Recombinant Human VEGFA protein, His-tagged

Cat. No. VEGFA-584H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human VEGFA (P15692) aa. (Pro28~Arg147) fused with His tag was produced in E. coli cells.
Species	Human
Source	E.coli
ProteinLength	Pro28~Arg147
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

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	AUG start codon is regulated by a small upstream open reading frame, which is located within an internal ribosome entry site.
Form	Freeze-dried powder
Molecular Mass	Predicted Molecular Mass: 18.2kDa; Accurate Molecular Mass: 17&18kDa as determined by SDS-PAGE reducing conditions.
Purity	>98%
Characteristic	Isoelectric point is 6.3.
Applications	Cell culture; Activity Assays.
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°C 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°C for one month. Aliquot and store at -80°C for 12 months.
Storage buffer	20mM Tris, 150mM NaCl, pH8.0, containing 0.05% sarcosyl and 5% trehalose.
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex

GENE INFORMATION

Gene Name	VEGFA vascular endothelial growth factor A [Homo sapiens (human)]

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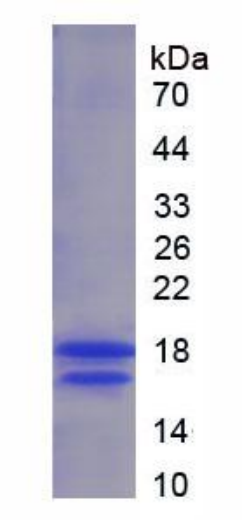
Official Symbol	VEGFA
Synonyms	VEGFA; VPF; VEGF; MVCD1; vascular endothelial growth factor A; vascular endothelial growth factor A121; vascular endothelial growth factor A165; vascular permeability factor
Gene ID	7422
mRNA Refseq	NM_001025366.2
Protein Refseq	NP_001020537.2
UniProt ID	P15692
SDS-PAGE	

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