

# Growth Factor Data Sheet

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GoldBio growth factors are manufactured for **RESEARCH USE ONLY** and cannot be sold for human consumption!

Persephin (PSPN) belongs to the GDNF ligand subfamily of the TGF-beta superfamily. The amino acid sequence of human PSPN is about 30% analogous to human GDNF. PSPN is synthesized throughout the nervous system and presumably originates from both astroglial cells and neurons. It promotes the survival and growth of mesencephalic dopaminergic and motor neurons. It also plays a role in kidney development by promoting ureteric bud branching. PSPN binds to a receptor complex consisting of Ret tyrosine kinase and GFR-alpha-4.

<b>Catalog Number</b>	<b>1170-23</b>
<b>Product Name</b>	<b>PSPN, Human</b> Recombinant Human Persephin (PSPN) PSP
<b>Source</b>	<i>Escherichia coli</i>
<b>MW</b>	~20.5 kDa (2x 96 amino acids)
<b>Sequence</b>	ALSGPCQLWS LTLSVAELGL GYASEEKVIF RYCAGSCPRG ARTQHGLALA RLQGQGRAHG GPCCRPTRYT DVAFLDDRHR WQRLPQLSAA ACGCGG
<b>Accession Number</b>	<a href="#">P06734</a>
<b>Purity</b>	>97% by SDS-PAGE and HPLC analyses
<b>Biological Activity</b>	Fully biologically active when compared to standard. The ED <sub>50</sub> as determined by a cell proliferation assay using human TT medullary thyroid cancer cells is less than 10 ng/ml, corresponding to a specific activity of >1.0 × 10 <sup>5</sup> IU/mg.
<b>Formulation</b>	Sterile filtered white lyophilized powder. Purified and tested for use in cell culture.
<b>Storage/Handling</b>	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage. The reconstituted sample can be apportioned into working aliquots and stored at -80 °C for up to 6 months. Avoid repeated freeze/thaw cycles.
<b>Reconstitution</b>	The sample should be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in 4 mM HCl to a concentration of 0.1-1.0 mg/ml. Reconstituted solutions are stable for up to one week at 2-8°C. Stock solutions should be aliquoted and stored at -80°C. Further dilutions should be made in appropriate buffered solutions.