

# Recombinant Human Endocrine Gland Vascular Endothelial Growth Factor (rh EG-VEGF)

**Synonyms:** PK1, PRK1, Prokineticin 1

**Introduction:** Endocrine gland-derived vascular endothelial growth factor (EG-VEGF) induces proliferation, migration and fenestration in capillary endothelial cells derived from endocrine glands. Its expression is induced by hypoxia and is restricted to the steroidogenic glands (ovary, testis, adrenal, and placenta). Its expression is often complementary to the expression of VEGF (MIM 192240), suggesting that these molecules function in a coordinated manner. EG-VEGF potently contracts gastrointestinal (gi) smooth muscle and has little or no effect on a variety of other endothelial and non-endothelial cell types.

**Description:** Recombinant human EG-VEGF produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 86 amino acids and having a molecular mass of 9.6 kDa. The rh EG-VEGF is purified by proprietary chromatographic techniques.

**Source:** Escherichia Coli

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

**Formulation:** Lyophilized from a concentrated solution with no additives.  
The aliquots of 1µg and 2µg contain Trehalose 5% (w/vol) for better recovery

**Solubility:** It is recommended to reconstitute the lyophilized rh EG-VEGF in sterile 18MΩ-cm water not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized rh EG-VEGF although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rh EG-VEGF 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 98.0% as determined by RP-HPLC and by SDS-PAGE.

**Amino Acid Sequence:**

The sequence of the first five N-terminal amino acids was determined and was found to be Ala-Val-Ile-Thr-Gly.

**Biological Activity:** Determined by the dose-dependent stimulation of the proliferation of human umbilical vein endothelial cells (HUVEC) using a concentration range of 1-5 ng/ml.

**Endotoxicity:** Less than 0.1 ng/µg (IEU/µg) of rh EG-VEGF.

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°	11344662
<i>medium</i>	10 µg	Cat.N°	11344663

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