

## VEGF120 Protein, Mouse

Cat. No.:	HY-P72775
Synonyms:	VEGF-AA; Vascular endothelial growth factor A; VPF; VEGFA
Species:	Mouse
Source:	E. coli
Accession:	Q00731-3 (A27-R146)
Gene ID:	22339
Molecular Weight:	Approximately 28.4 kDa (Disulfide-linked homodimer)

### PROPERTIES

AA Sequence	A P T T E G E Q K S      H E V I K F M D V Y      Q R S Y C R P I E T      L V D I F Q E Y P D E I E Y I F K P S C      V P L M R C A G C C      N D E A L E C V P T      S E S N I T M Q I M R I K P H Q S Q H I      G E M S F L Q H S R      C E C R P K K D R T      K P E K C D K P R R
Biological Activity	The cell proliferation assay using human umbilical vein endothelial cells has an ED50 value of less than 5 ng/ml; corresponding to a specific activity of $> 2.0 \times 10^5$ IU/mg.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 $\mu$ m filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/ $\mu$ g; determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 $\mu$ g/mL in ddH <sub>2</sub> O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

### DESCRIPTION

Background	VEGF-A is a key member of the VEGF family of cytokines, along with VEGF-B, -C, -D, and PGF. VEGF-A participates in angiogenesis, vasculogenesis, and endothelial cell growth, inducing endothelial cell proliferation, promoting cell migration, inhibiting cell apoptosis, and inducing vascular permeability. VEGF-A binds to the FLT1/VEGFR1, KDR/VEGFR2 and DEAR/FBXW7-AS1 receptors, heparan sulfate and heparin. VEGF-A also binds to NRP1 initiates a signaling pathway needed for motor neuron axon guidance and cell body migration, including for the caudal migration of facial motor neurons from rhombomere 4 to rhombomere 6 during embryonic development. VEGF-A stimulates endothelial cell mitogenesis and cell
------------	--

---

migration. VEGF-A is also a vasodilator and increases microvascular permeability<sup>[1][2][3][4][5]</sup>.

---

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA