

Persephin, murine recombinant protein
PSP, PSPN
Catalog # PBV10816r**Specification**

Persephin, murine recombinant protein - Product info

Primary Accession [O70300](#)
Calculated MW **10.3 kDa** KDa

Persephin, murine recombinant protein - Additional Info

Gene ID	5623
Gene Symbol	PSPN
Other Names	
PSP, PSPN	
Gene Source	Mouse
Source	E. Coli
Assay&Purity	SDS-PAGE; ≥98%
Assay2&Purity2	HPLC;
Recombinant	Yes
Sequence	ALAGSCLWS LTLPVAELGL GYASEEKVIF RYCAGSCPQE ARTQHSLVLA RLRGRGRAHG RPCCQPTSYA DVTFLDDQHH WQQLPQLSAA ACGCGG

Target/Specificity
Persephin

Application Notes

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

Format

Lyophilized powder

Storage

-20°C; Sterile filtered through a 0.2 micron filter. Lyophilized from 10 mM Sodium Citrate, pH 4.0

Persephin, murine recombinant protein - 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](#)

Persephin, murine recombinant protein - Images

Persephin, murine recombinant protein - Background

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 dopaminergic neurons and motor neurons after sciatic nerve axotomy, 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.

Persephin, murine recombinant protein - References

Milbrandt J., et al. Neuron 20:245-253(1998).