

## Recombinant Rat VEGF 164

Catalog # EPT063

**Expression Host** P.Pichia

**DESCRIPTION** Recombinant Rat Vascular Endothelial Growth Factor

A is produced by our Yeast expression system and the

target gene encoding Ala27-Arg190(Ala36Thr) is

expressed.

Accession P16612-2

**Synonyms** Vascular endothelial growth factor A; Vascular

permeability factor; VEGF; VEGF-A; VPF

Mol Mass 19.2 KDa

**AP Mol Mass** 18-23 KDa, reducing conditions

Purity Greater than 95% as determined by reducing

SDS-PAGE.

**Endotoxin** Less than 0.1 ng/μg (1 EU/μg) as determined by LAL

test.

**FORMULATION** Lyophilized from a 0.2 µm filtered solution of PBS, pH

7.4.

**RECONSTITUTION** Always centrifuge tubes before opening. Do not mix by



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vortex or pipetting.

It is not recommended to reconstitute to a concentration less than 100µg/ml.

Dissolve the lyophilized protein in distilled water.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

**SHIPPING** 

The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

**STORAGE** 

Lyophilized protein should be stored at < -20 ° C, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at 4-7°C for 2-7 days.

Aliquots of reconstituted samples are stable at < -20° C for 3 months.

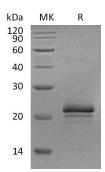
**BACKGROUND** 

Vascular endothelial growth factor (VEGF/VEGF-A) is originally known as vascular permeability factor (VPF). It belongs to the PDGF family with a cysteine-knot structure comprised of eight conserved cysteine residues, and reckoned as a potent mediator in the process of angiogenesis and vasculogenesis in either fetus or adult. VEGF is particularly expressed in





supraoptic , paraventricular nuclei and the choroid plexus of the pituitary, and abundant in the corpus luteum of the ovary and in kidney glomeruli. The rat VEGF protein contains a putative 20 amino acids (aa) signal peptide, and alternative splicing of rat VEGF gene produces isoforms of 120, 144, 164 and 188 aa. Rat VEGF164 respectively displays 97% and 88% aa identity with that regions of mouse and human VEGF. VEGF can bind to the FLT1/VEGFR1 and KDR/VEGFR2 receptors, heparan sulfate and heparin, and play important roles inducing endothelial in proliferation, promoting cell migration, inhibiting apoptosis and inducing permeabilization of blood vessels.



## **SDS-PAGE**



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