VEGF/VEGF-A, Rat, Recombinant

Cat. No. : PCK266

General Information

Synonyms	Vascular endothelial Growth Factor A;Vascular permeability factor;VEGF;VEGF-A;VPF
Species	Rat
Expression host	Yeast
Sequence	Ala27-Arg190 (Ala36Thr)
Accession	P16612-2
Mol mass	19.2 kDa
Expiration date	12 months
Bio activity	Immobilized Rat VEGF 164 at 2 μg/mL (100 μL/well) can bind Mouse VEGFR2-Fc. The ED50 of Mouse VEGFR2-Fc is 22.17 ng/mL.

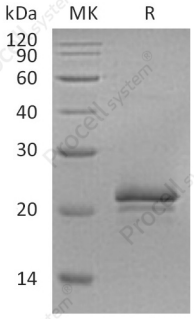
Product feature

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin (EU/μg)	< 0.1
Storage	Lyophilized protein should be stored at -5~-20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at -5~-20°C for 3 months.
Shipping	Ice bag
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 100 μg/mL. Dissolve the lyophilized protein in sterile water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

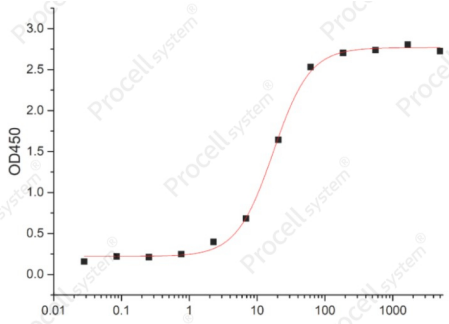
Background

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



Bio activity



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