Datasheet for ABIN1589585

PDGFC Protein (Homodimer)

Go to Product page

Overview

Quantity:	2 µg
Target:	PDGFC
Protein Characteristics:	Homodimer
Origin:	Parapoxvirus
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active

Product Details

Sequence:	MGSSHHHHHHSSGLVPRGSHDSTKTWSEVFENSGCKPRPM VFRVHDEHPELTSQRFNPPCVTLMRCGGCCNDESLECVPT EEANVTMQLMGASVSGGNGMQHLSFVEHKKCDCKPPLTTT PPTTTRPPRRRR
Characteristics:	Length (AA): 132 Measured in a cell proliferation assay using primary HUVECs. The ED50 for this effect is typically 1-5 ng/mL.
Purity:	> 90 % by SDS-PAGE. Visualized by silver stain
Endotoxin Level:	< 0.1 ng per µg of ov-VEGF-E

Target Details

Target:	PDGFC
Alternative Name:	VEGF-E (PDGFC Products)

Target Details

Target Type:	Viral Protein
Background:	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. Synonyms: Vascular Endothelial Growth Factor-E
Molecular Weight:	35 kDa
UniProt:	Q9YMF3
Pathways:	RTK Signaling, Platelet-derived growth Factor Receptor Signaling

Application Details

Comment:	Cytokines & Growth Factors
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	The lyophilised ovVEGF-E should be reconstituted in water or medium to a concentration not lower than 50 µg/mL. For long term storage we would recommend to add at least 0.1% human or bovine serum albumin.
Buffer:	PBS

Handling

Storage:	-20°C
Storage Comment:	Lyophilised samples are stable for greater than six months at -20 °C to -70 °C. Reconstituted VEGF-E should be stored in working aliquots at -20 °C.