

Recombinant Rat Vascular Endothelial Growth Factor-A (rr VEGF-A)

VEGF is an important signaling protein involved in both vasculogenesis and angiogenesis. As its name implies, VEGF's activity has been mostly studied on cells of vascular endothelium, although it does have effects on a number of other cell types (e.g. stimulation monocyte/ macrophage migration, neurons, cancer cells, kidney epithelial cells). VEGF mediates increased vascular permeability, induces angiogenesis, vasculogenesis and endothelial cell mitogenesis and cell migration. VEGF is also a vasodilator and increases microvascular permeability and was originally referred as vascular permeability factor.

Recombinant rat VEGF-A produced in *E.Coli* is a double, non-glycosylated, polypeptide chain containing 165 amino acids and having a molecular mass of 38.75 kDa. The rr VEGF-A is purified by proprietary chromatographic techniques.

Synonyms : Vascular permeability factor, VPF

Source: *Escherichia coli*

AA-Sequence: MAPTTEGEQK AHEVVKFMDV YQRSYCRPIE TLVDIFQEYP DEIEYIFKPS
CVPLMRCAGC CNDEALECVP TSESNVTMQI MRIKPHQSQH IGEMSFLQHS
RCECRPKKDR TKPEKHCEPC SERRKHLFVQ DPQTCKCSCK NTDSRCKARQ
LELNERTCRC DKPRR

Formulation: Lyophilisate from a 0.22 µm filtered solution in PBS, pH 7.2

Reconstitution: Reconstitute in sterile endotoxin free water not less than 100 µg/ml

Stability: The lyophilized protein is stable for at least 2 years at -20°C. Reconstituted rr VEGF-A is stable for at least 3 months when stored in concentrated working aliquots (100 ng/µl or higher) at -20°C. Avoid repeated freeze/thaw cycles.

Biological Activity: Determined by stimulation of proliferation of human umbilical vein endothelial cells (HUVECs). Cell proliferation was induced within a concentration range of 2 - 8 ng/ml.

Purity: 95% (verified by SDS-PAGE / silver stain)

Endotoxicity: The endotoxin level is less than 0.1 ng per µg (1EU/µg) determined by LAL method

Order N°: rr VEGF-A+Size
available sizes: 2 µg, 10 µg, 50 µg

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