

Recombinant Human Platelet Derived Growth Factor-AB

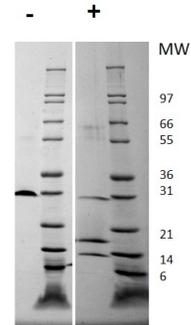
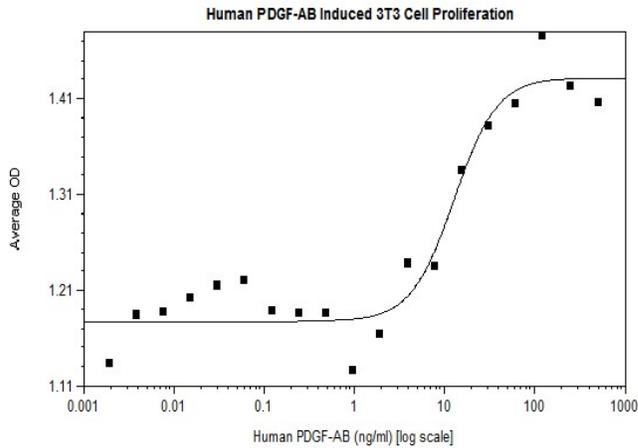
Catalog No.	CRP301A CRP301B CRP301C CRP301D	Quantity:	2 µg 10 µg 1.0 mg 100 µg
Alternate Names:	Glioma-derived growth factor, GDGF, Osteosarcoma-derived Growth Factor, ODGF		
Description:	Platelet-Derived Growth Factor (PDGF) plays an essential role in the regulation of embryonic development, cell proliferation, 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, 5155		
UniProt ID:	P04085, P01127		
Source:	<i>E. coli</i>		
Molecular Weight:	Dimer, Alpha:14.4 kDa, Beta: 12.4 kDa, Total 26.8 kDa (Alpha: 126, Beta: 110, Total: 236 aa)		
Formulation:	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM sodium phosphate, pH 7.5		
Purity:	≥ 95%, determined by reducing and non-reducing SDS-PAGE		
Endotoxin Level:	≤ 1 EU/µg protein, by kinetic LAL analysis		
Biological Activity:	ED ₅₀ < 2 ng/ml, determined by the dose-dependent proliferation of mouse 3T3 indicator cells.		
Specific Activity:	≥ 5.0 x 10 ⁴ U/mg		
Amino Acid Sequence:	<p>Alpha chain MSIEEAVPAV CKTRTVIYEI PRSQVDPTSA NFLIWPPCVE VKRCTGCCNT SSVKQCPSRV HHRSVKVAKV EYVRKKPKLK EVQVRLEEHL ECACATTSLN PDYREEDTGR PRESGKKRKR KRLKPT</p> <p>Beta chain MSLGSLTIAE PAMIAECKTR TEVFEISRRL IDRTNANFLV WPPCVEVQRC SGCCNNRNQV CRPTQVQLRP VQVRKIGIVR KKPIF</p>		
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.



Human PDGF-AB Gel

Figure: 1 ug in each lane (-) non-reducing conditions and (+) reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassie Blue. Human PDGF-AB is predicted to be a disulfide linked heterodimer with a predicted MW of 26.8 kDa (one 14.4 kDa alpha-chain and one 12.4 kDa beta-chain).

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



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