

VEGF144 active protein

Mouse VEGF144

CATALOG # AAA79270	HOST E Coli	REACTIVITY Mouse
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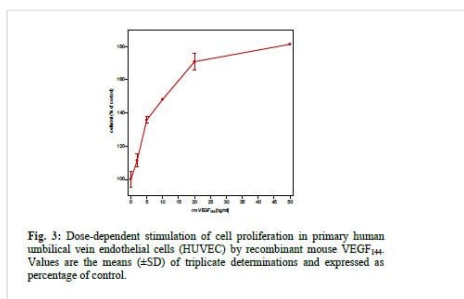
PRODUCT SYNONYMS

VEGF144; Mouse VEGF144; Recombinant Mouse Vascular Endothelial Growth Factor144; VEGF-A; VPF; VEGF144 active protein

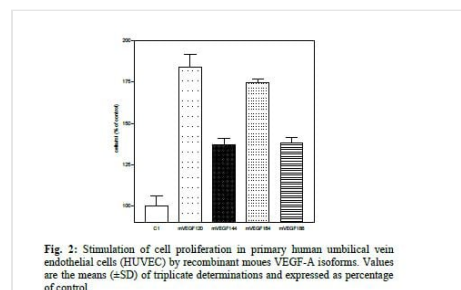
PRODUCT SPECIFICATIONS

Host	E Coli
Reactivity	Mouse
Purity/Purification	> 95% by SDS-PAGE & silver stain
Form/Format	Lyophilized
Sequence	N-Terminal Sequence: A PTTEGE
Sequence Length	392
Endotoxin Level	< 0.1ng per ug of mouse VEGF144
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 VEGF144 should be stored in working aliquots at -20 degree C.

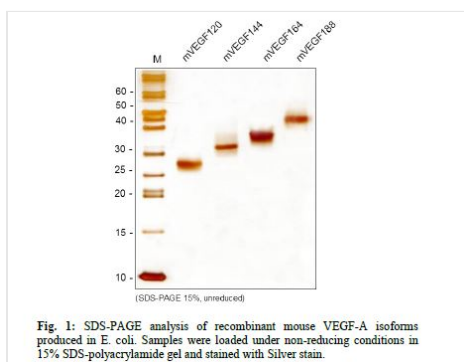
IMAGES



Application Data



Application Data



Application Data

ADDITIONAL INFORMATION

Related Product Information for VEGF144 active protein	Mouse Vascular Endothelial Growth Factor144 (VEGF144), a 16,9 kDa protein consisting of 144 amino acid residues, is produced as a homodimer. VEGF144 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 VEGF144 have been identified, VEGFR-1 (FLT-1), and VEGFR-2 (Flk-1). Consistent with the endothelial cell-specific action of VEGF144, 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 chemo attractant for monocytes and endothelial cells. At least four different proteins are generated by differential splicing of the mouse VEGF gene: VEGF120, VEGF144, VEGF164 and VEGF188. The most abundant form is VEGF164. Whereas VEGF120 VEGF144 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 exists and that different cells and tissues express different VEGF isoforms. A related protein of VEGF is placenta growth factor (PlGF) with about 53% homology and VEGF-B with similar biological activities.
Product Categories/Family for VEGF144 active protein	Cytokines & Growth Factors
References	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	25,283 Da
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.