

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant PDGF-AA, Mouse

Catalog Number: BK0151-1mg

Source: Escherichia coli.

Quantity: 1mg

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 PDGF AA, 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.

Molecular Weight:

28.7 kDa, observed by reducing SDS-PAGE.

Purity:

> 95% as analyzed by SDS-PAGE.

Biological Activity:

ED50 <50 ng/, measured in a cell proliferation assay using 3T3 cells.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against 1xPBS.

AA Sequence:

MSIEEAVPAVCKTRTVIYEIPRSQVDPTSAN-
FLIWPPCVEV-
KRCTGCCNTSSVKCQPSRVHHRSVKVAKVEY-
VRK-
KPKLKEVQVRLEEHLACACATSNLNPDHREEET
GRRRESGKNRKRRLKPT

Endotoxin:

< 0.2 EU/ μ g, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O at 100 μ g/ml.

Storage:

Lyophilized recombinant Mouse Platelet-Derived Growth Factor-AA (PDGF-AA) remains stable up to 6 months at -80 °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.

Usage:

This material is offered by USA Bioworld biotech for research, laboratory or further evaluation purposes. For research use only.