

Recombinant Rat Platelet-derived Growth Factor-BB (Rat PDGF-BB)

Product Information

| Product Name | Cat# | Size |
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| Recombinant Rat Platelet-derived Growth Factor-BB (Rat PDGF-BB) | 91603ES10 | 10 µg |
| | 91603ES60 | 100 µg |
| | 91603ES76 | 500 µg |

Product Description

Platelet-derived growth factor (PDGF) was discovered as a major mitogenic factor present in serum but absent from plasma. In vitro, PDGF-BB stimulated MAP kinase activity and cell motility of isolated lymphatic endothelial cells. In vivo, PDGF-BB potently induced growth of lymphatic vessels. Expression of PDGF-BB in murine fibrosarcoma cells induced tumor lymphangiogenesis, leading to enhanced metastasis in lymph nodes. The PDGF signaling system contributes to and vascular remodeling. Growth factors such as PDGF exert potent effects on wound healing including the regeneration of tooth-supporting structures. Some research reports findings in this chronic myocardial infarction model were that bFGF, PDGF-BB and their combination all had a more pronounced angiogenic effect on the arteriolar than the capillary level. bFGF stimulated both capillary and arteriolar growth while PDGF-BB preferentially stimulated arterioles.

Product Properties

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| Synonyms | Becaplermin, ODGF, PDGF-2, PDGFBB, PDGF-BB |
| Accession | Q05028 |
| GeneID | 24628 |
| Source | E.coli-derived rat PDGF-BB protein, Ser74-Thr182. |
| Molecular Weight | Approximately 24.4 kDa. |
| AA Sequence | SLGSLAAAEP AVIAECKTRT EVFQISRNLI DRTNANFLVW PPCVEVQRCS GCCNNRNVQC RASVQMRPV QVRKIEIVRK KPVFKKATVT LEDHLACKCE TVVTPRPVT |
| Tag | None |
| Physical Appearance | Sterile Filtered White lyophilized (freeze-dried) powder. |
| Purity | > 98% by SDS-PAGE and HPLC analyses. |
| Biological Activity | The ED ₅₀ as determined by a cell proliferation assay using murine Balb/c 3T3 cells is less than 2.0 ng/mL, corresponding to a specific activity of > 5.0 × 10 ⁵ IU/mg. Fully biologically active when compared to standard. |
| Endotoxin | < 0.1 EU per 1µg of the protein by the LAL method. |
| Formulation | Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 6.9. We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. |
| Reconstitution | Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA 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. |

Shipping and Storage

The products are shipped with ice pack and can be stored at -20°C to -80°C for 1 year.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

Cautions

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only!