

**Recombinant Murine Persephin**  
**Catalog # PBG10362****Specification**

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**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 $\alpha$  ( $\alpha$ 1- $\alpha$ 4) receptors. The GFR $\alpha$ 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 dopaminergic neurons and motor neurons after sciatic nerve oxotomy, and like GDNF, 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

**Biological Activity**

The  $ED_{50}$  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  $> 1 \times 10^7$  units/mg.

**Authenticity**

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

**Endotoxin**

Endotoxin level is  $< 0.1$  ng/  $\mu$ g of protein ( $< 1$  EU/  $\mu$ 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](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## **Recombinant Murine Persephin - Images**