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Anti-Vascular endothelial growth factor (VEGF), Rabbit-Polyclonal Antibody

Catalog No. GB-10050 **Quantity:** 250μl **Applications:** ELISA
Antigen species: Human **Reactivity:** Human, rat, mouse
Host species: Rabbit **Form:** Antiserum

Target description

Vascular endothelial growth factor is a mitogen primarily for vascular endothelial cells. It is structurally related to platelet-derived growth factor. VEGF, a homodimeric glycoprotein of relative molecular mass 45,000, is the only mitogen that specifically acts on endothelial cells. It may be a major regulator of tumor angiogenesis in vivo. In 1994, Millauer observed in mouse that its expression was upregulated by hypoxia and that its cell surface receptor, Flk1, is exclusively expressed in endothelial cells. In 1995, Folkman noted the importance of VEGF and its receptor system in tumor growth and suggested that intervention in this system may provide promising approaches to cancer therapy.

Antigen

This polyclonal antibody was raised by immunizing rabbit with synthetic peptide of human VEGF located within the putative C2C2 Zinc finger domain.

Application

The antibody specificity was assayed by ELISA with the synthetic peptide. The antibody titer is more than 915K for ELISA. It has not been tested in the other applications. However, for the first testing, we recommend 1/5,000 dilution for ELISA, 1/1,000 dilution for WB of recombinant protein, 1/400 dilution for tissue extracts or cell lysates, 1/100 dilution for immunohistochemistry (IHC) staining on frozen cryosections, 1/50 dilution for IHC staining on paraffin embedded sections.

Related Products

1. Anti-VEGFR3, pAb (GB-30015)
2. Anti-Vascular endothelial growth factor (VEGF), pAb (PY-10031)
3. Anti-v-erb-b2 erythroblastic leukemia viral oncogene homolog 2 (Her2/neu a.a. 153-433), pAb (PY-10254)
4. Anti-v-erb-b2 erythroblastic leukemia viral oncogene homolog 2 (Her2/neu a.a.146-195), pAb (PY-10256)
5. Anti-insulin-like growth factor binding protein 6 (IGFBP6), pAb (PY-10255)

Ab dilution	Pre-bleed	Anti-serum
1: 100	0.660	1.727
1:1,000	0.503	1.498
1:10,000	0.235	0.972
1:100,000	0.182	0.363
1:1,000,000	0.151	0.245
Titer		**915 K**

ELISA Protocol

Antigen is coated on EIA strips at 1μg per well. Add 200μl of blocking buffer and then wash wells with PBST buffer. Antiserum or peptide specific purified antibody GB-10050 is diluted in series as 10^2~10^6 folds and added in separate wells. Incubate antibody for 1hr. Wash unbound antibodies and add anti-rabbit IgG-HRP conjugate. Wash the plates and add substrate to develop color for 5 min. Read absorbance (ABS) at 650 nm. Amount of color is directly proportional to the amount of antibodies. Antibody titer is defined positive as >0.1 of ABS of antiserum minus pre-bleed serum.

Storage

It is supplied as lyophilized antibody. Reconstituted the powder with 250 microliter sterile water will restore the original condition. Store at 4°C for short-term application. For long-term storage, aliquot and store at -20°C.

References

1. Folkman, J. Angiogenesis in cancer, vascular, rheumatoid and other disease. *Nature Med.* 1: 27-31, 1995.
2. Millauer, B., Shawver, L.K., Plate, K.H., Risau, W., Ullrich, A. Glioblastoma growth inhibited in vivo by a dominant-negative Flk-1 mutant. *Nature* 367: 576-579, 1994.