

Recombinant Murine Persephin

Catalog # PBG10362

Specification

Recombinant Murine Persephin - Product Information

Recombinant Murine Persephin - Additional Information

Description

Persephin is a disulfide-linked homodimer neurotrophic factor structurally related to GDNF, Artemin, and Neurturin. These proteins belong to the cysteine-knot family of growth factors that assume stable dimeric structures. Persephin signals through a multicomponent receptor system, composed of RET and one of four GFR α (α 1- α 4) receptors. The GFR α 4 was first identified in chicken and was later shown to be the preferential binding subunit for Persephin. Persephin promotes the survival of ventral midbrain dompaminergic neurons and motor neurons after sciatic nerve oxotomy, and like GNDF, promotes ureteric bud branching. However, in contrast to GDNF and Neurturin, Persephin does not support survival of peripheral neurons. Recombinant murine Persephin is a disulfide-linked homodimer, composed of two 10.3 kDa polypeptide chains (96 total amino acid residues). Each chain contains seven conserved cysteine residues, one of which (Cys 63) is used for inter-chain disulfide bridging and the others are involved in intramolecular ring formation known as the cysteine knot configuration

BiologicalActivity

The ED₅₀ was determined by its ability to stimulate proliferation of human thyroid carcinoma cells (TT cells) is < 0.1 ng/ml, corresponding to a specific activity of > 1 x 10⁷ units/mg.

Authenticity

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

Endotoxin

Endotoxin level is $<0.1 \text{ ng}/\mu\text{g}$ of protein ($<1\text{EU}/\mu\text{g}$).

Protein Content

Verified by UV Spectroscopy and/or SDS-PAGE gel.

Storage

-20°C

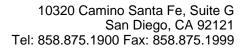
Precautions

Recombinant Murine Persephin is for research use only and not for use in diagnostic or therapeutic procedures.

Recombinant Murine Persephin - Protocols

Provided below are standard protocols that you may find useful for product applications.

Western Blot





• Blocking Peptides

- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Recombinant Murine Persephin - Images