

**BACKGROUND:**

Persephin (PSP) is a neurotrophic factor of the glial cell line-derived neurotrophic factor (GDNF) family. PSP promotes survival and growth of dopaminergic and motor neurons, but not peripheral neurons. PSP is a ligand for the RET receptor tyrosine kinase.

Recombinant human Persephin is a non-glycosylated protein dimer, containing 97/194 amino acids and having a molecular mass of 10.4/20.8 kDa.

**Cat. No.:**  
RP1081AF

**Alternate Names:**  
PSP

**AA Sequence:**  
MALSGPCQLW SLTLSVAELG LGYASEEKVI FRYCAGS  
CPR GARTQHGLAL ARLQGQGRAH GGPCCRPTRY TD  
VAFLDDRHRWQRLPQLSA AACGCGG

**TECHNICAL INFO**

**Source:**  
*E. coli*

**Physical Appearance:**  
Sterile Filtered white lyophilized (freeze-dried) powder.

**Formulation:**  
10 mM sodium phosphate, pH 7.5

**Stability:**  
Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

**Reconstitution:**  
Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/mL, which can be further diluted into other aqueous solutions.

**Protein Content and Purity determined by:**

- UV spectroscopy at 280 nm.
- RP-HPLC calibrated against a known standard.
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

**Endotoxin Level:**  
Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

**Biological Activity:**  
The activity is measured by dose-dependent TT cell proliferation, with Bioactivity Acceptance Criteria ED50 at 20 ng/mL.

**Animal Component-Free**  
This product is produced with no animal derived raw products. All processing and handling employs animal free equipment and animal free protocols.

