



## Product Datasheet

<b>Product Name</b>	Vascular Endothelial Growth Factor-121 Human Recombinant, His Tag
<b>Cata No</b>	CB501353
<b>Source</b>	<i>Escherichia Coli.</i>
<b>Synonyms</b>	Vascular endothelial growth factor A, VEGF-A, Vascular permeability factor, VPF, VEGF, MGC70609.

### Description

Vascular endothelial growth factor is an important signaling protein involved in both vasculogenesis and angiogenesis. As its name implies, VEGF activity has been mostly studied on cells of the 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 growth, promotes cell migration, and inhibits apoptosis. In vitro, VEGF has been shown to stimulate endothelial cell mitogenesis and cell migration. VEGF is also a vasodilator and increases microvascular permeability and was originally referred to as vascular permeability factor.

Elevated levels of this protein is linked to POEMS syndrome, also known as Crow-Fukase syndrome. Mutations in this gene have been associated with proliferative and nonproliferative diabetic retinopathy.

Vascular Endothelial Growth Factor-121 Human Recombinant produced in E.Coli is a double, non-glycosylated, polypeptide chain containing a total of 142 amino acids and having a molecular

mass of 16.3 kDa. The VEGF-121 is fused to 20 amino acid His tag at N-terminus and purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile Filtered colorless solution.

### Purity

Greater than 95.0% as determined by SDS-PAGE.

### Formulation

VEGF-121 His Tag in 20mM TRIS pH-8.

### Stability

Liquid VEGF 121 although stable at 10°C for 1 week, should be stored 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.**

### Sequence

MGSSHHHHHH SSGLVPRGSH MAPMAEGGGQ  
NHHEVVKFMD VYQRSYCHPI ETLVDIFQEY  
PDEIEYIFKP SCVPLMRGG CCNDEGLECV  
PTEESNITMQ IMRIKPHQQG HIGEMSFLQH  
NKCECRPKKD RARQEKCDKP RR