

## Datasheet for ABIN2468967

# Persephin Protein (PSPN)



#### Overview

Overview	
Quantity:	0.005 mg
Target:	Persephin (PSPN)
Origin:	Mouse
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active
Product Details	
Sequence:	ALAGSCRLWS LTLPVAELGL GYASEEKVIF RYCAGSCPQE ARTQHSLVLA RLRGRGRAHG
	RPCCQPTSYA DVTFLDDQHH WQQLPQLSAA ACGCGG
Characteristics:	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 $> 1 \times 10^7$ units/mg.
Purity:	< 98 % by SDS-PAGE gel and HPLC analyses.
Endotoxin Level:	Endotoxin level is less than 0.1 ng per $\mu$ g (1 EU/ $\mu$ g).
Target Details	
Target:	Persephin (PSPN)
Alternative Name:	Persephin (PSPN Products)
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 $\alpha$  ( $\alpha$ 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 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

Gene ID:	19197
NCBI Accession:	NP_032980
OMIM:	247269886
UniProt:	070300

### **Application Details**

esearch Use only
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## Handling

Format:	Lyophilized
Handling Advice:	As with any protein, exposing Persephin recombinant protein to repeated freeze / thaw cycles is not recommended. When working with proteins care should be taken to keep recombinant protein at a cool and stable temperature.
Storage:	-20 °C
Storage Comment:	The recombinant protein is stable for at least 2 years from date of receipt at -20 °C.  Reconstituted Persephin is stable for at least 3 months when stored in working aliquots with a carrier protein at -20 °C.
Expiry Date:	24 months