



# Recombinant Protein Technical Manual

**Recombinant Human VEGF165/VEGFA Protein  
(Active)**  
RPES3789

## Product Data:

**Product SKU:** RPES3789

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** P15692-4

## Protein Information:

**Molecular Mass:** 19.1 kDa

**AP Molecular Mass:** 18-22 kDa

### Tag:

**Bio-activity:** Immobilized Human VEGF165 at 10µg/ml (100 µl/well) can bind Human VEGFR2, The ED50 of Human VEGF165 is 433.6 ng/ml.

**Purity:** > 95% as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.2.

**Reconstitution:** Please refer to the printed manual for detailed information.

### Application:

**Synonyms:** MVCD1;VEGF;VEGF165;VPF;Vascular Endothelial Growth Factor Isoform 165

## Immunogen Information:

**Sequence:** Ala27-Arg191

## Background:

Human Vascular endothelial growth factor (VEGF), also known as VEGF-A and vascular permeability factor (VPF), belongs to the platelet-derived growth factor family of cysteine-knot growth factors. It is a potent activator in vasculogenesis and angiogenesis both physiologically and pathologically. VEGF-A has 8 differently spliced isoforms, of which VEGF165 is the most abundant one. VEGF165 is a disulfide-linked homodimer consisting of two glycosylated 165 amino acid polypeptide chains. VEGF stimulates the cellular response through binding to tyrosine kinase receptors VEGFR1 and VEGFR2 on the cell surface. It is widely accepted that VEGFR2 mediate almost all of the known cellular responses to VEGF while the function of VEGFR1 is less defined and is thought to modulate the VEGFR2 signaling.