

**PSPH Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP20207A**

**Specification**

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**PSPH Antibody (N-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">P78330</a>
Other Accession	<a href="#">Q5M819</a> , <a href="#">Q99LS3</a> , <a href="#">NP_004568.2</a>
Reactivity	Human, Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	25008
Antigen Region	7-36

**PSPH Antibody (N-term) - Additional Information**

**Gene ID** 5723

**Other Names**

Phosphoserine phosphatase, PSP, PSPase, L-3-phosphoserine phosphatase, O-phosphoserine phosphohydrolase, PSPH

**Target/Specificity**

This PSPH antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 7-36 amino acids from the N-terminal region of human PSPH.

**Dilution**

WB~~1:8000

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

PSPH Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**PSPH Antibody (N-term) - Protein Information**

**Name** PSPH ([HGNC:9577](#))

**Function** Catalyzes the last irreversible step in the biosynthesis of L-serine from carbohydrates, the dephosphorylation of O-phospho-L-serine to L-serine (PubMed:[12213811](#), PubMed:[14673469](#), PubMed:[15291819](#), PubMed:[25080166](#), PubMed:[9222972](#)). L-serine can then be used in protein synthesis, to produce other amino acids, in nucleotide metabolism or in glutathione synthesis, or can be racemized to D-serine, a neuromodulator (PubMed:[14673469](#)). May also act on O-phospho-D-serine (Probable).

#### Cellular Location

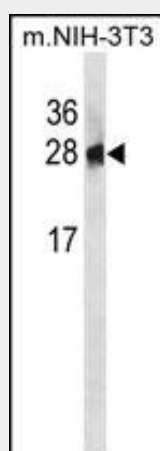
Cytoplasm, cytosol.

#### PSPH Antibody (N-term) - Protocols

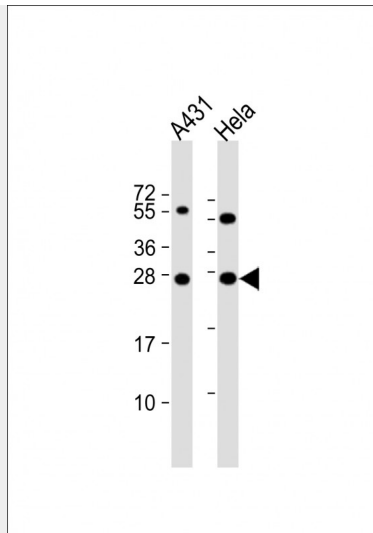
Provided below are standard protocols that you may find useful for product applications.

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

#### PSPH Antibody (N-term) - Images



PSPH Antibody (N-term) (Cat. #AP20207a) western blot analysis in mouse NIH-3T3 cell line lysates (35ug/lane). This demonstrates the PSPH antibody detected the PSPH protein (arrow).



All lanes : Anti-PSPH Antibody (N-term) at 1:8000 dilution Lane 1: A431 whole cell lysate Lane 2: HeLa whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 25 kDa Blocking/Dilution buffer: 5% NFDm/TBST.

### **PSPH Antibody (N-term) - Background**

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.

### **PSPH Antibody (N-term) - References**

Lamesch, P., et al. *Genomics* 89(3):307-315(2007)  
Ewing, R.M., et al. *Mol. Syst. Biol.* 3, 89 (2007) :  
Peeraer, Y., et al. *Eur. J. Biochem.* 271(16):3421-3427(2004)  
Veiga-da-Cunha, M., et al. *Eur. J. Hum. Genet.* 12(2):163-166(2004)  
Peeraer, Y., et al. *Acta Crystallogr. D Biol. Crystallogr.* 59 (PT 6), 971-977 (2003) :