Datasheet for ABIN1097787

VEGFC Protein (AA 32-227) (His tag)

Go to Product page

Overview

Quantity:	50 µg
Target:	VEGFC
Protein Characteristics:	AA 32-227
Origin:	Human
Source:	Human Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This VEGFC protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human VEGF-C (C-6His)
Sequence:	FESGLDLSDA EPDAGEATAY ASKDLEEQLR SVSSVDELMT VLYPEYWKMY KCQLRKGGWQ HNREQANLNS RTEETIKFAA AHYNTEILKS IDNEWRKTQC MPREVCIDVG KEFGVATNTF FKPPCVSVYR CGGCCNSEGL QCMNTSTSYL SKTLFEITVP LSQGPKPVTI SFANHTSCRC MSKLDVYRQV HSIIRRVDHH HHHH
Characteristics:	Recombinant Human VEGF-C (C-6His)
Purity:	> 95 % as determined by reducing SDS-PAGE.
Sterility:	0.2 µm filtered
Endotoxin Level:	Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test

Target Details

Target:	VEGFC

Target Details

Alternative Name:	Vascular Endothelial Growth Factor C/VEGF-C (VEGFC Products)
Background:	Recombinant Human Vascular Endothelial Growth Factor C/VEGF-C produced by transfected human cells is a secreted protein with sequence (Ala112-Arg227) of human VEGFC fused with a polyhistidine tag at the C-terminus. Vascular Endothelial Growth Factor (VEGF)-C is a member of the VEGF family, a group of polypeptide growth factors which play key roles in the physiology and pathology of many aspects of the cardiovascular system, including vasculogenesis, hematopoiesis, angiogenesis and vascular permeability. While VEGFC is homologous to other members of the VEGF/PDGF family, it contains the C-terminal propeptide which has an unusual structure with tandemly repeated cysteine-rich motifs. Upon biosynthesis, VEGFC is secreted as a non-covalent momodimer in an anti-parellel fashion. VEGF signalling in endothelial cells occurs through three tyrosine kinase receptors (VEGFRs) expressed by endothelial cells and hematopoietic precursors, and VEGF-C is a ligand for two receptors, VEGFR-3 (Flt4), and VEGFR-2. It is indicated that VEGFC undergoes a complex proteolytic maturation generating a variety of processed secreted forms with increased activity toward VEGFR-3, but only the fully processed form could activate VEGFR-2. VEGFC may function in angiogenesis of the venous and lymphatic vascular systems during embryogenesis, and also in the maintenance of differentiated lymphatic endothelium in adults. Knockout of the VEGF-C gene is embryonic lethal late in development, and although cells differentiate into the lymphatic lineage, they fail to sprout and form lymphatic vessels. Inactivation of a single VEGF-C allele results in the development of cutaneous lymphatic hypoplasia and lymphedema.
Molecular Weight:	23.27 kDa
UniProt:	P49767
Pathways:	RTK Signaling, Signaling Events mediated by VEGFR1 and VEGFR2

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	It is not recommended to reconstitute to a concentration less than 100 µg/mL. Dissolve the lyophilized protein in ddH2O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Handling

Buffer:	Lyophilized from a 0.2 μm filtered solution of 20 mM PB, 150 mM NaCl, pH 7.2.
Handling Advice:	Always centrifuge tubes before opening. Do not mix by vortex or pipetting.
Storage:	4 °C/-20 °C/-80 °C
Storage Comment:	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.