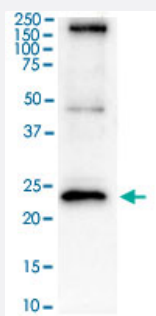


PSPH monoclonal antibody, clone 3G12

Catalog # MAB1093

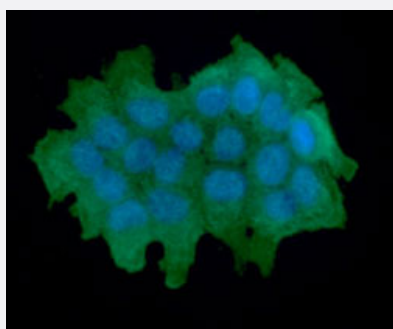
Size 100 uL

Applications



Western Blot (Tissue lysate)

Western blot analysis of mouse brain tissue lysate.



Immunofluorescence

Immunofluorescence analysis of A431 cells. The cell was stained with PSPH monoclonal antibody, clone 3G12 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

Specification

Product Description	Mouse monoclonal antibody raised against full length recombinant PSPH.
Immunogen	Recombinant protein corresponding to full length human PSPH.
Host	Mouse
Reactivity	Human, Mouse
Form	Liquid
Purification	Protein G purification
Isotype	IgG1, kappa

Recommend Usage	ELISA Immunocytochemistry Immunofluorescence Western Blot The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.4 (10% glycerol, 0.02% sodium azide).
Storage Instruction	Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Tissue lysate)

Western blot analysis of mouse brain tissue lysate.

- Immunocytochemistry

- Immunofluorescence

Immunofluorescence analysis of A431 cells. The cell was stained with PSPH monoclonal antibody, clone 3G12 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

- Enzyme-linked Immunoabsorbent Assay

Gene Info — PSPH

Entrez GeneID	5723
GeneBank Accession#	NM_004577
Protein Accession#	NP_004568
Gene Name	PSPH
Gene Alias	PSP
Gene Description	phosphoserine phosphatase
Omim ID	172480
Gene Ontology	Hyperlink

Gene Summary

The protein encoded by this gene belongs to a subfamily of the phosphotransferases. This encoded enzyme is responsible for the third and last step in L-serine formation. It catalyzes magnesium-dependent hydrolysis of L-phosphoserine and is also involved in an exchange reaction between L-serine and L-phosphoserine. Deficiency of this protein is thought to be linked to Williams syndrome. [provided by RefSeq]

Other Designations

L-3-phosphoserine phosphatase|O-phosphoserine phosphohydrolase|OTTHUMP00000025059|PSPase

Publication Reference

- [How calcium inhibits the magnesium-dependent enzyme human phosphoserine phosphatase.](#)

Peeraer Y, Rabijns A, Collet JF, Van Schaftingen E, De Ranter C.

European Journal of Biochemistry 2004 Aug; 271(16):3421.

- [Molecular basis for the local conformational rearrangement of human phosphoserine phosphatase.](#)

Kim HY, Heo YS, Kim JH, Park MH, Moon J, Kim E, Kwon D, Yoon J, Shin D, Jeong EJ, Park SY, Lee TG, Jeon YH, Ro S, Cho JM, Hwang KY.

The Journal of Biological Chemistry 2002 Nov; 277(48):46651.

- [Genetical and biochemical studies on human phosphoserine phosphatase.](#)

Moro-Furlani AM, Turner VS, Hopkinson DA.

Annals of Human Genetics 1980 May; 43(4):323.

Pathway

- [Glycine](#)
- [Metabolic pathways](#)