

Recombinant Protein Technical Manual Recombinant Human Persephin/PSPN Protein (His Tag) RPES0574

Product Data:

Product SKU: RPES0574 **Size:** 10μg

Species: Human Expression host: E. coli

Uniprot: 060542

Protein Information:

Molecular Mass: 10.4 kDa

AP Molecular Mass: 12 kDa

Tag: N-His

Bio-activity:

Purity: > 95% as determined by reducing SDS-PAGE.

Endotoxin: $< 1.0 \text{ EU per } \mu\text{g}$ as determined by the LAL method.

Storage: Lyophilized protein should be stored at < -20°C, though stable at room

temperature for 3 weeks. Reconstituted protein solution can be stored at $4-7^{\circ}$ C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 µm filtered solution of 4mM HCl.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Persephin; PSP; PSPN

Immunogen Information:

Sequence: Ala61-Gly156

Background:

Persephin is a secreted protein, belongs to the glial cell linederived neurotrophic factor (GDNF) family of the TGF- β superfamily. It shares 38-46% amino acid (aa) identity with family members GDNF, neurturin and artemin. It is expressed at very low levels in most tissues. Mature protein contains a signal sequence, a prodomain and a 96 aa mature sequence with several cysteines that are conserved among family members. It circulates as an unglycosylated disulfide-linked homodimer. Like other GDNF family members, Persephin acts through engagement of GRF α 4, a glycosylphosphatidylinositol (GPI)-linked GDNF receptor family Persephin is reported to promote both the survival and growth of central dopaminergic and motor neurons, and kidney development. These effects are correlated with the expression patterns of GFR α 4, and RET.