

VEGF-E active protein

Orf Virus VEGF-E

CATALOG # AAA79244	HOST E Coli	REACTIVITY Orf virus
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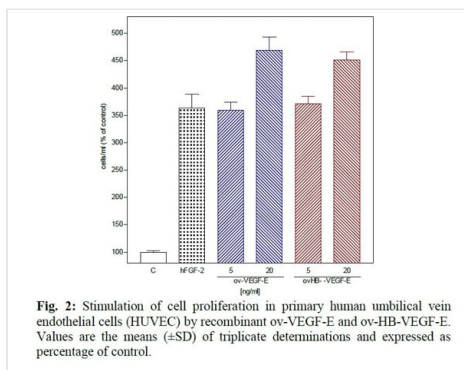
PRODUCT SYNONYMS

VEGF-E; Orf Virus VEGF-E; orf virus VEGF; VEGF-E active protein

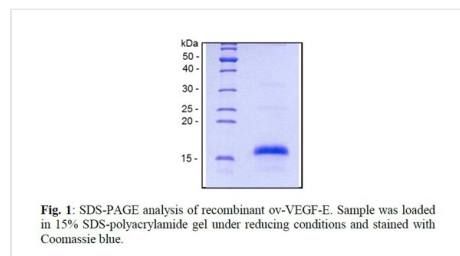
PRODUCT SPECIFICATIONS

Host	E Coli
Reactivity	Orf virus
Purity/Purification	> 90% by SDS-PAGE & silver stain
Form/Format	Lyophilized
Sequence	N-Terminal Sequence:U NDERWORK!
Sequence Length	132
Endotoxin Level	< 0.1ng per ug of ov-VEGF-E
Buffer	PBS

IMAGES



Application Data



Application Data

ADDITIONAL INFORMATION

Related Product Information for VEGF-E active protein	A DNA sequence encoding the mature variant of ovVEGF-E isolate D1701 (Dehio et al., 1999; GenBank accession No. AF106020) was expressed in E. coli as a 132 amino acid residue fusion protein with an N-terminal His-tag sequence and a thrombin cleavage site. Recombinant VEGF-E homodimer was dimerized in vitro and has a predicted mass of approximately 35 kDa. Based on sequence similarity to VEGF-A, a gene encoding a VEGF homologue has recently been discovered in the genome of Orf virus (OV) (Lyttle et al., 1994). Different isolates of Orf virus show significant amino acid sequence similarity to VEGF-A and described as a viral virulence factor that appears to be derived from captured host genes. All eight cysteine residues of the central cysteine knot motif characteristic of members of the VEGF family are conserved among other residues in the VEGF-E proteins (Dehio et al., 1999; Wise et al., 1999). Alignment of all mammalian VEGF sequences indicated that VEGF-E is distinct from the previously described VEGFs but most closely related to VEGF-A. Like VEGF-A, VEGF-E was found to bind with high affinity to VEGF receptor-2 (KDR) resulting in receptor autophosphorylation, whilst in contrast to VEGF-A, VEGF-E can not bind to VEGF receptor-1 (Flt-1). Furthermore VEGF-E can also not bind to VEGF receptor-3 (FLT-4). Therefore VEGF-E is a potent angiogenic factor selectively binding to VEGF receptor -2/KDR.
Product Categories/Family for VEGF-E active protein	Cytokines & Growth Factors
References	1. Dehio et al., 1999 EMBO J. 18:363-374 2. Lyttle et al., 1994 J. Virol 68:84-92 3. Wise et al., 1999 Proc. Natl. Acad. Sci USA 96:3071-3076

NCBI AND UNIPROT INFORMATION

NCBI GI #	82040241
NCBI Accession #	NP_005420.1
NCBI GenBank Nucleotide #	NM_005429.2
UniProt Accession #	Q2F842
Molecular Weight	35 kDa (Dimer)
NCBI Official Full Name	Vascular endothelial growth factor homolog Vegf-e
UniProt Protein Name	PP283
UniProt Entry Name	Q9YMF3_ORFV

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.