

VEGF Blocking Peptide (C-term) Synthetic peptide Catalog # BP6290b

Specification

VEGF Blocking Peptide (C-term) - Product Information

Primary Accession

<u>P15692</u>

VEGF Blocking Peptide (C-term) - Additional Information

Gene ID 7422

Other Names Vascular endothelial growth factor A, VEGF-A, Vascular permeability factor, VPF, VEGFA, VEGF

Target/Specificity

The synthetic peptide sequence is selected from aa 312~326 of HUMAN VEGFA

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

VEGF Blocking Peptide (C-term) - Protein Information

Name VEGFA

Synonyms VEGF

Function

[N-VEGF]: Participates in the induction of key genes involved in the response to hypoxia and in the induction of angiogenesis such as HIF1A (PubMed:35455969). Involved in protecting cells from hypoxia- mediated cell death (By similarity).

Cellular Location

[N-VEGF]: Cytoplasm. Nucleus. Note=Cytoplasmic in normoxic conditions and localizes to the nucleus under hypoxic conditions [Isoform L-VEGF189]: Endoplasmic reticulum. Golgi apparatus. Secreted, extracellular space, extracellular matrix [Isoform VEGF165]: Secreted

Tissue Location

Higher expression in pituitary tumors than the pituitary gland. [Isoform VEGF165]: Widely expressed. [Isoform VEGF206]: Not widely expressed.



VEGF Blocking Peptide (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

<u>Blocking Peptides</u>

VEGF Blocking Peptide (C-term) - Images

VEGF Blocking Peptide (C-term) - Background

Embryonic vascular system undergoes a series of complex, highly regulated series of events involving differentiation, migration and association of primitive endothelial cells. This process is termed vasculogenesis. A further remodeling of the primitive vascular system forms the mature cardiovascular system. This process is known as angiogenesis (sprouting of new capillary vessels from pre-existing vasculature). Angiogenesis accounts for the formation of vasculature into previously avascular organs such as brain and kidney. Angiogenic activity in the adult is required during the normal tissue repair, and for the remodeling of the female reproductive organs (ovulation and placental development). Certain pathological conditions, such as tumor growth and diabetic retinopathy, also require angiogenesis. Study of tumor angiogenesis has led to the identification of several proteins including basic fibroblast growth factor (bFGF) and vascular endothelial growth factor. VEGF acts by interacting with a family of largely endothelial-specific receptor tyrosine kinases that includes VEGFR-1 (flt-1), VEGFR-2 (flk-1/KDR), and VEGFR-3/Flt-4. Disruption of VEGFRs interferes with differentiation of endothelial cells and it is lethal for the embryo.

VEGF is a heparin-binding glycoprotein that is secreted as a homodimer of 45 kDa.