10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PSPH Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20207A

Specification

PSPH Antibody (N-term) - Product Information

Application	**WB,E**
Primary Accession	P78330
Other Accession	Q5M819, Q99LS3, NP_004568.2
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
E~~Use at an assay dependent concentration.

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).

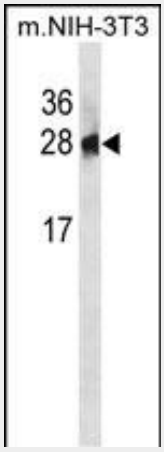
Cellular Location
Cytoplasm, cytosol.

PSPH Antibody (N-term) - Protocols

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

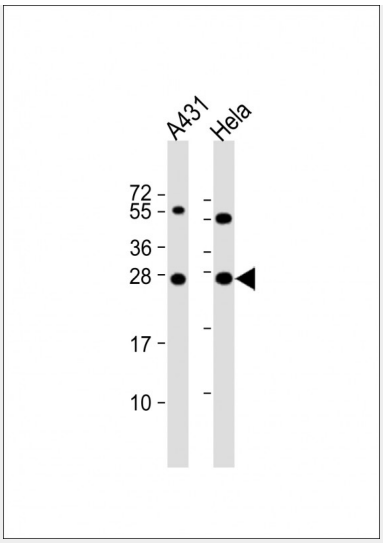
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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).

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



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) :