

TECHNICAL DATA SHEET

Recombinant Human PDGF-CC (Carrier-free)

Catalog Number: 21-7121

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

CONTENTS

Recombinant Human PDGF-CC (Carrier-free)

DESCRIPTION

Platelet-derived growth factor-CC (PDGF-CC) is one of the five dimeric proteins belonging to the PDGF family. Other members are homodimers PDGF-AA, PDGF-BB, PDGF-DD, and the heterodimer PDGF-AB. The PDGFs are produced by platelets, stored in platelet alpha-granules and are released upon platelet activation. PDGF proteins are generally considered as potent mitogens for connective tissue cells, and can also be chemotactic for fibroblasts, smooth muscle cells, neutrophils and mononuclear cells. PDGF-CC plays a role in angiogenesis, as well as cardiovascular development and function. Two receptors have been identified for the PDGF proteins - PDGFR alpha and PDGFR beta. PDGF-CC binds primarily to PDGFR alpha and activates PDGFR alpha homodimerization.

MOLECULAR MASS

Recombinant Human PDGF-CC is a disulfide-linked homodimer of 25 kDa made up of two identical A chains, each consisting of 112 amino acids.

AMINO ACID SEQUENCE

MVVDLNLTE EVRLYSCTPR NFSVSIREEL KRTDTIFWPG CLLVKRCGGN CACCLHNCNE CQCVPSKVTK KYHEVLQLRP
KTGVRGLHKS LTDVALEHHE ECDCVCRGST GG

SOURCE

E. coli

APPLICATIONS

Bioassay

PURITY

98 %

STORAGE

-20°C

PROTEIN CONTENT

Verified by UV Spectroscopy and/or SDS-PAGE gel.

ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/μg of protein (<1 EU/μg).

AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

CROSS REACTIVITY

Mouse

BIOACTIVITY

The expected ED₅₀ is 15-20 ng/ml, as determined by the dose-dependent stimulation of BALB/c 3T3 cell proliferation.

RESEARCH AREAS

Angiogenesis & Cardiovascular, Bone and Cartilage, Cancer, Differentiation, Immune System, Neurobiology, Stem Cells, Wound Healing

RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

REFERENCES

Gilbertson DG, Duff ME, West JW, Kelly JD, Sheppard PO, Hofstrand PD, Gao Z, Shoemaker K, Bukowski TR, Moore M, et al. 2001. J Biol Chem. 276(29): 27406-27414. Li X and Eriksson U. 2003. Cytokine Growth Factor Rev. 14(2): 91-98. Li X, Ponten A, Aase K, Karlsson L, Abramsson A, Uutela M, Backstrom G, Hellstrom M, Bostrom H, Li H, et al. 2000. Nat. Cell Biol. 2: 302-209. Cao R, Brakenhielm E, Li X, Pietras K, Widenfalk J, Ostman A, Eriksson U, and Cao Y. 2002. FASEB J. 16(12): 1575-1583.

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