

Recombinant Human Pleiotrophin/PTN Protein

Catalog No.: RP03563 **Recombinant**

Sequence Information

Species	Gene ID	Swiss Prot
Human	5764	P21246

Tags
NO-Tag

Synonyms

PTN; HBNF1; NEGF1; Pleiotrophin; PTN;
Heparin-binding brain mitogen; HBBM

Product Information

Source	Purification
Baculovirus-Insect Cells	> 90 % as determined by SDS-PAGE

Calculated MW	Observed MW
15.3 KDa	15-20 kDa

Endotoxin

< 1.0 EU per µg of the protein as determined by the LAL method

Formulation

Lyophilized from sterile 20mM Tris, 1M NaCl, pH 8.0. Please contact us for any concerns or special requirements. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize freeze-thaw cycles.

Background

Background: Pleiotrophin (PTN) is a secreted, strongly heparin-binding, developmentally regulated cytokine. PTN is a highly conserved protein. Human, mouse, rat, canine, porcine, equine and bovine PTN share 98% aa sequence identity or greater. PTN and midkine share 50% amino acid (aa) sequence identity, share some functions, and constitute a family. During development, PTN is involved in development of brain, bone, and organs undergoing branching morphogenesis. PTN causes PTPRB dimerization and inactivates its phosphatase activity, which allows increased tyrosine phosphorylation of its substrates. Increased expression of PTN is correlated with neuronal development or stresses such as brain ischemia and Parkinson's disease.

Basic Information

Description

Recombinant Human Pleiotrophin/PTN Protein is produced by Baculovirus-Insect Cells system. The target protein is expressed with sequence (Met1-Asp168) of Human Pleiotrophin/PTN (Accession #NP_002816.1) fused with no tag.

Bio-Activity

Measured by its binding ability in a functional ELISA. Immobilized human PTN at 10 µg/ml (100 µl/well) can bind rat SDC1-Fc. The EC50 of rat SDC1-Fc is 0.35-0.81 µg/ml.

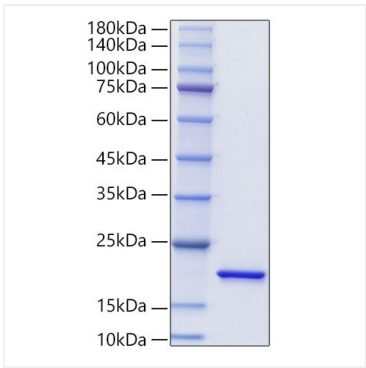
Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

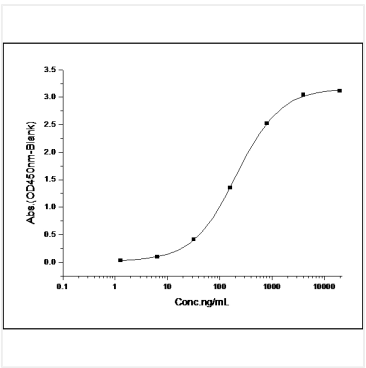
Contact

☎ | 400-999-6126

Validation Data



Recombinant Human Pleiotrophin/PTN Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



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