Recombinant Rat Vascular Endothelial Growth Factor A

Cat.No # MGF9831 **Lot.No : Refer to Vial** **Packaging: 10μg \ 50μg \ 500μg**

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.

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.

Quality control

Purity：Greater than 95% as determined by reducing SDS-PAGE.

Endotoxin： Less than 0.1 ng/ug (1 EU/ug) as determined by LAL test.

Formulation

Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.

Dissolution

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 μg/ml. Dissolve the lyophilized protein in ddH_2O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Store condition

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.

For Research Use Only. Not for use in diagnostic procedures.