

## 32-20530: Recombinant Murine Persephin(Discontinued)

**Reactivity :** Human  
**Alternative Name :** PSP, PSPN

### Description

**Source:** **E.coli** Persephin is a disulfide-linked, homodimeric, 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 GFRA 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 the survival of peripheral neurons. Recombinant Murine Persephin is a disulfide-linked homodimer, composed of two 10.3 kDa polypeptide chains (192 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 the intramolecular ring formation known as the cysteine-knot configuration.

### Product Info

**Amount :** 5 µg / 20 µg  
**Purification :** Purity: >= 98% by SDS-PAGE gel and HPLC analyses.  
**Content :** This recombinant protein is supplied in lyophilized form.  
**Amino Acid :** ALAGSCRLWS LTLPVAELGL GYASEEKVIF RYCAGSCPQE ARTQHSLVLA RLRGRGRAHG RPCCQPTSYA  
DVTFLDDQHH WQQLPQLSAA ACGCGG

### Application Note

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.