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

Product datasheet for DP3504

VEGFA (Isoform 165) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, FN, IP, WB
Recommended Dilution:	**Neutralization:** 1-2.5 µg/ml, to yield one-half maximal inhibition (ND50) of the biological activity of Human VEGF (50 ng/ml). **ELISA:** 0.5 µg/ml, allows the detection of 0.5-1.0 ng/well of recombinant Human VEGF165 or other VEGF splice forms. **Western Blot:** 1-5 µg/ml. **Immunoprecipitation:** 1-5 µg/ml lysate or reaction volume.
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Highly purified Recombinant Human $VEGF_{165}$ [Ala27-Arg191] produced in Insect cells (*Cat.-No* DA3514X)
Specificity:	The antibody will detect Human VEGF-A. Other species not tested.
Formulation:	PBS, pH 7.4 containing no preservatives State: Azide Free State: Lyophilized purified Ig fraction
Reconstitution Method:	Restore in sterile water to a concentration of 0.1-1.0 mg/ml.
Purification:	Affinity Chromatography on Protein A
Conjugation:	Unconjugated
Storage:	Prior to reconstitution store at 2-8°C. Following reconstitution store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	vascular endothelial growth factor A
Database Link:	Entrez Gene 7422 Human P15692

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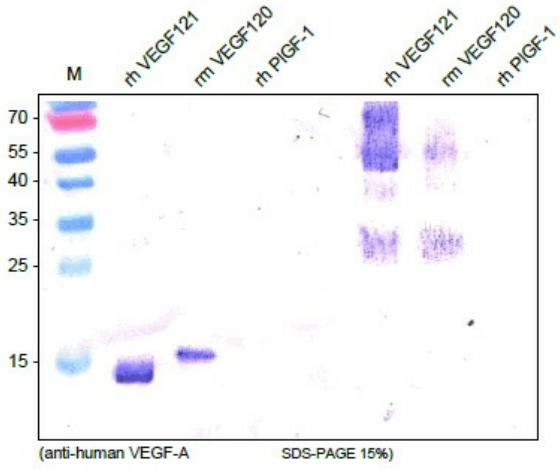
Background: Human Vascular Endothelial Growth Factor VEGF165, a 23kDa protein consisting of 165 amino acid residues, is produced as a homodimer. VEGF is a polypeptide growth factor and a member of the platelet-derived growth factor family. It is a specific mitogen for vascular endothelial cells and a strong angiogenic factor in vivo. Two high-affinity tyrosine kinase receptors for VEGF165 have been identified, VEGFR-1 (FLT-1), and VEGFR-2 (KDR). Consistent with the endothelial cell-specific action of VEGF165, expression of both receptor genes has been found predominantly but not exclusively on endothelial cells. Expression of VEGFR-1 was also found on human monocytes, neutrophils (PMNs), bovine brain pericytes and villous and extra villous trophoblast. 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 homo-dimer, 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 PlGF.

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

Product images:



Western analysis of recombinant human / mouse VEGF-A and PlGF-1 using a polyclonal antibody directed against recombinant human VEGF165 produced in insect cells. The recognition of the unreduced proteins is weaker. There is a clear cross reactivity with the mouse VEGF-A visible.