Datasheet

Cat. No. P1443

Recombinant Human Platelet-derived Growth Factor-BB GMP

Information

Gene ID	
Accession #	
Alternate Names	
Source	Escherichia coli.
M.Wt	Approximately 24.8 kDa, a disulfide-linked homodimeric protein containing two 110 amino acid residues polypeptide (B chain).
AA Sequence	MSLGSLTIAE PAMIAECKTR TEVFEISRRL IDRTNANFLV WPPCVEVQRC SGCCNNRNVQ CRPTQVQLRP VQVRKIEIVR KKPIFKKATV TLEDHLACKC ETVAAARPVT
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles A minimum of 12 months when stored at ≤ -20 °C as supplied Refer to lot specific COA for the Use by Date 1 month, 2 to 8 °C under sterile conditions after reconstitution 3 months, -20 to -70 °C under sterile conditions after reconstitution
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in PBS, pH 7.4.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.
Biological Activity	Fully biologically active when compared to standard. The ED as determined by a cell proliferation assay using murine Balb/c 3T3 cells is less than 3 ng/ml, corresponding to a specific activity of > 3.3 × 10 IU/mg.
Shipping Condition	Gel pack.
Handling	Centrifuge the vial prior to opening.
Usage	For Research Use Only! Not to be used in humans.

Components and Storage

Components	5μg	100μg	
Recombinant Human Platelet-derived Growth Factor-BB GMP	5μg	100μg	

Use a manual defrost freezer and avoid repeated freeze-thaw cycles
A minimum of 12 months when stored at ≤ -20 °C as supplied
Refer to lot specific COA for the Use by Date
1 month, 2 to 8 °C under sterile conditions after reconstitution
3 months, -20 to -70 °C under sterile conditions after reconstitution

Quality Control

Purity	> 98 % by SDS-PAGE and HPLC analyses.
Endotoxin	Less than 0.01 EU/μg of rHuPDGF-BB GMP as determined by LAL method.

Description

Platelet-derived growth factor (PDGF) presenting in serum but absent from plasma was first discovered in animal study by Lynch and co-workers in the late 1980s. It is a disulfide-linked dimer consisting of two peptides-chain A and chain B. PDGF has three subforms: PDGF-AA, PDGF-BB, PDGF-AB. It is involved in a number of biological processes, including hyperplasia, embryonic neuron development, chemotaxis, and respiratory tubule epithelial cell development. The function of PDGF is mediated by two receptors (PDGFR-α and PDGFR-β).

Reference

1. Hart CE, Bailey M, Curtis DA, et al. 1990. Biochemistry, 29: 166-72
2. Heidaran MA, Yu JC, Jensen RA, et al. 1992. J Biol Chem, 267: 2884-7
3. Haber M, Cao Z, Panjwani N, et al. 2003. Vet Ophthalmol, 6: 211-7
4. Matei D, Kelich S, Cao L, et al. 2007. Cancer Biol Ther, 6: 1951-9
5. Chung R, Foster BK, Zannettino AC, et al. 2009. Bone, 44: 878-85
6. Sufen G, Xianghong Y, Yongxia C, et al. 2011. Cell Biol Int, 35: 545-51.

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