

PSPH Blocking Peptide (N-term)
Synthetic peptide
Catalog # BP20207A**Specification**

PSPH Blocking Peptide (N-term) - Product Information

Primary Accession [P78330](#)
Other Accession [Q5M819](#), [Q99LS3](#), [NP_004568.2](#)

PSPH Blocking Peptide (N-term) - Additional Information

Gene ID 5723

Other Names

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

Target/Specificity

The synthetic peptide sequence is selected from aa 22-36 of HUMAN PSPH

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PSPH Blocking Peptide (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:15291819, PubMed:9222972, PubMed:14673469, PubMed:25080166). 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 Blocking Peptide (N-term) - Protocols

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

- [Blocking Peptides](#)

PSPH Blocking Peptide (N-term) - Images

PSPH Blocking Peptide (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 Blocking Peptide (N-term) - References

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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) :