



Recombinant Human Vascular Permeability Factor, VEGF

Cat# P2003

INFORMATION

Size	5ug/25ug
Introduction	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. To be specific, VEGF is a sub-family of growth factors, the platelet-derived growth factor family of cystine-knot growth factors. They are important signaling proteins involved in both vasculogenesis (the de novo formation of the embryonic circulatory system) and angiogenesis (the growth of blood vessels from pre-existing vasculature).
Formula	C118H17
Molecular weight	18 kD
CAS Number	127464-60-2
PH	7.0
Puity	97%
Source	E.coli
Water soluble	Soluble
Storage	2-8 Degree Centigrade
Biological function	<p>1. Promote endothelial cell proliferation VEGF is a specific mitogen of vascular endothelial cells, which can promote the growth of vascular endothelial cells in vitro and induce vascular proliferation in vivo. Especially in a hypoxic environment, VEGF binds to the VEGF receptor on the endothelial cell membrane, causing autophosphorylation of the receptor, thereby activating mitogen-activated protein kinase (MAPK), achieving the mitogen properties of VEGF, and inducing endothelial cell proliferation.</p> <p>2. Promote vascular hyperplasia In a hypoxic environment, VEGF increases the activity of plasma zymogen activating factor (PA) and plasma zymogen activating factor inhibitory factor-1 (PAI-1) mRNA to increase the activity of plasma zymogen activating factor, Promote extracellular protein hydrolysis, and then promote the formation of new capillaries.</p> <p>3. Increasing vascular permeability VEGF is one of the strongest substances that can increase vascular permeability, and is achieved by small cellular vesicles. It is characterized by rapid action and short duration.</p> <p>4. Change the extracellular matrix Under low oxygen environment, VEGF can induce the expression of plasma plasminogen activator and plasma plasminogen activator inhibitor-1, as well as the expression of matrix collagenase and tissue factor in endothelial cells to stimulate V3 factor is released from endothelial cells, thereby changing the extracellular matrix, making it easier for blood vessel growth. VEGF can be used for Hair growth stimulation through the facilitation of nutrient feeding to hair follicle by the</p>

	<p>VEGF-induced angiogenesis.</p> <ol style="list-style-type: none"> 1.Increase vascular permeability 2.Degeneration of extracellular matrix 3.Migration, proliferation and angiogenesis of vascular endothelial cells
Main Funtion	Promote the regeneration of capillaries, remove acne, dark spots, and chloasma, and make the skin ruddy and shiny.
Appearance	White powder, White losse powder