

VEGFD (VEGF4) Antibody Blocking peptide
Synthetic peptide
Catalog # BP2043a**Specification**

VEGFD (VEGF4) Antibody Blocking peptide - Product InformationPrimary Accession [O43915](#)**VEGFD (VEGF4) Antibody Blocking peptide - Additional Information****Gene ID** 2277**Other Names**

Vascular endothelial growth factor D, VEGF-D, c-Fos-induced growth factor, FIGF, FIGF, VEGFD

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP2043a](/product/products/AP2043a) was selected from the region of human VEGF4. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

VEGFD (VEGF4) Antibody Blocking peptide - Protein Information**Name** VEGFD ([HGNC:3708](#))**Synonyms** FIGF**Function**

Growth factor active in angiogenesis, lymphangiogenesis and endothelial cell growth, stimulating their proliferation and migration and also has effects on the permeability of blood vessels. May function in the formation of the venous and lymphatic vascular systems during embryogenesis, and also in the maintenance of differentiated lymphatic endothelium in adults. Binds and activates VEGFR-2 (KDR/FLK1) and VEGFR-3 (FLT4) receptors.

Cellular Location

Secreted.

Tissue Location

Highly expressed in lung, heart, small intestine and fetal lung, and at lower levels in skeletal muscle, colon, and pancreas

VEGFD (VEGF4) Antibody Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

VEGFD (VEGF4) Antibody Blocking peptide - Images

VEGFD (VEGF4) Antibody Blocking peptide - Background

Vascular endothelial growth factors (VEGFs) are a family of secreted glycoproteins which act as mitogens primarily for vascular endothelial cells. VEGF-C (VEGF3) and VEGF-D (VEGF4) are recently identified members which share the conserved VEGF Homology Domain. They both have long N- and C-terminal propeptide extensions, and undergo proteolytic processing. Both VEGF-C and VEGF-D are widely expressed with highest expression in lymphnodes. The receptors VEGFR2 and VEGFR3 are expressed in vascular endothelial cells and lymphatic endothelial cells. VEGF-C and VEGFR3 are usually co-expressed at growing lymphatic endothelial cells. The VEGF-C/VEGFR3 signaling pathway has been shown to be crucial for lymphatic development. Recently increased expression of VEGF-C has been linked to a variety of human tumors and correlates with increased lymphatic density and lymph node metastasis.

VEGFD (VEGF4) Antibody Blocking peptide - References

McColl, B.K., et al., J. Exp. Med. 198(6):863-868 (2003). Rissanen, T.T., et al., Circ. Res. 92(10):1098-1106 (2003). Nakamura, Y., et al., Clin. Cancer Res. 9(2):716-721 (2003). Yokoyama, Y., et al., Br. J. Cancer 88(2):237-244 (2003). Funaki, H., et al., Oncology 64(4):416-422 (2003).