

hPersephin Protein
Human Persephin, Recombinant, E. coli
Catalog # PG10037

Specification

hPersephin Protein - Product Information

hPersephin Protein - Additional Information

Storage
-20°C

Precautions

hPersephin Protein is for research use only and not for use in diagnostic or therapeutic procedures.

hPersephin Protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

hPersephin Protein - Images

hPersephin Protein - Background

Persephin is a novel neurotrophic factor related to GDNF and Neurturin in the GDNF subfamily.¹ Persephin is ubiquitously expressed, although at very low levels.² In sharp contrast to GDNF and Neurturin, Persephin does not support the survival of neurons from peripheral ganglia including sympathetic and parasympathetic neurons, sensory neurons and enteric neurons.^{1,3} Persephin does promote the survival of midbrain dopaminergic neurons after neurotoxic injury and the survival of spinal motor neurons in vitro and in vivo animal models. The receptor for Persephin is a multi-component complex composed of RET tyrosine kinase and the glycosyl-phosphatidylinositol (GPI)-anchored co-receptor GFR α 1- α 4.^{4,5} Persephin induces, in vitro, branching of the ureteric bud of the kidney, an activity shared by Neurturin and GDNF.¹ Both in vitro and in vivo experiments using animal models suggest that Persephin could be useful in the treatment of neurodegenerative diseases including Parkinson's disease and Amyotrophic Lateral Sclerosis (ALS).⁶

hPersephin Protein - References

1 . Milbrandt, J. et al. (1998) *Neuron* 20, 245. 2 . Jaszai, J. et al. (1998) *J. Neurosci. Res.* 53, 494. 3 . Bilak, M.M. (1999) *Mol. Cell Neurosci.* 13, 326. 4 . Enokido, Y. et al. (1998) *Curr. Biol.* 8, 1019. 5 . Masure,

S. et al. (2000) J. Biol. Chem. 275, 39427-6 . Akerud, P. et al. (2002) Mol. Cell. Neurosci. 21, 205.