# Datasheet

	Endothelial Growth
	Factor (VEGF)
Clone	VEGF-21
Isotype	IgG1-к
<b>C</b>	

Vascular

#### Source

Mouse mAb to

A BALB/c mouse was immunized with human VEGF189 recombinant protein.

### **Specifications**

VEGF-21 reacts with Vascular Endothelial Growth Factor, also known as Vascular Permeability Factor (VEGF/ VPF) and is the key mediator of angiogenesis. The MWs are 19-22kDa (reducing) and 38kDa-44kDa (non-reducing). There are multiple isoforms of VEGF containing 206-, 189-, 165-, and 121-amino acid residues. The smaller two isoforms, VEGF165 and VEGF121, are secreted proteins and act as diffusible agents, whereas the larger two remain cell associated. VEGF/VPF plays an important role in angiogenesis, which promotes tumor progression and metastasis. In addition to endothelial cells, VEGF and VEGF

receptors are expressed on numerous non-endothelial cells including tumor cells.



**Figure 1:** Ovarian cancer stained with VEGF-21 (paraffin)

## Species reactivity

Positive: human, dog, mouse, rabbit, rat.

### Applications

VEGF-21 can be applied for immunohistochemistry on frozen and paraffin sections. Astrocytomas, breast and ovarian carcinomas are positive.

Flow cytometry	Frozen sections	Immunofluorescence	Paraffin sections
+	+	+	Citrate

#### Format

Produced in tissue culture, contains no host Ig. Antibodies are affinity purified and presented in PBS with 0,02 % sodium azide.

Stored at 4°C- 8°C, shelf life is at least 24 months after purchase.

## **Dilution advice**

- Flow Cytometry (1-2  $\mu$ g/million cells in 0,1 ml).
- > Immunofluorescence (1-2  $\mu$ g/ml).
- Immunohistology (2-4 μg/ml for 30 min at RT; staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes).

#### Positive control

Astrocytomas, breast or ovarian carcinomas.



**Figure 2:** Human tonsil stained with VEGF-21 (paraffin)

# **Datasheet**



# References

- Tischer E. et al. *J. Biol. Chem* 266: 11947-11954 (1991).
  Berse B. et al, *Mol. Biol. Cell* 3: 211-220 (1992).
- ≻ Folkman J. et al, *Nature* **339**: 58-61 (1989).