

## PDGFA

### Recombinant Human Platelet Derived Growth Factor-AA

<b>Catalog No.</b>	CRP300A	<b>Quantity:</b>	2 µg
	CRP300B		10 µg
	CRP300C		1.0 mg
	CRP300D		100 µg

**Alternate Names:** PDGF-A, PDGF1, PDGF A-chain, platelet-derived growth factor alpha

**Description:** Platelet-Derived Growth Factor (PDGF) plays an essential role in the regulation of embryonic development, cell proliferation, cell migration, survival and chemotaxis. Potent mitogen for cells of mesenchymal origin. Required for normal lung alveolar septum formation during embryogenesis, normal development of the gastrointestinal tract, normal development of Leydig cells and spermatogenesis. Required for normal oligodendrocyte development and normal myelination in the spinal cord and cerebellum. The synthesis of PDGF can be induced by IL-1, IL-6, TNF-alpha, TGF-beta and EGF. PDGF is a dimeric glycoprotein formed by two A chains (AA), two B chains (BB), or as a heterodimer with an A and a B chain (AB). The PDGF dimer binds the cell surface receptor tyrosine kinases PDGFR-α and PDGFR-β.

**Gene ID:** 5154

**UniProt ID:** P04085

**Source:** *E. coli*

**Molecular Weight:** Dimer, 14.4/28.9 kDa (126/252 aa)

**Formulation:** Lyophilized from sterile filtered solution containing 0.1% Trifluoroacetic Acid (TFA)

**Purity:** ≥ 95% by reducing and non-reducing SDS-PAGE

**Endotoxin Level:** ≤ 1 EU/µg by kinetic LAL

**Biological Activity:** ED<sub>50</sub> ≤ 50 ng/ml, determined by the dose-dependent proliferation of mouse 3T3 cells.

**Specific Activity:** ≥ 2.0 x 10<sup>4</sup> units/mg

**Amino Acid Sequence:** MSIEEAVPAV CKTRTVIYEI PRSQVDPTSA NFLIWPPCVE VKRCTGCCNT  
SSVKCQPSRV HHRSVKVAKV  
EYVRKKPKLK EVQVRLEEHL ECACATTSLN PDYREEDTGR PRESGKKRKR KRLKPT

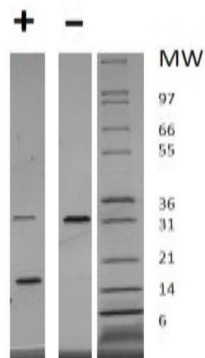
**Reconstitution:** **Centrifuge vial prior to opening.** When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/mL, which can be further diluted into other aqueous solutions.

**Storage & Stability:** Store as supplied at -20°C to -80°C for up to 1 year. Upon reconstitution, prepare working aliquots and store at -20°C to -80°C. It is recommended that a carrier protein

such as 0.1% HSA or BSA is added for long term storage.

**Avoid repeated freeze-thaw cycles.**

Figure: 1  $\mu$ g run under (+) reducing conditions and (-) non-reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassie Blue.



**NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.**



**Cell Sciences®**  
65 Parker Street  
Unit 11  
Newburyport, MA 01950

Toll Free: 888-769-1246  
Phone: 978-572-1070  
Fax: 978-992-0298

E-mail: [info@cellsciences.com](mailto:info@cellsciences.com)  
Website: [www.cellsciences.com](http://www.cellsciences.com)