

Mouse Anti-Human VEGF-A

ORDERING INFORMATION

Catalog Number:	101-M59
Size:	100 µg
Formulation:	Monoclonal Antibody; Lyophilized
Clone/AB feature:	(#3(6D3))
Antigen:	Recombinant human VEGF165 protein
Application:	ELISA, WB, N
Stabilizer:	None
Buffer:	PBS pH 7.4 w/o preservative

Description:

Vascular endothelial growth factor (VEGF or VEGF-A) is a homodimeric 34 - 42 kDa, heparin-binding glycoprotein with potent angiogenic, mitogenic and vascular permeability-enhancing activities specific for endothelial cells. Different isoforms can be generated by differential splicing (e.g. VEGF165). All eight cysteine residues involved in intra- and inter-chain disulfide bonds are conserved among these growth factors. A cDNA encoding a protein having a 53% amino acid sequence homology in the PDGF-like region of VEGF has been isolated from a human placental cDNA library. This protein, named placenta growth factor (PlGF), is now recognized to be a member of the VEGF family of growth factors. Two receptor tyrosine kinases have been described as putative VEGF receptors. Flt-1 (fms-like tyrosine kinase), and KDR (kinase-insert-domain-containing receptor) proteins have been shown to bind VEGF-A with high affinity. In vitro, VEGF is a potent endothelial cell mitogen. In cultured endothelial cells, VEGF can activate phospholipase C and induce rapid increases of free cytosolic Ca²⁺. VEGF has also been shown to be chemotactic for monocytes and osteoblasts. In vivo, VEGF can induce angiogenesis as well as increase microvascular permeability. As a vascular permeability factor, VEGF acts directly on the endothelium and does not degranulate mast cells. Based on its in vitro and in vivo properties, VEGF is expected to play important roles in inflammation and during normal and pathological angiogenesis, a process that is associated with wound healing, embryonic development, and growth and metastasis of solid tumors.

Reconstitution:

Centrifuge vial prior to opening. Reconstitute in sterile water to a concentration of 0.1-1.0 mg/ml.

Stability:

The lyophilized antibody is stable at room temperature for up to 1 month. The reconstituted antibody is stable for at least two weeks at 2-8 °C. Frozen aliquots are stable for at least 6 months when stored at -20 °C. **Avoid repeated freeze-thaw cycles!**

Optimal dilutions should be determined by each laboratory for each application.

The listed dilutions are for recommendation only and the final conditions should be optimized by the ender users!

This product is sold for Research Use Only !