

## Recombinant Human VEGF165 / Vascular Endothelial Growth Factor 165, Animal Free & Carrier Free

Cat #: C-CYP236

Size: 5µg, 20µg, 100µg, 500µg, 1mg

Shipping: Blue Ice

### Product Overview

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

### Product Information

**Source:** *Escherichia Coli*.

**Purity:** >98% as determined by SDS-PAGE. Ni-NTA chromatography.

**Biological Activity:** Measure by its ability to induce HUVEC cells proliferation. The ED<sub>50</sub> for this effect is < 5 ng/mL. The specific activity of recombinant human VEGF165 is approximately > 1.4 x 10<sup>6</sup> IU/mg.

**Endotoxin:** <0.1EU per 1µg of the protein by the LAL method.

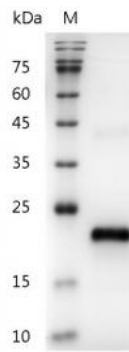
**Amino acid sequence:**

MAPMAEGGGQNHHEVVKFMDVYQRSYCHPIETLVDIFQEYDPDEIEYIFKPCSVPLMRCGGCCNDEGLECVPTESNITMQIMRIKPHQG

QHIGEMSFLQHNKCECRPKKDRARQENPCGPCSERRKHLFVQDPQTCKCCKNTDSRCKARQLELNERTCRCDKPRR with

polyhistidine tag at the C-terminus.

**Formulation:** Lyophilized from a sterile filtered aqueous solution in 1X PBS, pH 8.0.



SDS-PAGE analysis of recombinant human VEGF165

## Usage Method

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.
2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile distilled H<sub>2</sub>O. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.
3. The reconstituted solution can be stored at 2-8°C for up to 1 week.
4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10 µg/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

## Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

## Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.