



# SZABO SCANDIC

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## Produktinformation



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Diagnostik & molekulare Diagnostik



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### Lieferung & Zahlungsart

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### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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## Pleiotrophin, human recombinant (rhuPTN)

**Catalog No:** 99912  
**Lot No:** XXXXX  
**Source:** *E. coli*  
**Synonyms:** PTN, Heparin Affin Regulatory Protein, HARP, Heparin-binding growth factor-8, HBGF-8, Osteoblast-Specific Factor-1, OSF-1, Heparin-binding growth-associated molecule, HB-GAM, HBNF-1 Heparin-binding brain mitogen, Heparin-binding neurite outgrowth-promoting factor 1, HBBM, NEGF1

### Background

Pleiotrophin (Osteoblast-Specific Factor-1, OSF-1) contains 136 amino acid residues. The sequence is very rich in cationic amino acids (24% of the residues). Lysine cluster sequences are found in the N-terminal and C-terminal ends of the structure. The OSF-1 gene was shown by Northern Blotting analysis to be expressed in mouse calvarial osteoblast-enriched cells and in mouse brain tissues, but not in thymus, spleen, kidney, liver, lung, testis or heart. Pleiotrophin has the ability to promote adhesion, migration, expansion, and differentiation of human osteoprogenitor cells. In addition to certain types of cancer, the embryonic growth and differentiation factor pleiotrophin is also found in adults in inflammatory diseases. In osteoarthritis, pleiotrophin is especially expressed in early stages, and its concentrations in the synovial fluid could serve as a marker for the progress of the disease. Pleiotrophin might be involved in cartilage repair in osteoarthritis, in particular, in earlier stages.

### Description

Pleiotrophin Human Recombinant, produced in *E. coli*, is a single, non-glycosylated polypeptide chain containing 136 amino acids. It has a molecular mass of 15.3 kDa. The Pleiotrophin is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile filtered, white, lyophilized (freeze-dried) powder.

### Formulation

The Pleiotrophin protein was lyophilized from a 0.2 µm filtered concentrated solution in PBS (pH 7.4).

### Solubility

It is recommended to reconstitute the lyophilized Pleiotrophin in sterile 18 MΩ-cm H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

### Stability

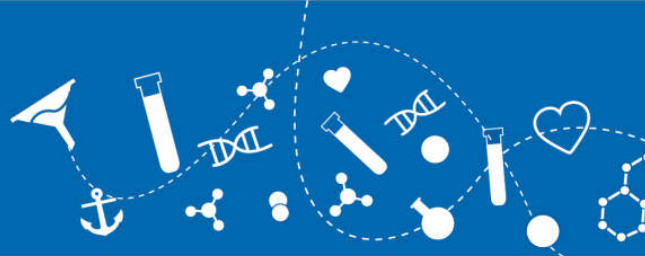
Lyophilized Pleiotrophin, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Pleiotrophin should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

### Purity

Greater than 97.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

### Amino Acid Sequence

GKKEKPEKKV KKSDCGEWQW SVCVPTSGDC GLGTREGTRT GAECKQTMKT QRCKIPCNWK KQFGAECKYQ FQAWGECDLN  
TALKTRTGSL KRALHNAECQ KTVTISKPCG KLTKPKPQAE SKKKKKEGKK QEKMLD



#### Usage

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