

Rev03  
Update: Dec,14,2021

**DATASHEET**

# VEGF120, Mouse

Cat. No.: Z02779

## Product Introduction

<b>Species</b>	Mouse
<b>Protein Construction</b>	Expressed with an N-terminal Met. <b>VEGF120 (Ala27-Arg146) Accession # Q00731-3</b>
<b>Purity</b>	> 96% as analyzed by SDS-PAGE > 96% as analyzed by HPLC
<b>Endotoxin Level</b>	< 1 EU/ $\mu$ g of protein by LAL method
<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 $> 2.0 \times 10^5$ IU/mg.
<b>Expression System</b>	E. coli
<b>Theoretical Molecular Weight</b>	28.4 kDa
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS, pH 7.4.
<b>Reconstitution</b>	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml.
<b>Storage &amp; Stability</b>	Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

## Background

**Target Background :** 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. It was subsequently found to be identical to an independently discovered vascular permeability factor (VPF), which was previously identified in media conditioned by tumor cell lines based on its ability to increase the permeability of capillary blood vessels. 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. The roles of the homodimers of KDR, Flt, and the heterodimer of KDR/Flt in VEGF signal transduction remain to be elucidated. In vivo, VEGF has been found to be a potent angiogenesis inducer.

**Synonyms :** Vascular Endothelial Growth Factor 120; VEGF-120; Vascular Permeability Factor; VPF

**For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.**