

# Growth Factor Data Sheet

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Vascular Endothelial Growth Factor is a potent growth 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. Three mouse cDNA clones (monomeric VEGF having 120, 164 or 188 amino acids) have been identified through alternative splicing. Two receptor tyrosine kinases (RTKs), Flt-1 and Flk-1 (the mouse homologue of human KDR) have been shown to bind VEGF with high affinity.

<b>Catalog Number</b>	<b>1350-07</b>
<b>Product Name</b>	<b>VEGF<sub>164</sub>, Murine Recombinant Murine Vascular Endothelial Growth Factor<sub>164</sub> VEGF<sub>164</sub></b>
<b>Source</b>	<i>Escherichia coli</i>
<b>MW</b>	~38.8 kDa (2x165 amino acid) (A disulfide linked homodimeric protein with two 165 amino acid polypeptide chains)
<b>Sequence</b>	MAPTTEGEQK SHEVIKFM DV YQRSYCRPIE TLVDIFQEYP DEIEYIFKPS CVPLMRCAGC CNDEALECVP TSESNITMQI MRIKPHQSQH IGEMSFLQHS RCECRPKKDR TKPEKHCEPC SERRKHLFVQ DPQTCKCSCK NTDSRCKARQ LELNERTCRC DKPRR
<b>Accession Number</b>	<a href="#">Q00731</a>
<b>Purity</b>	>95% by SDS-PAGE and HPLC analyses
<b>Biological Activity</b>	Fully biologically active when compared to standard. The ED <sub>50</sub> as determined by a cell proliferation assay using human umbilical vein endothelial cells (HUVEC) is less than 5.0 ng/ml, corresponding to a specific activity of >2.0 × 10 <sup>5</sup> IU/mg.
<b>Formulation</b>	Sterile filtered white lyophilized powder. Purified and tested for use in cell culture.
<b>Storage/Handling</b>	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.
<b>Reconstitution</b>	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.