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| MESGEN.pngRecombinant Rat Vascular Endothelial Growth Factor A |

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

**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 ddH2O. 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.**

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