Rat PDGF-AA Protein

Cat. No. PGA-RY101

Description

Source	Recombinant Rat PDGF-AA Protein is expressed from Yeast with His tag at the N-terminus.
	It contains Arg86-Lys204.
Accession	P28576-1
Molecular Weight	The protein has a predicted MW of 14.75 kDa. Due to glycosylation, the protein migrates to 17-22 kDa and 25-45 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 90% as determined by Bis-Tris PAGE

Formulation and Storage

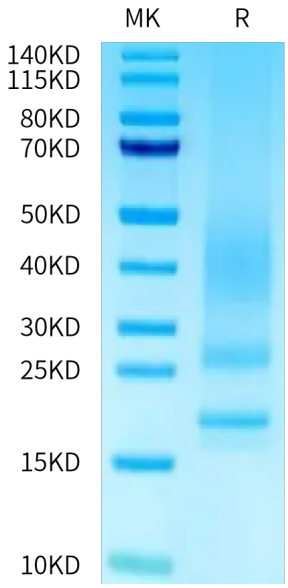
Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 μg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt.-80°C for 3 months after reconstitution.Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

PDGF (Platelet-derived growth factor) is one among numerous growth factors that regulate cell growth and division. The PDGF family forms five dimeric ligands, PDGF-AA, PDGF-BB, PDGF-CC, PDGF-DD, and PDGF-AB, which activate cognate receptor tyrosine kinases PDGFR-α and PDGFR-β. Upon binding to its tyrosine kinase receptor PDGF-αα, PDGF-AA stimulates the proliferation of osteoblastic cells and may exert autocrine and paracrine effects in regulating bone-forming processes. PDGF-AA is the most well characterized mitogen that is not restricted to any kind of tumor cell type but was seen in osteoblastic cells as well as in pleomorphic tumor elements.

Assay Data

Bis-Tris PAGE



Rat PDGF-AA on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

Cell Based Assay

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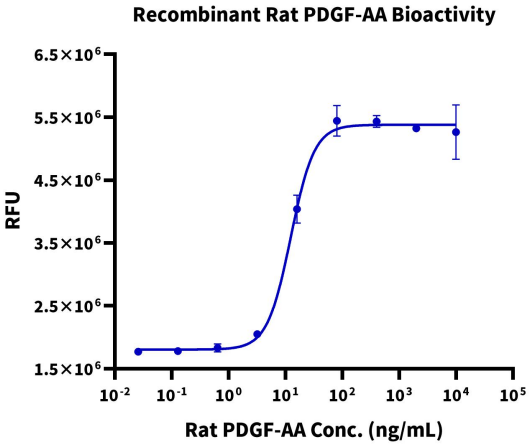
Assay Data



Measured in a cell proliferation assay using Balb/C 3T3 mouse embryonic fibroblasts. The ED50 for this effect is 5 - 15 ng/mL.