10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.622.0609

VEGFB (VEGF2) Blocking Peptide (N-term)

Synthetic peptide
Catalog # BP6293a

Specification

VEGFB (VEGF2) Blocking Peptide (N-term) - Product Information

Primary Accession	P49765
Other Accession	Q16528

VEGFB (VEGF2) Blocking Peptide (N-term) - Additional Information

Gene ID 7423

Other Names
Vascular endothelial growth factor B, VEGF-B, VEGF-related factor, VRF, VEGFB, VRF

Target/Specificity
The synthetic peptide sequence is selected from aa 22-37 of HUMAN VEGFB

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.

VEGFB (VEGF2) Blocking Peptide (N-term) - Protein Information

Name VEGFB

Synonyms VRF

Function
Growth factor for endothelial cells.
VEGF-B167 binds heparin and neuropilin-1

VEGFB (VEGF2) Blocking Peptide (N-term) - Background

Vascular endothelial growth factors (VEGFs) are a family of closely related growth factors having a conserved pattern of eight cysteine residues and sharing common VEGF receptors. VEGFs stimulate endothelial cells, induce angiogenesis, promote cell migration, increase vascular permeability, and inhibit apoptosis. VEGFB has structural similarities to VEGF and PlGF and is frequently co-expressed with VEGF. There are two alternatively spliced isoforms of VEGFB: VEGFB 167 and VEGFB 186. VEGFB 167, a highly basic heparin-binding protein, remains with the cell or extracellular matrix whereas, VEGFB 186 is readily secreted. VEGFB stimulates endothelial cell proliferation. VEGFB binds to the tyrosine kinase receptor VEGFR1 (flt1) and does not bind to VEGFR2. Vascular Endothelial Growth Factor B is widely expressed but is most abundant in heart, skeletal muscle, and pancreas. It has been suggested that VEGFB expression in human primary breast cancers is associated with lymph node metastasis. The genes that encode VEGFB have been mapped to chromosome 11q13.

VEGFB (VEGF2) Blocking Peptide (N-term) - References

Trompezinski, S., et al., Exp. Dermatol. 13(2):98-105 (2004).
Qi, J.H., et al., Nat. Med. 9(4):407-415 (2003).
Joukov, V., et al., J. Cell. Physiol. 173(2):211-215 (1997).
Olofsson, B., et al., J. Biol. Chem. 271(32):19310-19317 (1996).
Olofsson, B., et al., Proc. Natl. Acad. Sci. U.S.A. 93(6):2576-2581 (1996).

whereas the binding to neuropilin-1 of VEGF-B186 is regulated by proteolysis.

Cellular Location
Secreted. Note=Secreted but remains associated to cells or to the extracellular matrix unless released by heparin

Tissue Location
Expressed in all tissues except liver. Highest levels found in heart, skeletal muscle and pancreas

VEGFB (VEGF2) Blocking Peptide (N-term) - Protocols

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

- Blocking Peptides