

Recombinant Human VEGF (165aa)

Cat No:HR2R2063

For research use only

Overview

Quantity	100 µg
Gene Symbol	VEGFA
Gene ID	7422
Accession	P15692
Alternative Name	Vascular endothelial growth factor A, VEGF-A, Vascular permeability factor, VPF, VEGFA, VEGF-165aa Recombinant Human Vascular Endothelial Growth Factor 165AA (VEGFA)
Species	Human
Source	E. coli
Description	VEGF is a homodimeric glycoprotein that is actively involved in angiogenesis, vasculogenesis and endothelial cell growth. Owing to alternative splicing of the mRNA, VEGF occurs in several molecular variants of 121, 162, 145, 148, 165, 183, 189 and 206 amino acids. The various isoforms of VEGF differ in biological properties such as; (a) the receptors they recognize and (b) their interaction with heparan sulfate proteoglycans. VEGF-121 and VEGF-165 are soluble secreted forms of the factor while VEGF-189 and VEGF-206 are mostly bound to heparin-containing proteoglycans in the cell surface or in the basement membrane. VEGF-165 is the most common variant in most tissues and one with heparin binding properties. Recombinant VEGF-165aa is a non-glycosylated, disulfide linked homodimer.
Functions	The ED50 as determined by the dose-dependent proliferation of human umbilical vein endothelial cells, using a concentration range of 1-100 ng/mL, was found to be <10ng/mL
Formulation	Lyophilized from 0.2 µm filtered solution in sodium phosphate and NaCl (pH 6.5)
Solubility	A quick spin of the vial followed by reconstitution in distilled water to a concentration no less than 0.1 mg/mL. This solution can then be diluted into other buffers.
Appearance	Lyophilized Powder
Molecular Weight	19
Purity	>95% as determined by SDS-PAGE
Concentration	< 1.0 EU/µg of recombinant protein as determined by the LAL method.
Shipping Condition	Ambient Temperature
Storage Condition	The lyophilized protein is stable for at least one year from date of receipt at -70°C. Upon reconstitution, this cytokine can be stored in working aliquots at 2° - 8°C for one month, or at -20°C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.