



# Polyclonal Anti- Vascular Endothelial Growth Factor D, VEGF-D (Sepharose Bead Conjugate)

Catalogue No. PA1332-S

Lot No. 013101223264

Ig type: rabbit IgG

Size: 100µg/vial

**Specificity** Human. No cross reactivity with other proteins.

Recommended application

(Immunoprecipitation(IP)

#### Immunogen

A synthetic peptide corresponding to a sequence at the middle region of human VEGFD (101-115aa), identical to the related rat sequence.

Purification Immunogen affinity purified.

Formulation 50% slurry in PBS pH 7.2 with 0.01mg NaN<sub>3</sub>a<sub>3</sub> preservative.

Storage Store at 4°C for frequent use.

#### Description:

This Antagene antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated sepharose beads. It is useful for immunoprecipitation assays

### BACKGROUND

C-fos induced growth factor (FIGF) (or vascular endothelial growth factor D, VEGF-D) is a vascular endothelial growth factor that in humans is encoded by the *FIGF* gene. The protein encoded by this gene is a member of the platelet-derived growth factor/vascular endothelial growth factor (PDGF/VEGF) family and is active in angiogenesis, lymphangiogenesis, and endothelial cell growth. Analyzing by Northern blotting, Yamada et al. (1997) symbolized VEGFD, was expressed as a 2.2-kb transcript with highest expression in lung, heart, small intestine, and fetal lung, and lower levels in skeletal muscle, colon, and pancreas. And Achen et al. (1998) concluded that VEGFD was most closely related to VEGFC by virtue of the presence of N- and C-terminal extensions that were not found in other VEGF family members. Stacker et al. (2001) showed that VEGFD can induce tumor angiogenesis through VEGFR2 and tumor lymphangiogenesis through VEGFR3, whereas VEGF, which does not activate VEGFR3, induces only tumor angiogenesis.

## REFERENCE

1. Yamada, Y., Nezu, J., Shimane, M., Hirata, Y. Molecular cloning of a novel vascular endothelial growth factor, VEGF-D. Genomics 42: 483-488, 1997.

2. Achen, M. G., Jeltsch, M., Kukk, E., Makinen, T., Vitali, A., Wilks, A. F., Alitalo, K., Stacker, S. A. Vascular endothelial growth factor D (VEGF-D) is a ligand for the tyrosine kinases VEGF receptor 2 (Flk1) and VEGF receptor 3 (Flt4). Proc. Nat. Acad. Sci. 95: 548-553, 1998.

3. Stacker, S. A., Caesar, C., Baldwin, M. E., Thornton, G. E., Williams, R. A., Prevo, R., Jackson, D. G., Nishikawa, S., Kubo, H., Achen, M. G. VEGF-D promotes the metastatic spread of tumor cells via the lymphatics. Nature Med. 7: 186-191, 2001.