

VEGF165 active protein

Human VEGF165-Biotin

CATALOG # AAA79317	HOST E Coli	REACTIVITY Human
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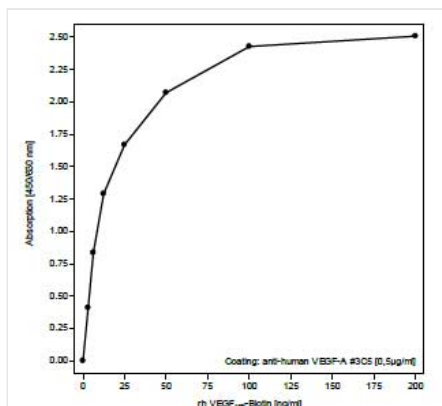
PRODUCT SYNONYMS

VEGF165; Human VEGF165-Biotin; Vascular endothelial growth factor A; VEGFA; VPF; VEGF; MVCD1; VEGF165 active protein

PRODUCT SPECIFICATIONS

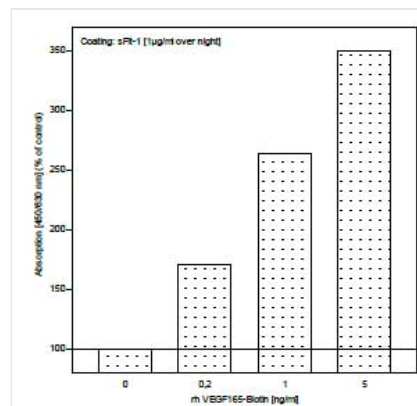
Host	E Coli
Reactivity	Human
Purity/Purification	> 95% by SDS-PAGE & Coomassie stain
Form/Format	Lyophilized
Sequence	ResultbyN- terminalse quencing-A PMAEGG APMAEGGGQN HHEVVKFMDV YQRSYCHPIE TLVDIFQEYP DEIEYIFKPS CVPLMRCGGC CNDEGLECV TEESNITMQI MRIKPHQGQH IGEMSFLQHN KCECRPKKDR ARQENPCGPGC SERRKHLFVQ DPQTCKCSCK NTDSRCKARQ LELNERTCRC DKPRR
Sequence Length	412
Reconstitution	The lyophilized VEGF165-Biotin should be reconstituted in 50 mM acetic acid to a concentration not lower than 50 ug/ml. For long term storage we recommend to add at least 0.1% human or bovine serum albumin.
Biological Activity	Tested in a functional ELISA.
Label	Biotin
Preparation and Storage	Lyophilized samples are stable for greater than six months at -20 degree C to -70 degree C. Reconstituted VEGF165-Biotin should be stored in working aliquots at -20 degree C.

IMAGES



Application Data

Binding of Biotinylated VEGF165 to anti-human VEGF-A #3C5 in a functional ELISA. Anti-human VEGF-A antibody was coated with 0.5ug/ml (100ul/well) and Biotinylated VEGF165 was added starting with 3.125 ng/ml to 200 ng/ml.



Application Data

Binding of Biotinylated VEGF165 to human soluble VEGFR-1/Flt-1 in a BioLISA. Recombinant human soluble VEGFR-1/Flt-1 was coated with 1ug/ml (100ul/well) over night at 4 degree C and Biotinylated VEGF165 was added.

ADDITIONAL INFORMATION

Related Product Information for VEGF165 active protein	Human Vascular Endothelial Growth Factor VEGF165, a 23 kDa protein consisting of 165 amino acid residues, is produced as a homodimer. VEGF 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 VEGF165 have been identified, VEGFR-1 (FLT-1), and VEGFR-2 (KDR). Consistent with the endothelial cell-specific action of VEGF165, 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 extra villous trophoblast. In addition to its action as a mitogen it is a potent vascular permeability factor (VPF) in vivo. VEGF165 is also a chemo attractant molecule for monocytes and endothelial cells. 5 different proteins are generated by differential splicing: VEGF121, VEGF145, VEGF165, VEGF189 and VEGF206. The most abundant form is VEGF165. Whereas VEGF121 and VEGF165 are secreted proteins, VEGF145, VEGF189 and VEGF206 are strongly cell-associated. The isoforms VEGF145, VEGF165 and VEGF189 bind to heparin with high affinity. VEGF165 is apparently a homo-dimer, but preparations of VEGF165 show some heterogeneity on SDS gels, depending on the secretion of different glycosylation patterns. All dimeric forms have similar biological activities but their bioavailability is very different. There is good evidence that different cells and tissues express different VEGF isoforms. The other members of this increasing growth factor family are VEGF-B, -C, -D and -E. Another member is the Placenta growth factor PIGF.
Product Categories/Family for VEGF165 active protein	Recombinant Protein; Cytokines & Growth Factors; VEGF165-Biotin
References	Kremer at al., Cancer Res 57:3852, (1997); Flamme et al., Dev Biol 162:699, (1995); Fiebig et al., Eur J Biochem 211:19, (1993); Breier et al., Dev 114:521, (1992)

NCBI AND UNIPROT INFORMATION

NCBI GI #	76781480
NCBI GeneID	7422
NCBI Accession #	NP_001020537.2
NCBI GenBank Nucleotide #	NM_001025366.2
UniProt Accession #	P15692; O60720; O75875; Q074Z4; Q16889; B5BU86; H0Y2S8; H0Y407; H0Y414; H0Y462; H0Y8N2; H3BLW7
Molecular Weight	34,406 Da
NCBI Official Full Name	vascular endothelial growth factor A isoform a
NCBI Official Synonym Full Names	vascular endothelial growth factor A
NCBI Official Symbol	VEGFA
NCBI Official Synonym Symbols	VPF; VEGF; MVCD1
NCBI Protein Information	vascular endothelial growth factor A
UniProt Protein Name	Vascular endothelial growth factor A
UniProt Gene Name	VEGFA
UniProt Synonym Gene Names	VEGF; VEGF-A; VPF
UniProt Entry Name	VEGFA_HUMAN

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.