

VEGFA

Recombinant Equine VEGF 165

Catalog No.	CRE051A	Quantity:	5 µg
	CRE051B		20 µg
	CRE051C		1.0 mg
	CRE051D		100 µg

Alternate Names: Vascular endothelial growth factor A, VEGF-A, Vascular permeability factor, VPF
Description: Vascular Endothelial Growth Factor is a potent growth and angiogenic cytokine. It stimulates proliferation and survival of endothelial cells. VEGF-A is also a vasodilator and increases microvascular permeability via nitric oxide-dependent pathways, and was originally referred to as vascular permeability factor. There are multiple isoforms of VEGF-A that result from alternative splicing of mRNA from a single, 8-exon VEGFA gene, with VEGF-165 being the most abundant. The VEGF-165 isoform is a secreted protein that acts on receptors VEGFR-1 and VEGFR-2 to modulate endothelial cell proliferation and angiogenesis.

Gene ID: 100033839

UniProt ID: F6XLT6

Source: *E. coli*

Molecular Weight: 19.3/38.6 kDa (166/332 aa), dimer

Formulation: Lyophilized from a sterile filtered 10 mM Sodium Phosphate, pH 7.5

Purity: ≥ 95% by reducing and non-reducing SDS-PAGE

Endotoxin Level: ≤ 1 EU/µg of protein by kinetic LAL analysis

Biological Activity: ED₅₀ ≤ 10 ng/ml, determined by dose-dependent cell proliferation assay using human umbilical vein endothelial cells (HUVEC).

Specific Activity: ≥ 1.0 × 10⁵ units/mg

Amino Acid Sequence: MAPMAEGEHK THEVVKFMDV YQRSYCRPIE TLVDIFQEYP DEIEYIFKPS
 CVPLMRCGGC CNDEGLECVP TAEFNITMQI MRIKPHQSQH IGEMSFLQHS
 KCECRPKKDK ARQENPCGPC SERRKHLFVQ DPQTCKCSCK NTDSRCKARQ
 LELNERTCRC DKPRR

Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water to a concentration of 0.1 mg/ml. **DO NOT VORTEX.** Allow several minutes for complete reconstitution. Further dilution should be made in appropriate buffered solutions.

Storage & Stability: Lyophilized product is stable at room temperature for shipping purposes. Upon receipt, store at -20°C to -80°C for up to 1 year.

Upon reconstitution, the preparation is stable for up to one month at 2-8°C. For long term storage, freeze in working aliquots and store at -20 to -80°C. For maximal stability, dilute to working aliquots in a 0.1% BSA solution. **Avoid repeated freeze-thaw cycles.**

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

