

VEGF164 active protein

Mouse VEGF164

CATALOG # AAA79312	HOST Insect Cells	REACTIVITY Mouse
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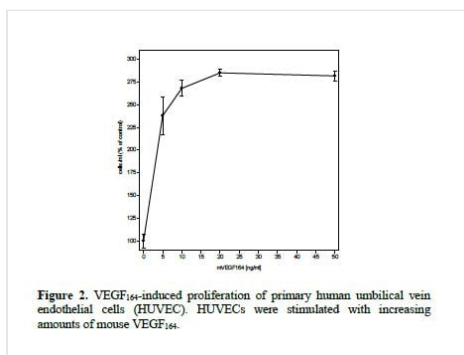
PRODUCT SYNONYMS

VEGF164; Mouse VEGF164; Recombinant Mouse Vascular Endothelial Growth Factor164; VEGF-A; VPF; VEGF164 active protein

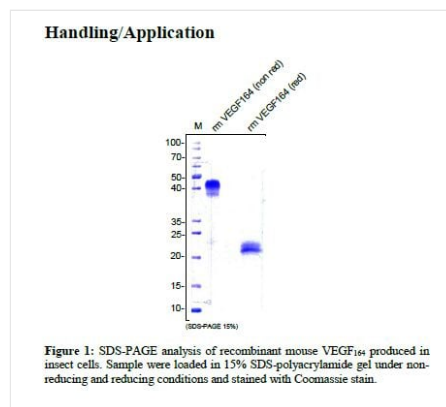
PRODUCT SPECIFICATIONS

Host	Insect Cells
Reactivity	Mouse
Purity/Purification	> 95% by SDS-PAGE & silver stain
Form/Format	Lyophilized
Sequence	N-Terminal Sequence: APTTEGE
Sequence Length	164
N Terminal Sequence	APTTEGE
Buffer	50 mM acetic acid
Preparation and Storage	Lyophilized samples are stable for greater than six months at -20 degree C to -70 degree C. Reconstituted VEGF164 should be stored in working aliquots at -20 degree C. Avoid repeated freeze-thaw cycles!

IMAGES



Application Data



Application Data

ADDITIONAL INFORMATION

Related Product Information for VEGF164 active protein	Mouse Vascular Endothelial Growth Factor164 (VEGF164), a 24 kDa protein consisting of 164 amino acid residues, is produced as a homodimer. VEGF164 is a polypeptide growth factor and a member of the platelet-derived growth factor family. It is a specific mitogen for vascular endothelial cells and a strong angiogenic factor in vivo. Two high-affinity tyrosine kinase receptors for VEGF164 have been identified, VEGFR-1 (FLT-1), and VEGFR-2 (Flk-1). Consistent with the endothelial cell-specific action of VEGF164, expression of both receptor genes has been found predominantly but not exclusively on endothelial cells. Expression of VEGFR-1 was also found on human monocytes, neutrophils (PMNs), bovine brain pericytes and villous and extravillous trophoblasts. In addition to its action as a mitogen it is a potent vascular permeability factor (VPF) in vivo and is also a chemoattractant for monocytes and endothelial cells. At least three different proteins are generated by differential splicing of the mouse VEGF gene: VEGF120, VEGF164 and VEGF188. The most abundant form is VEGF164. Whereas VEGF120 and VEGF164 are secreted proteins, VEGF188 is strongly cell-associated. In addition, the isoforms VEGF164 and VEGF188 bind to heparin with high affinity. VEGF is apparently a homodimer, but preparations of VEGF show some heterogeneity on SDS gels depending of the secretion of different forms and the varying degrees of glycosylation. All dimeric forms possess similar biological activities. There is evidence that heterodimeric molecules between the different isoforms exist and that different cells and tissues express different VEGF isoforms. A related protein of VEGF is placenta growth factor (PIGF) with about 53% homology and VEGF-B with similar biological activities.
Product Categories/Family for VEGF164 active protein	Cytokines & Growth Factors
References	1. Breier et al., Dev 114:521, 1992 2. Fiebig et al., Eur J Biochem 211:19, 1993 3. Flamme et al., Dev Biol 162:699, 1995 4. Kremer at al., Cancer Res 57:3852, 1997

NCBI AND UNIPROT INFORMATION

NCBI GI #	160358799
NCBI GeneID	22339
NCBI Accession #	NP_001020421
NCBI GenBank Nucleotide #	NM_001025250
UniProt Accession #	Q00731; O70123; Q66S31; Q6GT23; Q6WZL9
Molecular Weight	48.0 kDa
NCBI Official Full Name	vascular endothelial growth factor A isoform 1
NCBI Official Synonym Full Names	vascular endothelial growth factor A
NCBI Official Symbol	Vegfa
NCBI Official Synonym Symbols	Vpf; Vegf
NCBI Protein Information	vascular endothelial growth factor A; vascular permeability factor
UniProt Protein Name	Vascular endothelial growth factor A
UniProt Gene Name	Vegfa
UniProt Synonym Gene Names	Vegf; VEGF-A; VPF
UniProt Entry Name	VEGFA_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.