



Anti-Vascular endothelial growth factor receptor-3 (VEGFR-3), Rabbit-Polyclonal Antibody

Catalog No. GB-30015
Antigen species: Human
Host species: Rabbit

Quantity: 250 μ l
Reactivity: Human, rat, mouse
Form: Antiserum

Applications: ELISA

Target description

Vascular endothelial growth factor is a key regulator of blood vessel development in embryos and angiogenesis in adult tissues. Unlike VEGF, the related VEGFC stimulates the growth of lymphatic vessels through its specific lymphatic endothelial receptor VEGFR-3. In 1998, Dumont showed that targeted inactivation of the VEGFR-3 gene in mice resulted in defective blood vessel development in early embryos. Vasculogenesis and angiogenesis occurred, but large vessels became abnormally organized with defective lumens, leading to fluid accumulation in the pericardial cavity and cardiovascular failure at embryonic day 9.5. Thus, VEGFR3 has an essential role in the development of the embryonic cardiovascular system before the emergence of the lymphatic vessels.

Antigen

This polyclonal antibody was raised by immunizing rabbit with synthetic peptide of human VEGFR-3 located within the putative 4th Immunoglobulin like (IG_{like}) domain (a.a. 430-552).

Application

The antibody titer is more than 10K 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-Vascular endothelial growth factor (VEGF), pAb (GB-10050)
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	0.176	1.432
1:1,000	0.080	1.218
1:10,000	0.076	0.385
1:100,000	0.066	0.116
1:1,000,000	0.063	0.072
Titer		71.8K

ELISA Protocol

Antigen is coated on EIA strips at 1 μ g per well. Add 200 μ l of blocking buffer and then wash wells with PBST buffer. Antiserum or peptide specific purified antibody GB-30015 is diluted in series as 10²~10⁶ 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 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. Dumont, D.J., Jussila, L., Taipale, J., Lymboussaki, A., Mustonen, T., Pajusola, K., Breitman, M., Alitalo, K. Cardiovascular failure in mouse embryos deficient in VEGF receptor-3. *Science* 282: 946-949, 1998

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