



### Anti-human VEGF-B



**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>102-PA72S</b>
Size:	100 µg
Lot. No.:	According to product label
Country of origin:	Germany

**Preparation:** Produced from sera of rabbits pre-immunized with highly pure (>95%) recombinant human VEGF-B167 (Ala21-Arg188) produced in E. coli.

### Target Background

<b>Synonyms:</b>	Vascular endothelial growth factor B, VRF, VEGF-related factor
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Vascular endothelial growth factor B (VEGF-B), also known as vascular endothelial growth factor-related factor (VRF), is a member of the VEGF family of growth factors that share structural and functional similarity. Five mammalian members, including VEGF-A, B, C, D and PlGF, have been identified. VEGF family members are disulfide-linked dimeric proteins that are important regulators of physiological and pathological vasculogenesis, angiogenesis and lymphangiogenesis. VEGF-B is expressed in most tissues, especially in heart, skeletal muscle and pancreas. In many tissues, VEGF-B is coexpressed and can heterodimerize with VEGF. By alternative splicing, two isoforms of mature VEGF-B containing 167 or 186 amino acid (aa) residues exist. The two VEGF-B isoforms have identical amino-terminal cysteine knot VEGF homology domains but the carboxyl end of VEGF-B167 differs from that of VEGF-B186 by the presence of a highly basic cysteine-rich heparin binding domain. Whereas VEGF-B186 is a secreted diffusible protein, VEGF-B167 is sequestered into the cell matrix after secretion. Both VEGF-B isoforms bind VEGF receptor 1 (VEGFR-1), but not VEGFR-2 or VEGFR-3.

### References

1. Li and Eriksson, Int J Biochem Cell Biol 33 (2001)
2. Olofsson et al, Curr Opin Biotechnol 10 (1999)
3. Olofsson et al, Proc Natl Acad Sci 93 (1996)
4. Grimmond et al, Genome Res 6 (1996)
5. Olofsson et al, Proc Nat Acad Sci 95 (1998)
6. Makinen et al, J Biol Chem 274 (1999)
7. Fuh et al, J Biol Chem 275 (2000).

### Database References Antigen

<b>Protein RefSeq:</b>	NP_003368.1
<b>Uniprot ID:</b>	P49765
<b>mRNA RefSeq:</b>	NM_003377.4

### Product Specifications

<b>Species reactivity</b>	human
<b>Clone/Ab feature</b>	Rabbit IgG
<b>Cross reactivity</b>	ND
<b>Host</b>	rabbit
<b>Clonality</b>	polyclonal
<b>Purification</b>	Protein A purified
<b>Immunogen</b>	Recombinant human VEGF-B167
<b>Formulation</b>	lyophilized
<b>Buffer</b>	PBS

**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

**Western Blot:** Use at 2-5 µg/ml

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



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### Handling/Applications