

TECHNICAL DATA SHEET

Recombinant Human PDGF-AB (Carrier-free)

Catalog Number: 21-7119

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

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Recombinant Human PDGF-AB (Carrier-free)

DESCRIPTION

Platelet-derived growth factor-AB (PDGF-AB) is one of the five dimeric proteins belonging to the PDGF family. Other members are homodimers PDGF-AA, PDGF-BB, PDGF-CC and PDGF-DD. 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-AB is reported to support angiogenesis in the heart. Two receptors have been identified for the PDGF proteins - PDGFR alpha and PDGFR beta. PDGF-AB with both PDGFR alpha and PDGFR beta.

MOLECULAR MASS

Recombinant Human PDGF-AB is made up of one A and one B chain, resulting in a 26.4 kDa disulfide-linked heterodimer consisting of 234 total amino acids.

AMINO ACID SEQUENCE

Alpha chain: SIEEAVPAVC KTRTVIYEIP RSQVDPTSAN FLIWPPCVEV KRCTGCCNTS SVKCQPSRVH HRSVKVAKVE YVRKKPKLKE VQVRLEEHL E CACATTSLNP DYREEDTGRP RESGKKRKRK RLKPT

Beta chain: SLGSLTIAEP AMIAECKTRT EVFEISRRLI DRTNANFLVW PPCVEVQRCS GCCNNRNVQC RPTQVQLRPV QVRKIGIVRK KPIFKKATVT LGDHLACKCE TVAAARPVT

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

Monkey, Mouse

BIOACTIVITY

The expected ED₅₀ is ≤ 1 ng/ml, corresponding to a specific activity of ≥ 1 x 10⁶ units/mg, as determined by the dose-dependent stimulation of Balb/c 3T3 cell proliferation.

RESEARCH AREAS

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

RECONSTITUTION

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

REFERENCES

Nister M, Hammacher A, Mellstrom K, Siegbahn A, Ronnstrand L, Westermark B and Heldin CH. 1988. Cell. 52(6): 791-799. Fredriksson L, Li H and Eriksson U. 2004. Cytokine Growth Factor Rev. 15(4): 197-204. Xaymardan M, Tang L, Zagreda L, Pallante B, Zheng J, Chazen JL, Chin A, Duignan I, Nahirney P, Rafii S, Mikawa T, Edelberg JM. 2004. Circ Res. 94(5): E39-45. Li X and Eriksson U. 2003. Cytokine Growth Factor Rev. 14(2): 91-98.

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