9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

VEGF E (Orf Virus)

Vascular Endothelial Growth Factor-E Recombinant (Orf Virus)
GRF0407

Product Overview

Name	VEGF E (Orf Virus)

Description

Vascular Endothelial Growth Factor-E Recombinant (Orf Virus)

Accession (Primary)	Q2F842

Introduction

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 angiog

Source

Escherichia Coli.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation

The protein was lyophilized from a concentrated (1mg/ml) solution containing PBS.

Stability

Lyophilized Vascular Endothelial Growth Factor-E Orf Virus although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution VEGF E -OV should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.

Purity

Greater than 90.0% as determined by SDS-PAGE.

Amino acid sequence

MGSSHHHHHH SSGLVPRGSH DSTKTWSEVF ENSGCKPRPM VFRVHDEHPE LTSQRFNPPC VTLMRCGGCC

9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

NDESLECVPT EEANVTMQLM GASVSGGNGM QHLSFVEHKK CDCKPPLTTT PPTTTRPPRR RR

Biological Activity

The biological activity was determined (1) by the ability to induce VEGFR-2/KDR receptor phosphorylation in PAE/KDR cells and (2) in a cell proliferation assay using primary HUVECs. The ED 50 for this effect is typically 1-5ng/ml.

Solubility

The lyophilized oVEGF-E Orf Virus 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.

Precautions

VEGF E (Orf Virus) is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (Q2F842)