

DATASHEET
Version 20181206**PDGF-AA, Mouse****Cat. No.:** Z03276-1**Size:** 1.0 mg

Synonyms: Platelet-Derived Growth Factor-AA, Glioma-derived growth factor (GDGF), Osteosarcoma-derived Growth Factor (ODGF)

Description:

Platelet-Derived Growth Factor-AA (PDGF-AA) is one of five dimers (PDGF-AA, AB, BB, CC, and DD) formed by 4 different PDGF subunits. In chemical terms, platelet-derived growth factor is a dimeric glycoprotein composed of two A (-AA) or two B (-BB) chains or a combination of the two (-AB). The dimeric isoforms PDGFAA, AB and BB are differentially expressed in various cell types, and their effects are mediated through two distinct receptors termed α and β . Differences exist in isoform binding to each receptor. In general, PDGF isoforms are potent mitogens for connective tissue cells including dermal fibroblasts, glial cells, arterial smooth muscle cells and some epithelial and endothelial cells. In addition to its activity as a mitogen, PDGF is chemotactic for fibroblasts, smooth muscle cells, neutrophils and mononuclear cells. PDGF-AA plays a significant role in blood vessel formation (angiogenesis).

Recombinant Mouse Platelet-Derived Growth Factor-AA (PDGF-AA) produced in *E. coli* is a disulfide-linked homodimer containing two non-glycosylated polypeptide chains of 125 amino acids each. A fully biologically active molecule, rmPDGF-AA has a molecular mass of 28.7 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Amino Acid Sequence:

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00001 MSIEEAVPAV CKTRTVIYEI PRSQVDPTSA NFLIWPPCVE
00041 VKRCTGCCNT SSVKQCPSRV HHRSVKVAKV EYVRKKPKLK
00081 EVQVRLEEHL ECACATSNLN PDHREETGR RRESGKNRKR
00121 KRLKPT
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Source: *E. coli***Species:** Mouse**Biological Activity:** ED₅₀ <50 ng/ml, measured in a cell proliferation assay using 3T3 cells.**Molecular Weight:** 28.7 kDa, observed by reducing SDS-PAGE.**Formulation:** Lyophilized after extensive dialysis against 1xPBS.**Reconstitution:** Reconstituted in ddH₂O at 100 µg/ml.**Purity:** > 95% as analyzed by SDS-PAGE.**Endotoxin Level:** < 0.2 EU/µg, determined by LAL method.**Storage:** Lyophilized recombinant Mouse Platelet-Derived Growth Factor-AA (PDGF-AA) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, recombinant Mouse PDGF-AA should be stable up to 1 week at 4°C or up to 2 months at -20°C.