

BACKGROUND:

Pleiotrophin (PTN) is a heparin-binding growth factor that has mitogenic effects on fibroblast, epithelial, and endothelial cells. PTN is made by many tissues, but is predominantly secreted by nervous tissue during development. PTN induces neurite outgrowth and is involved in tumor growth and metastasis. PTN binds with low affinity to the cell surface receptor nucleolin to inhibit HIV-1 infection. PTN can also bind the receptor protein tyrosine phosphatase type Z (PTPRZ), syndecan-3, and anaplastic lymphoma kinase (ALK) receptors.

Recombinant human Pleiotrophin is a non-glycosylated protein monomer, containing 137 amino acids and having a molecular mass of 15.4 kDa.

Cat. No.:
RP1055

Alternate Names:
HBBM, HBGF-8, NEG1, HARP

AA Sequence:

MGKKEKPEKK	VKKSDCGEWQ	WSVCVPTSGD
CGLGTREGTR	TGAECKQTMK	TQRCKIPCNW
KKQFGAECKY	QFQAWGECDL	NTALKTRTGS
LKRALHNAEC	QKTVTISKPC	GKLTKPKPQA
ESKSKKKEGK	KQEKMLD	

TECHNICAL INFO

Source:
E. coli

Physical Appearance:
Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:
10 mM sodium phosphate, pH 7.5

Stability:
Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:
Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/mL, which can be further diluted into other aqueous solutions.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm.
- RP-HPLC calibrated against a known standard.
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:
Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

