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# VEGF (Vascular Endothelial Growth Factor) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone VEGF/1063 ]
Catalog # AH12509

## Product Information

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| **Application** | IHC, IF |
| **Primary Accession** | P15692 |
| **Other Accession** | 7422, 73793 |
| **Reactivity** | Human, Mouse, Rat, Rabbit, Dog |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Isotype** | Mouse / IgG1, kappa |
| **Clone Names** | VEGF/1063 |
| **Calculated MW** | 43597 |

## Additional Information

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| **Gene ID** | 7422 |
| **Other Names** | Vascular endothelial growth factor A, VEGF-A, Vascular permeability factor, VPF, VEGFA, VEGF |
| **Application Note** | IHC~~1:100~500 IF~~1:50~200 |
| **Storage** | Store at 2 to 8°C.Antibody is stable for 24 months. |
| **Precautions** | VEGF (Vascular Endothelial Growth Factor) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | VEGFA |
| **Synonyms** | VEGF |
| **Function** | [N-VEGF]: Participates in the induction of key genes involved in the response to hypoxia and in the induction of angiogenesis such as HIF1A (PubMed:35455969). Involved in protecting cells from hypoxia- mediated cell death (By similarity). |
| **Cellular Location** | [N-VEGF]: Cytoplasm. Nucleus. Note=Cytoplasmic in normoxic conditions and localizes to the nucleus under hypoxic conditions [Isoform L-VEGF189]: Endoplasmic reticulum. Golgi apparatus. Secreted, extracellular space, extracellular matrix [Isoform VEGF165]: Secreted |

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| **Tissue Location** | Higher expression in pituitary tumors than the pituitary gland. [Isoform VEGF165]: Widely expressed. [Isoform VEGF206]: Not widely expressed. |

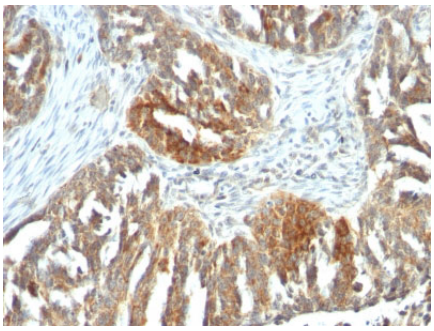
## Background

This MAb recognizes proteins of 19-22kDa (reducing) and 38kDa-44kDa (non-reducing), identified as various isoforms of Vascular Endothelial Growth Factor or Vascular Permeability Factor (VEGF/VPF). It is highly specific to VEGF, which is a homodimeric, disulfide-linked glycoprotein with a close homology to platelet derived growth factor (PDGF). 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.

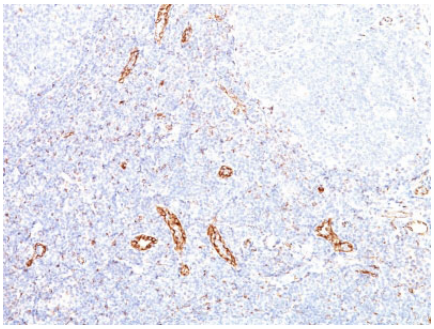
## References

Tischer, E., et al. 1991. The human gene for vascular endothelial growth factor. Multiple protein forms are encoded through alternative exon splicing. J. Biol. Chem. 266: 11947-11954. | Berse, B., et al. 1992. Vascular permeability factor (vascular endothelial growth factor) gene is expressed differentially in normal tissues, macrophages and tumors. Mol. Biol. Cell 3: 211-220. | Folkman, J., et al. 1989. Induction of angiogenesis during the transition from hyperplasia to neoplasia. Nature 339: 58-61

## Images



Formalin-fixed, paraffin-embedded human Ovarian Carcinoma stained with VEGF Monoclonal Antibody (VEGF/1063).



Formalin-fixed, paraffin-embedded human Tonsil stained with VEGF Monoclonal Antibody (VEGF/1063).