

Growth Factor Data Sheet

GoldBio growth factors are manufactured for **RESEARCH USE ONLY** and cannot be sold for human consumption!

Vascular endothelial growth factor is a potent growth factor and angiogenic cytokine. It stimulates proliferation and survival of endothelial cells and promotes angiogenesis and vascular permeability. VEGF is expressed in vascularized tissues and plays a prominent role in normal and pathological angiogenesis. VEGF has been implicated in the induction of tumor metastasis, intra-ocular neovascular syndromes and angiogenesis. Two receptor tyrosine kinases (RTKs), Flt-1 and Flk-1 have been shown to bind VEGF with high affinity.

Catalog Number	1550-07
Product Name	VEGF164, Rat Recombinant Rat Vascular Endothelial Growth Factor ₁₆₄ VEGF ₁₆₄
Source	<i>Escherichia coli</i>
MW	~38.2 kDa (2x165 amino acid) (A disulfide linked homodimeric protein with two 165 amino acid polypeptide chains)
Sequence	MAPTTEGEQK AHEVVKFMDV YQRSYCRPIE TLVDIFQEYP DEIEYIFKPS CVPLMRCAGC CNDEALECVP TSESNVTMQI MRIKPHQSQH IGEMSFLQHS RCECRPKKDR TKPEKHCEPC SERRKHLFVQ DPQTCKCSCK NTDSRCKARQ LELNERTCRC DKPRR
Accession Number	P16612
Purity	>95% by SDS-PAGE and HPLC analyses
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using human umbilical vein endothelial cells(HUVEC) is less than 5 ng/ml, corresponding to a specific activity of > 2.0 × 10 ⁵ IU/mg.
Formulation	Sterile filtered white lyophilized powder. Purified and tested for use in cell culture.
Storage/Handling	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage. The reconstituted sample can be apportioned into working aliquots and stored at -80 °C for up to 6 months. Avoid repeated freeze/thaw cycles.
Reconstitution	The sample should be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a siliconized tube using PBS that contains a 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Reconstituted solutions are stable for up to one week at 2-8°C. Stock solutions should be aliquoted and stored at -80°C. Further dilutions should be made in appropriate buffered solutions containing BSA or serum.