

#### PDGF-CC, human recombinant protein

Platelet-Derived Growth Factor-CC Catalog # PBV10813r

#### **Specification**

### PDGF-CC, human recombinant protein - Product info

Primary Accession O9NRA1
Calculated MW 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 COCVPSKVTK KYHEVLOLRP 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°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.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry



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

## 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- $\alpha$  and PDGFR- $\beta$ , 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  $\alpha$ -granules and are released upon platelet activation. PDGF-AA, -AB, -BB and -CC signal primarily through the PDGF-R $\alpha$  receptor, whereas PDGF-DD interacts almost exclusively with the PDGF-R $\beta$  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.