycoprotein of relative molecular mass 45,000, is the only mitogen that specifically acts on endothelial cells. It may be a major regulator of tumor angiogenesis in vivo. It is, however, structurally related to platelet-derived growth factor. VEGF shares homology with the PDGF A chain and B chain, including conservation of all 8 cysteines found in PDGFA and PDGFB. VEGF gene contains 8 exons. And VEGF induces remodeling and enhances TH2-mediated sensitization and inflammation in the lung. This gene can also regulate haematopoietic stem cell survival by an internal autocrine loop mechanism. What's more, it also stimulates neurogenesis in vitro and in vivo.