

Recombinant Human VEGFA Protein, His-tagged

Cat. No. VEGFA-563H Lot. No. (See product label)

SPECIFICATION

Product Overview Recombinant Human VEGFA Protein (Ala27-Arg232) with N-His tag was expressed in 293F.

Species Human

Source HEK293

ProteinLength Ala27-Arg232

Description

This gene is a member of the PDGF/VEGF growth factor family. It encodes a heparin-binding protein, which exists as a disulfide-linked homodimer. This growth factor induces proliferation and migration of vascular endothelial cells, and is essential for both physiological and pathological angiogenesis. Disruption of this gene in mice resulted in abnormal embryonic blood vessel formation. This gene is upregulated in many known tumors and its expression is correlated with tumor stage and progression. Elevated levels of this protein are found in patients with POEMS syndrome, also known as Crow-Fukase syndrome. Allelic variants of this gene have been associated with microvascular complications of diabetes 1 (MVCD1) and atherosclerosis. Alternatively spliced transcript variants encoding different isoforms have been described. There is also evidence for alternative translation initiation from upstream non-AUG (CUG) codons resulting in additional isoforms. A recent study showed that a C-terminally extended isoform is produced by use of an alternative in-frame translation termination codon via a stop codon readthrough mechanism, and that this isoform is antiangiogenic. Expression of some isoforms derived from the

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

AUG start codon is regulated by a small upstream open reading frame, which is located within an internal ribosome entry site. The levels of VEGF are increased during infection with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), thus promoting inflammation by facilitating recruitment of inflammatory cells, and by increasing the level of angiotensin II (Ang II), one of two products of the SARS-CoV-2 binding target, angiotensin-converting enzyme 2 (ACE2). In turn, Ang II facilitates the elevation of VEGF, thus forming a vicious cycle in the release of inflammatory cytokines.

Form	Freeze-dried powder
Molecular Mass	Predicted Molecular Mass: 25.5 kDa Accurate Molecular Mass: \
Purity	> 95%
Applications	Positive Control; Immunogen; SDS-PAGE; WB.
Stability	The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 centigrade for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.
Storage	Avoid repeated freeze/thaw cycles. Store at 2-8 centigrade for one month. Aliquot and store at -80 centigrade for 12 months.
Storage Buffer	PBS, pH7.4, containing 0.01% SKL, 1 mM DTT, 5% Trehalose and Proclin300.
Reconstitution	Reconstitute in sterile water to a concentration of 0.1-1.0 mg/mL. Do not vortex.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

GENE INFORMATION**Gene Name** VEGFA vascular endothelial growth factor A [Homo sapiens (human)]**Official Symbol** VEGFA**Synonyms** VEGFA; vascular endothelial growth factor A; vascular endothelial growth factor, VEGF; VEGF A; VPF; vascular permeability factor; VEGF; MVCD1; MGC70609**Gene ID** 7422**mRNA Refseq** NM_001025366**Protein Refseq** NP_001020537**MIM** 192240**UniProt ID** P15692 Tel: 1-631-559-9269 1-516-512-3133 Email: info@creative-biomart.com  Fax: 1-631-938-8127 45-1 Ramsey Road, Shirley, NY 11967, USA