



Recombinant Human PDGF-CC

20150227BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	100-354S
Size:	5 µg
Lot. No.:	According to product label

Scientific Background

Gene-ID (NCBI):	56034
Synonyms:	PDGF-CC

The platelet-derived growth factor (PDGF) family of heparin-binding growth factors consists of five known members, denoted PDGF-AA, PDGF-BB, PDGF-AB, PDGF-CC and PDGF-DD. The mature and active form of these proteins, an anti-parallel disulfide-linked dimer of two 12-14 kDa polypeptide chains, is obtained through proteolytic processing of biologically inactive precursor proteins, which contain an N-terminal CUB domain and a PDGF/VEGF homologous domain. The PDGFs interact with two related protein tyrosine kinase receptors, PDGFR- α and PDGFR- β , and are potent mitogens for a variety of cell types, including smooth muscle cells, connective tissue cells, bone and cartilage cells, and certain tumor cells. They play an important role in a number of biological processes, including hyperplasia, chemotaxis, embryonic neuron development, and respiratory tubules epithelial cell development. Mature PDGFs are stored in platelet α -granules and are released upon platelet activation. PDGF-AA, -AB, -BB and -CC signal primarily through the PDGF-R α receptor, whereas PDGF-DD interacts almost exclusively with the PDGF-R β receptor. Recombinant human PDGF-CC is a 25 kDa protein consisting of two identical disulfide-linked 114 amino-acid polypeptide chains.

Sequence

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MVVDLNLLE EURLYSCTPR NFSVSIREEL KRTDTIFWPG  
CLLVKRCGGN CACCLHNCNE CQCVPSKVTK KYHEVLQLRP  
KTGVRGLHKS LTDVALEHHE ECDCVCRGST GG
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Database References

Protein RefSeq:	NP_057289.1
Uniprot ID:	Q9NRA1
mRNA RefSeq:	NM_016205.2

Product Specifications

Expressed in	E. coli
Purity	> 98% by SDS-PAGE & HPLC analyses
Structural Information	disulphide-linked homodimer
Endotoxin level	< 0.1 ng /µg of protein (<1EU/µg).
Formulation	lyophilized
Length (aa):	114
MW:	25 kDa

Biological Activity: Determined by the dose-dependent stimulation of the proliferation of Balb/c 3T3 cells. The expected The ED50 for this effect is 15-20 ng/ml.



AVOID REPEATED FREEZE AND THAW CYCLES!