A Reliable Research Partner in Life Science and Medicine

# Recombinant Human Persephin/PSPN Protein

Catalog Number: PKSH033568

Note: Centrifuge before opening to ensure complete recovery of vial contents.

		crip					
	00	CI	411	n	П	n	m
JU	$\mathbf{c}$	U		J A	ш	v.	ш

Species Human

Source E.coli-derived Human Persephin/PSPN protein Ala61-Gly 156

Calculated MW 10.4 kDa
Observed MW 12 kDa
Accession 060542

**Bio-activity** Not validated for activity

#### **Properties**

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

Endotoxin < 1.0 EU per µg of the protein as determined by the LAL method.

**Storage** Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80

°C. Reconstituted protein solution can be stored at 4-8°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.

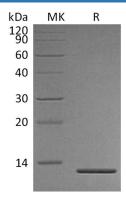
Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants

before lyophilization.

Please refer to the specific buffer information in the printed manual.

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

# Data



> 95 % as determined by reducing SDS-PAGE.

## **Background**

Persephin is a secreted protein, belongs to the glial cell linederived neurotrophic factor (GDNF) family of the TGF- $\beta$  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 pro-domain 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 $\alpha$ 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 $\alpha$ 4, and RET.

## For Research Use Only