

User Manual

Version 2.0
Revision Date: 08/06/2024

Product name: ATP sulfurylase Yeast

Cat #: ATPSY-100, ATPSY-200, ATPSY-OEM

Description:

Adenosine 5'-Triphosphate Sulfurylase Yeast Recombinant produced in *E. coli* is a non-glycosylated, polypeptide chain containing 511 amino acids and having a Mw of 57.7 kDa. Adenosine 5'-Triphosphate Sulfurylase Yeast Recombinant catalyzes the activation of sulfate by transferring sulfate to the adenine monophosphate moiety of ATP to form adenosine 5'-phosphosulfate (APS) and pyrophosphate (PPi). The reaction is reversible: ATP is formed from APS and PPi. Adenosine 5'-Triphosphate Sulfurylase is purified by proprietary chromatographic techniques.

Application:

Synthesizes adenosine 5'-sul-phatophosphate from ATP and inorganic SO₄²⁻ - Catalyzes the activation of sulfate by transferring sulfate to the adenine monophosphate moiety of ATP to form adenosine 5'-phosphosulfate (APS) and pyrophosphate (PPi).

Source:

Escherichia Coli containing Yeast adenosine 5'-Triphosphate Sulfurylase gene

Unit Definition:

One unit will produce 1.0 μ mole of ATP from APS and inorganic pyrophosphate per min at pH 8.0 at 30°C.

Concentration: 300 Units/ml

Unit Assay Conditions:

115 mM Tris-HCL(pH 8.0), 0.58 mM b-NADP, 2.4 mM Mg acetate, 34 mM D-glucose, 0.3 mM adenosine 5'-phosphosulfate, 3.4 mM pyrophosphate, 0.75 units/ml hexokinase and 0.5 units/ml glucose 6-phosphate dehydrogenase.

Recommended Storage Conditions: -20°C