

User Manual

Version 1.0
Revision Date: 08/29/2013

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 is the amount of enzyme which incorporates 1 pmol AMP into acid-insoluble material at 37°C in 1 minute.

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