

PSAT1 Protein, Human

Cat. No.:	HY-P701351
Synonyms:	PSAT1; Phosphoserine aminotransferase; Phosphohydroxythreonine aminotransferase; PSAT
Species:	Human
Source:	E. coli
Accession:	Q9Y617 (L17-L370)
Gene ID:	29968
Molecular Weight:	

PROPERTIES

Appearance	Solution.
Formulation	Supplied as a 0.22 µm filtered solution of 50 mM Tris-HCl, pH7.5, 200 mM NaCl, 20% glycerol.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	Please use rapid thawing with running water to thaw the protein.
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

DESCRIPTION

Background	<p>The PSAT1 (Phosphoserine aminotransferase 1) protein is an enzyme that catalyzes the reversible conversion of 3-phosphohydroxypyruvate to phosphoserine and 3-hydroxy-2-oxo-4-phosphonooxybutanoate to phosphohydroxythreonine. This enzymatic activity is a key step in the serine biosynthetic pathway, contributing to the synthesis of essential amino acids and cellular processes such as nucleotide and protein biosynthesis. Phosphoserine and phosphohydroxythreonine generated by PSAT1 serve as precursors for the production of serine and glycine, both of which are crucial for various metabolic pathways and cellular functions. PSAT1's role in serine biosynthesis underscores its importance in maintaining cellular homeostasis and provides potential insights into therapeutic approaches for conditions involving dysregulated amino acid metabolism.</p>
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Caution: Product has not been fully validated for medical applications. For research use only.

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