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Datasheet for ABIN7317931 Pleiotrophin Protein (PTN)

Overview

Quantity:	100 µg
Target:	Pleiotrophin (PTN)
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Biological Activity:	Active

Product Details

Purpose:	Recombinant Human Pleiotrophin/PTN/HB-GAM Protein (Active)
Sequence:	Met 1-Asp168
Characteristics:	A DNA sequence encoding the mature form of human PTN (NP_002816.1) (Met1-Asp168) was expressed.
Purity:	> 90 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.
Biological Activity Comment:	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.

Target Details

Target:	Pleiotrophin (PTN)
Alternative Name:	Pleiotrophin/PTN/HB-GAM (PTN Products)

Target Details

Background: Background: HB-GAM belongs to the pleiotrophin family. During embryonic and early postnatal development, HB-GAM is expressed in the central and peripheral nervous system and also in several non-neural tissues, notably lung, kidney, gut and bone. While in the adult central nervous system, it is expressed in an activity-dependent manner in the hippocampus where it can suppress long term potentiation induction. HB-GAM has a low expression in other areas of the adult brain, but it can be induced by ischemic insults, or targeted neuronal damaged in the entorhinal cortex or in the substantia nigra pars compacta. It is structurally related to midkine and retinoic acid induced heparin-binding protein and has a high affinity for heparin. HB-GAM binds anaplastic lymphoma kinase (ALK) which induces MAPK pathway activation, an important step in the anti-apoptotic signaling of PTN and regulation of cell proliferation. It also functions as a secreted growth factor and induces neurite outgrowth and which is mitogenic for fibroblasts, epithelial, and endothelial cells.

Synonym: HARP,HBGF8,HBNF,NEGF1

Molecular Weight: 15.3 kDa

NCBI Accession: [NP_002816](#)

Pathways: [RTK Signaling](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

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

Buffer: Lyophilized from sterile 20 mM Tris, 1M NaCl, pH 8.0

Storage: 4 °C,-20 °C,-80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.