

PDGF-CC, human recombinant protein

Platelet-Derived Growth Factor-CC Catalog # PBV10813r

Specification

PDGF-CC, human recombinant protein - Product info

Primary Accession Calculated MW

<u>Q9NRA1</u> 25 kDa KDa

PDGF-CC, human recombinant protein - Additional Info

Gene ID	56034
Gene Symbol	PDGFC
Other Names	
Platelet-Derived Growth Factor-CC	

Gene Source	Human
Source	E. Coli
Assay&Purity	SDS-PAGE; ≥98%
Assay2&Purity2	HPLC;
Recombinant	Yes
Sequence	MVVDLNLLTE EVRLYSCTPR NFSVSIREEL KRTDTIFWPG CLLVKRCGGN CACCLHNCNE CQCVPSKVTK KYHEVLQLRP KTGVRGLHKS LTDVALEHHE ECDCVCRGST GG

Target/Specificity PDGFC

Application Notes

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at $2-8^{\circ}$ C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20° C to -80° C.

Format Lyophilized powder

Storage

-20°C; Sterile filtered through a 0.2 micron filter. Lyophilized from 5 mM Sodium citrate, pH 3.0

PDGF-CC, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry



- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

PDGF-CC, human recombinant protein - Images

PDGF-CC, human recombinant protein - Background

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 25kDa protein consisting of two identical disulfide-linked 112 amino-acid polypeptide chains.

PDGF-CC, human recombinant protein - References

Tsai Y.J.,et al.Biochim. Biophys. Acta 1492:196-202(2000). Hamada T.,et al.FEBS Lett. 475:97-102(2000). Li X.,et al.Nat. Cell Biol. 2:302-309(2000). Gilbertson D.G.,et al.J. Biol. Chem. 276:27406-27414(2001). Zhao J.,et al.Submitted (DEC-2007) to the EMBL/GenBank/DDBJ databases.