



## Product Information Sheet

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

**Catalogue No.** PA1332-M

**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.

**Purity**

Immunogen affinity purified.

**Contents**

Each vial contains 1mg/ml Magnetic Bead in PBS, pH 7.2, 0.05mg NaN<sub>3</sub>.

**Storage**

Store at 4°C for frequent use.

**Description**

This Antagene antibody is immobilized by the covalent reaction of hydrazinonicotinamide-modified antibody with formylbenzamide-modified magnetic beads. It is useful for immunoprecipitation.

## **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.