Active Recombinant Rat Vegfa

Cat. No. Vegfa-762R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant rat Vascular Endothelial Growth Factor A164 (rrVEGF-A164) produced in P. pastoris is a disulfide-linked homodimer containing two polypeptide chains of 165 amino acids each.
Species	Rat
Source	P.pastoris
Description	Vascular Endothelial Growth Factor A164 (VEGF-A164), a member of the cysteine knot growth factor, is one of major isoforms of VEGF-As. VEGF-As are endothelial cell-specific mitogens with angiogenic and vascular permeability-inducing properties. During maturation, rat VEGF-A is alternatively spliced to generate rVEGF-A120, rVEGF-A164 and rVEGF-A188 which correspond to hVEGF-A121, hVEGF-A165 and hVEGF-A189 in human, respectively (the numbers designate the amino acid residues). The active form of rVEGF-A164 is either a homodimeric or heterodimeric polypeptides which bind to the transmembrane tyrosine kinases receptors FLT1, FLK1 or KDR or to the non-tyrosine kinase neuropilin receptors NRP1/2.
Form	Lyophilized after extensive dialysis against PBS.
Bio-activity	ED50<4 ng/ml,="" measured="" by="" cell="" proliferation="" assay="" of="">
Molecular Mass	38 kDa, observed by non-reducing SDS-PAGE.
AA Sequence	Ala27-Arg190, expressed with an N-terminal Met.

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Endotoxin	<1 eu/μg,="" determined="" by="" lal="">
Purity	>95% as analyzed by reducing SDS-PAGE.
Storage	Lyophilized recombinant protein remains stable up to 6 months at -80°C from date of receipt. Upon reconstitution, rrVEGF-A164 should be stable up to 1 week at 4°C or up to 2 months at -20°C.
Reconstitution	Reconstituted in ddH2O or PBS at 100 μg/ml.

GENE INFORMATION

Gene Name	Vegfa vascular endothelial growth factor A [Rattus norvegicus]
Official Symbol	Vegfa
Synonyms	VEGFA; vascular endothelial growth factor A; VPF; VEGF-A; vascular permeability factor; Vegf; VEGF164;
Gene ID	83785
mRNA Refseq	NM_001110334
Protein Refseq	NP_001103804
UniProt ID	P16612
Pathway	Bladder cancer, organism-specific biosystem; Bladder cancer, conserved biosystem; Endochondral Ossification, organism-specific biosystem; Focal adhesion, organism-specific biosystem; Focal adhesion, conserved biosystem; Hemostasis, organism-specific biosystem; Hypertrophy Model, organism-specific biosystem;

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Function	cell surface binding; cell surface binding; chemoattractant activity; chemoattractant activity; cytokine activity; cytokine activity; fibronectin binding; fibronectin binding; growth factor activity; growth factor activity; heparin binding; heparin binding; platelet-derived growth factor receptor binding; platelet-derived growth factor receptor binding; protein heterodimerization activity; protein heterodimerization activity; protein homodimerization activity; receptor agonist activity; vascular endothelial growth factor receptor 1 binding; vascular endothelial growth factor receptor 1 binding; vascular endothelial growth factor receptor 2 binding; vascular endothelial growth factor receptor 2 binding; vascular endothelial growth factor receptor 2 binding; vascular endothelial growth factor receptor binding; vascular endothelial growth factor receptor binding;

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA