



Recombinant Protein Technical Manual

Recombinant Mouse Pleiotrophin/PTN/HB-GAM Protein (His Tag)

RPES0888

Product Data:

Product SKU: RPES0888

Size: 10µg

Species: Mouse

Expression host: Human Cells

Uniprot: P63089

Protein Information:

Molecular Mass: 16.1 kDa

AP Molecular Mass: 18 kDa

Tag: C-His

Bio-activity:

Purity: > 95% as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Pleiotrophin; PTN; Heparin-binding brain mitogen; HBBM; Heparin-binding growth factor 8; HBGF-8; Osteoblast-specific factor 1; OSF;HARP;HB-GAM;HBBN;HBNF;OSF;Osf;Osf1

Immunogen Information:

Sequence: Gly33-Asp168

Background:

Pleiotrophin (PTN) is a secreted, strongly heparin-binding, developmentally regulated cytokine. PTN and midkine share 50% amino acid (aa) sequence identity, share some functions, and constitute a family. PTN is a highly conserved protein? human, mouse, rat, canine, porcine, equine and bovine PTN share 98% aa sequence identity or greater. 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.