



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





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 $< -20^{\circ}\text{C}$, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at $4-7^{\circ}\text{C}$ for 2-7 days.

Aliquots of reconstituted samples are stable at $< -20^{\circ}\text{C}$ 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 in inducing endothelial cell proliferation, promoting cell migration, inhibiting apoptosis and inducing permeabilization of blood vessels.

SDS-PAGE

