

## VEGF164 Protein, Mouse (164a.a, P.pastoris)

<b>Cat. No.:</b>	HY-P70761
<b>Synonyms:</b>	VEGF-AA; Vascular endothelial growth factor A; Vascular permeability factor; VPF; VEGFA; VEGFA164; VEGF164
<b>Species:</b>	Mouse
<b>Source:</b>	P. pastoris
<b>Accession:</b>	Q00731-2 (A27-R190)
<b>Gene ID:</b>	22339
<b>Molecular Weight:</b>	Approximately 18-22 kDa in reducing conditions.

### PROPERTIES

<b>AA Sequence</b>	<p>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</p> <p>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</p> <p>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 N H C E P C S</p> <p>E R R K H L F V Q D    P Q T C K C S C K N    T D S R C K A R Q L    E L N E R T C R C D</p> <p>K P R R</p>
<b>Biological Activity</b>	Measured in a cell proliferation assay using HUVEC human umbilical vein endothelial cells. The ED <sub>50</sub> for this effect is 3.54 ng/mL, corresponding to a specific activity is 2.82×10 <sup>5</sup> units/mg.
<b>Appearance</b>	Lyophilized powder.
<b>Formulation</b>	Lyophilized from a 0.2 μm filtered solution of 20 mM PB, 250 mM NaCl, pH 7.0.
<b>Endotoxin Level</b>	<1 EU/μg, determined by LAL method.
<b>Reconstitution</b>	It is not recommended to reconstitute to a concentration less than 100 μg/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).
<b>Storage &amp; Stability</b>	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.
<b>Shipping</b>	Room temperature in continental US; may vary elsewhere.

### DESCRIPTION

<b>Background</b>	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