

## Recombinant Mouse VEGFA protein (HPLC-verified)

Cat. No. VEGFA-381M Lot. No. (See product label)

### SPECIFICATION

**Product Overview** Recombinant Mouse VEGFA protein (Ala27-Arg190)(HPLC-verified) carries no tag and was expressed in human 293 cells (HEK293).

**Species** Mouse

**Source** HEK293

**ProteinLength** 164

**Description** Vascular endothelial growth factor A (VEGFA) is also known as Vascular permeability factor (VPF). VEGFA belongs to the PDGF/VEGF growth factor family. VEGFA is a glycosylated mitogen that specifically acts on endothelial cells and has various effects, including mediating increased vascular permeability, inducing angiogenesis, vasculogenesis and endothelial cell growth, promoting cell migration, and inhibiting apoptosis. Alternatively spliced transcript variants, encoding either freely secreted or cell-associated isoforms, have been characterized. VEGFA is produced by a group of three major isoforms as a result of alternative splicing and if any three isoforms are produced (VEGFA120, VEGFA164, and VEGFA188) then this will not result in vessel defects and death of the full VEGFA knockout in mice.

**Form** Lyophilized from 0.22 um filtered solution in PBS, pH7.4, 10% trehalose.

**Molecular Mass** The protein has a calculated MW of 19.3 kDa. The protein migrates as 23-25 kDa under reducing (R) condition (SDS-PAGE) due to different glycosylation.

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<b>Endotoxin</b>	Less than 1.0 EU per ug by the LAL method.
<b>Purity</b>	>95% as determined by SDS-PAGE.
<b>Storage</b>	<p>For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower.</p> <p>Please avoid repeated freeze-thaw cycles.</p> <p>This product is stable after storage at:</p> <p>-20 centigrade to -70 centigrade for 12 months in lyophilized state;            -70 centigrade for 3 months under sterile conditions after reconstitution.</p>
<b>Reconstitution</b>	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4°C before opening to recover the entire contents.

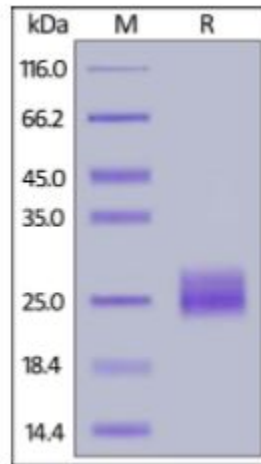
## GENE INFORMATION

<b>Gene Name</b>	VEGFA
<b>Official Symbol</b>	VEGFA
<b>Synonyms</b>	VEGFA; vascular endothelial growth factor A; vascular permeability factor; Vpf; Vegf; Vegf120; Vegf164; Vegf188
<b>Gene ID</b>	22339
<b>mRNA Refseq</b>	NM_001025250
<b>Protein Refseq</b>	NP_001020421
<b>UniProt ID</b>	Q00731

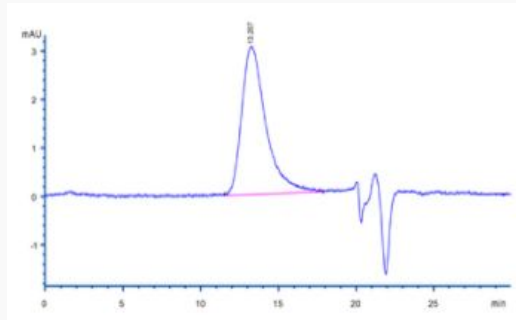
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**SDS-PAGE of  
VEGFA-381M**

Mouse VEGF164, Tag Free (HPLC-verified) on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

**SEC-HPLC of  
VEGFA-381M**

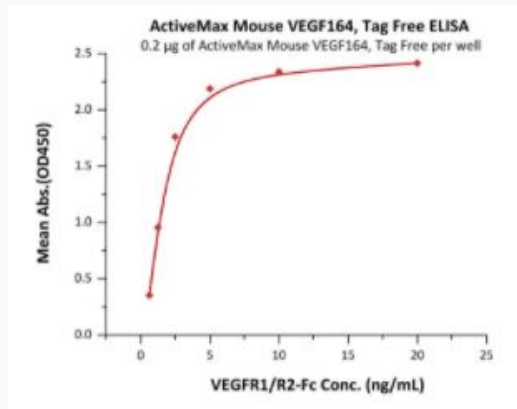
The purity of Mouse VEGF164, Tag Free (HPLC-verified) was greater than 95% as determined by SEC-HPLC.

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**Bioactivity-ELISA of  
VEGFA-381M**



Immobilized Mouse VEGF164, Tag Free (HPLC-verified) at 2 µg/mL (100 µL/well) can bind VEGFR1/R2-Fc with a linear range of 0.6-2.5 ng/mL (QC tested).

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