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Persephin, human recombinant protein

PSP, PSPN
Catalog # PBV10815r

Specification

Persephin, human recombinant protein - Product info

Primary Accession	O60542
Calculated MW	**10.4 kDa KDa**

Persephin, human recombinant protein - Additional Info

Gene ID	**5623**
Gene Symbol	**PSPN**
Other Names	
PSP, PSPN	
Gene Source	**Human**
Source	**E. Coli**
Assay&Purity	**SDS-PAGE; ≥98%**
Assay2&Purity2	**HPLC;**
Recombinant	**Yes**
Sequence	**RALSGPCQLW SLTLSVAELG LGYASEEKVI FRYCAGSCPR GARTQHGLAL ARLQGQGRAH GGPCCRPTRY TDVAFLDDRH RWQRLPQLSA AACGCGG**

Target/Specificity
Persephin

Application Notes
Centrifuge the vial prior to opening. Reconstitute in 5 mM Sodium Phosphate, pH 7.5 to a concentration of ≤ 0.5 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 0.3 x PBS, pH 7.2

Persephin, human 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 Cytomety
- Cell Culture

Persephin, human recombinant protein - Images

Persephin, human 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 GFRα (α1-α4) receptors. The GFRα4 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 human Persephin is a disulfide linked homodimer, composed of two 10.4 kDa polypeptide chains (194 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, human recombinant protein - References

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