



Product Data Sheet

Human Recombinant Vascular Endothelial Growth Factor 165 (VEGF-165) Protein

Catalog Number: ORF.GF.VEGF165

Product Details	
Product Name	Human Recombinant Vascular Endothelial Growth Factor 165 (VEGF-165) Protein
Catalog Numbers	ORF.GF.VEGF165-10, ORF.GF.VEGF165-50, ORF.GF.VEGF165-100, ORF.GF.VEGF165-500, ORF.GF.VEGF165-1000
Sizes	10 µg, 50 µg, 100 µg, 500 µg, 1000 µg
Species	Human
UniProt ID	P15692
Product Form	Lyophilized

Product Description	Product Image
<p>Vascular Endothelial Growth Factor 165 (VEGF 165) is a major isoform of the VEGF-A family and a key mediator of angiogenesis, vasculogenesis, and endothelial cell function. It exerts its biological activity by binding to VEGF receptors (VEGFR-1 and VEGFR-2) in the presence of co-receptors such as neuropilin-1, initiating downstream signaling cascades including the MAPK, PI3K/AKT, and PLCγ pathways. These pathways regulate endothelial cell proliferation, migration, survival, and new blood vessel formation.</p> <p>VEGF 165 is abundantly expressed during embryonic development and in response to tissue injury or hypoxia, where it plays a vital role in establishing and remodeling the vascular system. In adult tissues, it continues to support angiogenesis, vascular permeability, and tissue regeneration. Recombinant VEGF 165 is widely used in vitro for endothelial cell culture, angiogenesis assays, and tissue engineering. It is also a valuable tool in cancer biology, wound healing studies, and the development of pro- and anti-angiogenic therapeutics in regenerative medicine and disease modeling.</p>	

For research applications only. Not for diagnostic or therapeutic use.



Product Specifications		
Protein Description	165-amino acid mature human VEGF variant consisting of residues Ala27 to Arg191	
Expression System	Available upon request	
Amino Acid Sequence	APMAEGGGQN HHEVVKFMDV YQRSYCHPIE TLVDIFQEYP DEIEYIFKPS CVPLMRCGGC CNDEGLECVPT TEESNITMQI MRKPHQGQH IGEMSFLQHN KCECRPKKDR ARQENPCGPC SERRKHLFVQ DPQTCKCSCK NTDSRCKARQ LELNERTCRC DKPRR	
Molecular Weight	SDS-PAGE	19.2 kDa (Expected)
Purity	SDS-PAGE	> 95%
Endotoxin	LAL	<1 EU/microgram
Bioactivity	Determined by ability to stimulate the proliferation of human umbilical vein endothelial cells (HUVECs).	Biologically Active

Product Preparation	
Shipping Temperature	Ambient
Form	Lyophilized
Reconstitution Instructions	Reconstitute with sterile deionized water or 10 mM Sodium Citrate, pH 6.0+ 0.1% BSA.

Storage and Stability		
	Temperature	Storage Time
Liquid Form	2°C to 8°C	1 month
Liquid Form	-20°C to -80°C	3 months

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