

## EG-VEGF

### Endocrine Gland-derived Vascular Endothelial Growth Factor

human, recombinant, *E. coli*

Cat. No.	Amount
PR-412	10 $\mu$ g

For *in vitro* use only  
Quality guaranteed for 12 months  
Store at -20°C

#### Avoid freeze / thaw cycles

#### Form

Lyophilized.

#### Solubility

It is recommended to reconstitute the lyophilized EG-VEGF in sterile bidest H<sub>2</sub>O not less than 100  $\mu$ g/ml, which can then be further diluted to other aqueous solutions. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

#### Activity

ED<sub>50</sub>: 1-5 ng/ml, determined by the dose-dependent stimulation of the proliferation of human umbilical vein endothelial cells (HUVEC).

#### Endotoxin

Less than 0.1 ng/ $\mu$ g (IEU/ $\mu$ g) of EG-VEGF.

#### Molecular Weight

9,6 kDa

#### Purity

≥ 95% by SDS-PAGE and RP-HPLC

#### Description

Human Endocrine Gland-derived vascular Endothelial Growth Factor (EG-VEGF) is selectively expressed in steroidogenic glands and promotes growth of endocrine gland endothelium. The identification of tissue-selective angiogenic factors raises the possibility that other secreted molecules in this class exist. Consistent with such an expression pattern, the human EG-VEGF gene promoter has a potential binding site for steroidogenic factor (SF)-1, a pivotal element for steroidogenic-specific transcription. In the human ovary, the expression of EG-VEGF is temporally and spatially complementary to the expression of VEGF-A, both in the follicular and in the luteal phase, suggesting complementary and coordinated roles of these molecules in ovarian angiogenesis. Also, EG-VEGF expression correlates with vascularity in the polycystic ovary syndrome, a leading cause of infertility.

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 9.605 kDa. Recombinant EG-VEGF is purified by proprietary techniques.

#### Selected References:

- Lecouter *et al.* (2004) EG-VEGF: a novel mediator of endocrine-specific angiogenesis, endothelial phenotype, and function. *Ann. N. Y. Acad. Sci.* **1014**:50.
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- Kimata (2004) Ciliary neurotrophic factor preferentially enhances spontaneous IgE production by B cells from atopic patients. *Neuropeptides* **38**:92.