Technical Data Sheet

Recombinant Rat Platelet-derived Growth Factor-AA (rRtPDGF-AA)

Rat Platelet-derived Growth Factor-AA

Platelet-derived growth factor (PDGF) presenting in serum but absent from plasma was first discovered in animal study by Lynch and co-workers in the late 1980s. It is a disulfide-linked dimer consisting of two peptides-chain A and chain B. PDGF has three subforms: PDGF-AA, PDGF-BB, PDGF-AB. It is involved in a number of biological processes, including hyperplasia, embryonic neuron development, chemotaxis, and respiratory tubule epithelial cell development. The function of PDGF is mediated by two receptors (PDGFR-α and PDGFR-β).

Catalog Number:	RC256-25
Source:	*Escherichia coli.*
Molecular Weight:	Approximately 25.3 kDa, a disulfide-linked homodimeric protein containing two 111 amino acid residues polypeptide (A chain).
Quantity:	2μg/10μg/1000μg
AA Sequence:	MSIEEAIPAV CKTRTVIYEI PRSQVDPTSA NFLIWPPCVE VKRCTGCCNT SSVKCQPSRV HHRSVKVAKV EYVRKKPKLK EVQVRLEEHL ECACATSNLN PDHREEETDV R
Purity:	> 98 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED_{50} as determined by a cell proliferation assay using murine Balb/c 3T3 cells is less than 5.0 ng/ml, corresponding to a specific activity of > 2.0×10^5 IU/mg.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 μm filtered concentrated solution in 30 % Acetonitrile and 0.1 % TFA.
Endotoxin:	Less than 0.1 EU/μg of rRtPDGF-AA as determined by LAL method.
Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in 4mM HCl to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.
Storage:	This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 °C. For maximal stability, apportion the

	reconstituted preparation into working aliquots and store at -20 °C to -70 °C. **Avoid repeated freeze/thaw cycles**.
Usage:	This material is offered by Bio Basic Canada Inc. for research, laboratory or further evaluation purposes. **NOT FOR HUMAN USE**.

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