



Anti-mouse VEGF-A-Biotin

20140414BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	103-PABi03
Size:	50 µg
Lot. No.:	According to product label
Country of origin:	Germany

Preparation: Produced from sera of rabbits pre-immunized with highly pure (>95%) recombinant mouse VEGF₁₆₄ derived from insect cells.

Target Background

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

Mouse Vascular Endothelial Growth Factor₁₆₄ (VEGF₁₆₄), a 24 kDa protein consisting of 164 amino acid residues, is produced as a homodimer. VEGF₁₆₄ 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 VEGF₁₆₄ have been identified, VEGFR-1 (FLT-1), and VEGFR-2 (Flk-1). In addition to its action as a mitogen it is a potent vascular permeability factor (VPF) *in vivo* and is also a chemoattractant for monocytes and endothelial cells. At least three different proteins are generated by differential splicing of the mouse VEGF gene: VEGF₁₂₀, VEGF₁₆₄ and VEGF₁₈₈. The most abundant form is VEGF₁₆₄. Whereas VEGF₁₂₀ and VEGF₁₆₄ are secreted proteins, VEGF₁₈₈ is strongly cell-associated. In addition, the isoforms VEGF₁₆₄ and VEGF₁₈₈ bind to heparin with high affinity. A related protein of VEGF is placenta growth factor (PIGF) with about 53% homology and VEGF-B with similar biological activities.

References

1. Breier et al., Dev 114:521, 1992
2. Fiebig et al., Eur J Biochem 211:19, 1993
3. Flamme et al., Dev Biol 162:699, 1995
4. Kremer et al., Cancer Res 57:3852, 1997

Database References Antigen

Protein RefSeq:	NP_001020421
Uniprot ID:	Q00731
mRNA RefSeq:	NM_001025250

Product Specifications

Species reactivity	mouse
Clone/Ab feature	rabbit IgG
Cross reactivity	Mouse, Human
Host	rabbit
Clonality	polyclonal
Purification	Antigen affinity purified
Immunogen	Recombinant mouse VEGF ₁₆₄ (RT #M30-001)
Formulation	lyophilized
Buffer/Stabilizer	PBS, pH 7.2, 50X BSA
Preservative	0,02% sodium azide
Conjugation	Biotin

Warnings: Reagents contain sodium azide. Under acidic conditions sodium azide yields hydrazoic acid, this is extremely toxic. Azide compounds should be diluted with running water before discarding. These precautions are recommended to avoid deposits in plumbing where explosive condition may develop.

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.

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



AVOID REPEATED FREEZE AND THAW CYCLES!

Applications

ELISA: Use 1-10 µg/ml

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!



Anti-mouse VEGF-A-Biotin

Handling/Applications

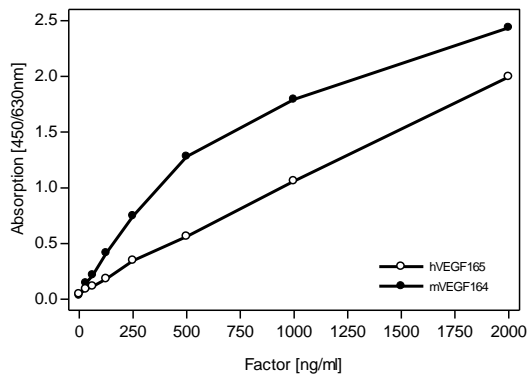


Figure 1: VEGF-A Sandwich-ELISA using the Biotinylated polyclonal anti-mouse VEGF-A antibody [Cat# 103-PABi03] for detection and recombinant human VEGF₁₆₅ [Cat# 300-036] and mouse VEGF₁₆₄ [Cat# M30-001] as standard. A unbiotinylated rabbit anti-mouse VEGF-A antibody was used as capture antibody.