

## Product datasheet for DM3519P

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## VEGFA (Isoform 165) Mouse Monoclonal Antibody [Clone ID: 3]

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: 3

**Applications:** ELISA, FN, WB

**Recommended Dilution:** Western blot: Use at 2-10 µg/ml.

Neutralization: Blocks the VEGF-A induced proliferation of ACE cell at a 1:6 molar ratio of

ligand to antibody.

Inhibits the binding of VEGF-A to the VEGF receptors 1 (Flt-1) and 2 (KDR).

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

**Immunogen:** Recombinant Human VEGF165 protein (45 kDa)

**Specificity:** The antibody recognizes VEGF-A.

Formulation: H2O, Trehalose, Na-Phosphate, Polysorbart20

State: Purified

State: Lyophilized purified Ig fraction

**Reconstitution Method:** Restore in sterile water to a concentration of 0.1-1.0 mg/ml.

**Purification:** Protein G Chromatography

**Conjugation:** Unconjugated

**Storage:** Store lyophilized at 2-8°C for 6 months or at -20°C long term.

After reconstitution store the antibody undiluted at 2-8°C for one month

or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

Stability: Shelf life: one year from despatch.

Gene Name: vascular endothelial growth factor A

Database Link: Entrez Gene 7422 Human

P15692





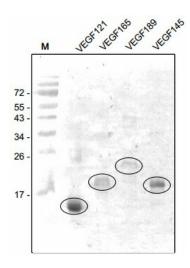
Background:

Human Vascular Endothelial Growth Factor VEGF165, a 23kDa protein consisting of 165 amino acid residues, is produced as a homodimer. VEGF is a polypeptide growth factor and a member of the platelet-derived growth factor family. It is a specific mitogen for vascular endothelial cells and a strong angiogenic factor in vivo. Two high-affinity tyrosine kinase receptors for VEGF165 have been identified, VEGFR-1 (FLT-1), and VEGFR-2 (KDR). In addition to its action as a mitogen it is a potent vascular permeability factor (VPF) in vivo. VEGF165 is also a chemo attractant molecule for monocytes and endothelial cells. 5 different proteins are generated by differential splicing: VEGF121, VEGF145, VEGF165, VEGF189 and VEGF206. The most abundant form is VEGF165. Whereas VEGF121 and VEGF165 are secreted proteins, VEGF145, VEGF189 and VEGF206 are strongly cell-associated. The isoforms VEGF145, VEGF165 and VEGF189 bind to heparin with high affinity. VEGF165 is apparently a homodimer, but preparations of VEGF165 show some heterogeneity on SDS gels, depending on the secretion of different glycosylation patterns. All dimeric forms have similar biological activities but their bioavailability is very different. There is good evidence that different cells and tissues express different VEGF isoforms. The other members of this increasing growth factor family are VEGF-B, -C, -D and -E. Another member is the Placenta growth factor PIGF.

Synonyms:

VEGFA, VEGF, VPF, Vascular endothelial growth factor A, Vascular permeability factor

## **Product images:**



Western blot analysis using with different isoforms of recombinant human VEGF-A.