

Recombinant Mouse Platelet-derived Growth Factor AA (rm PDGF-AA)

Synonyms: Glioma-derived growth factor, GDGF, Osteosarcoma-derived Growth Factor, ODGF, PDGF-1.

Introduction: PDGF-AA, PDGF-BB and PDGF-AB, are potent mitogens for a variety of cell types including smooth muscle cells, connective tissue cells, bone and cartilage cells and some blood cells. The PDGF is stored in platelet alpha-granules and released upon platelet activation. The PDGF is involved in a number of biological processes including hyperplasia, chemotaxis, embryonic neuron development and respiratory tubule epithelial cell development. Two distinct signaling receptors used by PDGF have been identified and named PDGFR-alpha and PDGFR-beta. PDGFR-alpha is high-affinity receptor for each of the three PDGF forms. On the other hand PDGFR-beta interacts with only PDGF-BB and PDGF-AB.

Description: Recombinant mouse PDGF-AA is a disulfide linked homodimeric, non-glycosylated, polypeptide chain containing 2 x 126 amino acids and having a total molecular mass of 28.9 kDa. PDGF-AA is purified by proprietary chromatographic techniques

Source: *Escherichia Coli*

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: Lyophilized from a 0.22 µm filtered solution in 25 mM sodium acetate, pH 4.0. The aliquots of 1 µg and 2 µg contain Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized rm PDGF-AA in sterile H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized PDGF-AA although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution PDGF-AA should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity: Greater than 97.0% as determined by RP-HPLC and by SDS-PAGE

Endotoxicity: The endotoxin level is less than 1 EU / µg determined by LAL method.

Amino Acid Sequence: SIEEAVPAVC KTRTVIYEIP RSQVDPTSAN FLIWPPCVEV KRCTGCCNTS SVKCQPSRVH HRSVKVAKVE YVRKKPKLKE VQVRLEEHL E CACATSNLNP DHREEETGRR RESGKNRKRK RLKPT

Biological Activity: Established by the dose-dependent stimulation of Balb/c 3T3 cells proliferation. The expected ED₅₀ for this effect is 8-10 ng/ml.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	2 µg	Cat.N°	12343682
<i>medium</i>	10 µg	Cat.N°	12343683
<i>large</i>	50 µg	Cat.N°	12343685
<i>x-large</i>	250 µg	Cat.N°	12343687
<i>xx-large</i>	1000 µg	Cat.N°	12343688

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Gladiolenweg 2; 26169 Friesoythe; Germany
phone: +49-(0)4491-400997, fax: +49-(0)4491-400998, info@immunotools.com
www.immunotools.com