

Active Recombinant Mouse Vegfa Protein

Cat. No. Vegfa-6915M Lot. No. (See product label)

SPECIFICATION

Product Overview	Purified recombinant protein of Mouse vascular endothelial growth factor A (Vegfa), transcript variant 1 without tag was expressed in E. coli.
Species	Mouse
Source	E.coli
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. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. 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 AUG start codon is regulated by a small upstream open reading frame, which is located within an internal ribosome entry site. [provided by RefSeq, Nov 2015]
Bio-activity	Determined by the dose-dependent stimulation of the proliferation of human umbilical

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vein endothelial cells (HUVEC) using a concentration range of 1.0-5.0 ng/mL.

Molecular Mass	39 kDa
AA Sequence	MAPTTEGEQKSHEVIKFMVDVYQRSYCRPIETLVDIFQEYPDEIEYIFKPSCVPLMRCA GCCNDEALECVPTSESNITMQIMRIKPHQSQHIGEMSFLQHSRCECRPKKDRTKPE KHCEPCSERRKHLFVQDPQTCKCCKNTDSRCKARQLELNERTCRCDKPRR
Endotoxin	< 0.1 ng/μg of protein (< 1 EU/μg)
Purity	> 95% as determined by SDS-PAGE and Coomassie blue staining
Stability	Stable for at least 6 months from date of receipt under proper storage and handling conditions.
Storage	Store at -80 centigrade.
Storage Buffer	Lyophilized from a 0.2 μM filtered solution of 20 mM phosphate buffer, 100 mM NaCl, pH 7.2

GENE INFORMATION

Gene Name	Vegfa vascular endothelial growth factor A [Mus musculus (house mouse)]
Official Symbol	Vegfa
Synonyms	VEGFA; vascular endothelial growth factor A; vascular permeability factor; Vpfa; Vegf; Vegf120; Vegf164; Vegf188
Gene ID	22339

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mRNA Refseq	NM_001025250
Protein Refseq	NP_001103736
UniProt ID	Q00731

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