

Recombinant Human Vascular Endothelial Growth Factor-D (rh VEGF-D)

Synonyms: c-fos induced growth factor (FIGF)

Introduction: VEGF-D, a member of the VEGF/PDGF family of structurally related proteins, is a potent angiogenic cytokine. It promotes endothelial cell growth, promotes lymph angiogenesis, and can also affect vascular permeability. VEGF-D is highly expressed in the lung, heart, small intestine and fetal lung, and at lower levels in the skeletal muscle, colon, and pancreas. It forms cell surfaced-associated non-covalent disulfide linked homodimers, and can bind and activate both VEGFR-2 (flk1) and VEGFR-3 (flt4) receptors. During embryogenesis, VEGF-D may play a role in the formation of the venous and lymphatic vascular systems. It also participates in the growth and maintenance of differentiated lymphatic endothelium in adults. Both VEGF-C and VEGF-D are over-expressed in certain cancers, and the resulting elevated levels of VEGF-C or VEGF-D tend to correlate with increased lymphatic metastasis.

Description: Recombinant human VEGF-D produced in HEK-293 cells is a secreted protein (amino acids Phe93-Ser201) fused to a polyhistidine tag at the C-terminus. Due to glycosylation the protein migrates as a 20.0 - 22.0 kDa band under non-reducing condition.

Source: HEK293 cells

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: Lyophilized after extensive dialysis against PBS.
The aliquots of 1µg and 2µg contain Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized rh VEGF-D in sterile water or aqueous buffers not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rh VEGF-D although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rh VEGF-D should be stored at 4° C between 2-7 days and for future use below -18° C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity: greater than 95.0% by SDS-PAGE.

Biological Activity: The ED50 of 3-4 ng/ml is measured by its ability to stimulate the proliferation of human microvascular endothelial cells (HMVECs).

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	2 µg	Cat.N°	11344712
<i>medium</i>	10 µg	Cat.N°	11344713

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Gladiolenweg 2; 26169 Friesoythe; Germany
phone:+49-(0)4491-400997, fax:+49-(0)4491-400998, info@immunotools.com
www.immunotools.com