

VEGF121/VPF, Mouse, Recombinant

Cat. No. : PCK358

General Information

Synonyms	VPF
Species	Mouse
Expression host	E.coli
Sequence	MAPTTEGEQKSHEVIKFMDEVYQRSYCRPIETLVDIFQEYPDEIEYIFKPSCVPLMRCAGCCNDEALECVPTSESNITMQIMRIKPHQSQHIGEMSFLQHSRCECRPKKDRTKPEKCDKPRR with polyhistidine tag at the C-terminus.
Accession	Q00731.2 (Mouse), P16612.2 (Rat)
Tag	His-tag at the C-terminus
Mol mass	15.01 kDa
Expiration date	12 months
Bio activity	Measure by its ability to induce proliferation in HUVEC cells. The ED50 for this effect is < 3 ng/mL.

Product feature

Purity	> 95% as determined by SDS-PAGE. Ni-NTA chromatography.
Endotoxin (EU/μg)	< 0.1
Storage	Lyophilized protein should be stored at -5~-20°C for 1 year. Upon reconstitution, store at 2-8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10% FBS, 5% HSA or 5% trehalose solution), protein aliquots should be stored at -5~-20°C or -80°C for 3-6 months.
Shipping	Ice bag
Formulation	The protein was lyophilized from a 0.2 μm filtered solution containing 1 × PBS, pH 8.0.
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 100 μg/mL. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

Background

Vascular endothelial growth factor (VEGF), originally known as vascular permeability factor (VPF), is a signal protein produced by cells that stimulates the formation of blood vessels. VEGF is required during embryogenesis to regulate the proliferation, migration, and survival of endothelial cells. In adults, VEGF functions mainly in wound healing and the female reproductive cycle. Pathologically, it is involved in tumor angiogenesis and vascular leakage. Circulating VEGF levels correlate with disease activity in autoimmune diseases such as rheumatoid arthritis, multiple sclerosis and systemic lupus erythematosus. VEGF is induced by hypoxia and cytokines such as IL-1, IL-6, IL-8, oncostatin M and TNF-alpha.

SDS-PAGE

