

Recombinant Murine Vascular Endothelial Growth Factor₁₂₀

 $(rmVEGF_{120})$

Catalog Number: 125-06

Description VEGF was initially purified from media conditioned by normal bovine pituitary folliculo-

stellate cells and by a variety of transformed cell lines as a mitogen specific for vascular endothelial cells. Three mouse cDNA clones, which arise through alternative splicing and which encode mature mouse monomeric VEGF having 120, 164, or 188, amino acids, respectively, have been identified. Two receptor tyrosine kinases (RTKs), Flt-1 and Flk-1 (the mouse homologue of human KDR), both members of the type III subclass of RTKs containing seven immunoglobulin-like repeats in their extracellular domains, have been shown to bind VEGF with high affinity. VEGF has been found to be a potent angiogenesis inducer *in vivo*.

Synonyms VEGFA, VEGF-A, Vascular permeability factor (VPF), VEGF, Vegf188, Vegf164, Vegfa

AA Sequence MAPTTEGEQK SHEVIKFMDV YQRSYCRPIE TLVDIFQEYP DEIEYIFKPS

CVPLMRCAGC CNDEALECVP TSESNITMQI MRIKPHQSQH IGEMSFLQHS

RCECRPKKDR TKPEKCDKPR R

Source Escherichia coli

Molecular Weight Approximately 28.4 kDa disulfide-linked homodimeric protein consisting of two 121 amino

acid polypeptide chains.

Purity >96% by SDS-PAGE and HPLC analyses.

Biological Activity Fully biologically active. The ED₅₀ is 2-4ng/ml, as determined by HUVEC cell proliferation.

Physical Appearance White lyophilized powder.

Formulation Lyophilized from a 0.2µm filtered solution in PBS, pH 7.4.

Endotoxin $< 1EU/\mu g$ of growth factor as determined by LAL method.

Reconstitution Reconstitute in sterile distilled water containing 0.1% BSA to a concentration of 0.1-1.0

mg/mL.

Storage Storage Store at -20°C after receiving. Upon reconstitution, store at 2-8°C for up to one week. For

maximal stability, aliquot and store at -20°C. Avoid repeated freeze/ thaw cycles.

Usage This product is for research use only. It is not approved for use in humans, animals, or *in vitro*

diagnostic procedures.