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ProductInformation

Platelet-Derived Endothelial Cell Growth Factor (PD-ECGF) Human, Recombinant Expressed in *Sf* 21 insect cells

Product Number **P 5208**

Product Description

Platelet-Derived Endothelial Cell Growth Factor (PD-ECGF) is an endothelial cell mitogen which was originally purified from human platelets.[1] In contrast with the endothelial mitogens of the fibroblast growth factor (FGF) family,[2] PD-ECGF is an endothelial cell growth factor initially purified from human platelets, which does not bind to heparin and does not stimulate the proliferation of fibroblasts.[1] This is in contrast with the effect of PDGF, which stimulates the growth of human foreskin fibroblasts, but is inactive on endothelial cells.[1] PD-ECGF will stimulate endothelial cells *in vitro* and *in vivo*.[2] PD-ECGF is chemotactic for bovine aortic endothelial cells.[3] PD-ECGF does not induce smooth muscle cell migration.[3] PD-ECGF is involved in angiogenesis and has potent angiogenic activity both in the developing vascular system of the chick chorioallantoic membrane and in vascularization of tumors in nude mice.[3] PD-ECGF has a pI of 4.0-4.8 and a molecular weight of 49 kDa..

The biological activity of recombinant, human PD-ECGF is measured in a cell proliferation assay using human umbilical vein endothelial cells.[4] The EC_{50} is defined as the effective concentration of growth factor that elicits a 50% increase in cell growth in a cell based bioassay.

Reagents

Lyophilized from a 0.2 μm-filtered solution of phosphate buffered saline, pH 7.4, containing 500 μg bovine serum albumin (BSA) as a carrier protein.

Preparation Instructions

Reconstitute the contents of the vial using 0.2 μm-filtered PBS containing 0.1% HSA or BSA to a concentration not less than 1 μg/ml.

Storage/Stability

Store at –20 °C for no more than 6 months.

After reconstitution, store at 2-8 °C for a maximum of one month. For extended storage, freeze in working aliquots at –70 °C or –20 °C. Repeated freezing and thawing is not recommended.

References

1. Miyazano, K., et al., J. Biol. Chem., **262**, 4098 (1987).
2. Lobb, R., et al., Analyt. Biochem., **154**, 1 (1986).
3. Ishikawa, F., et al., Nature, **338**, 557 (1989).
4. Usuki, K., et al., Cell Regulation, **1**, 577 (1990).

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