9051 Mira Mesa Blvd, #910094
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Pleiotrophin Human

Pleiotrophin Human Recombinant
NTR0070

Product Overview

Name	Pleiotrophin Human
Description	
Pleiotrophin Human Recombinant	
Accession (Primary)	P21246
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.	
Introduction	
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 found also 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. Pleitrophin might be involved in cartilage repair in osteoarthritis, in particular, in earlier stages.	
Source	
Escherichia Coli.	
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.	
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.	

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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.

Solubility

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

Precautions

Pleiotrophin Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P21246)