

Product Data Sheet

□ Cat # RP-432

Recombinant Yeast Adenosine 5" Triphosphate Sulfurylase

Size: □ 10 IU

□ 50 IU

Synonyms:

Sulfate adenyltransferase, EC 2.7.7.4, Sulfate adenylate transferase, SAT, ATP-sulfurylase, Methionine-requiring protein 3, ATPS.

Introduction:

ATP sulphurylase synthesizes adenosine 5'-sul-phatophosphate from ATP and inorganic SO₄²⁻. This is the first reaction of a two step sequence in the formation of "active sulphate", adenosine 3'-phosphate 5'-sulphatophosphate, which is a sulphate donor for a wide variety of compounds and is also involved in the reduction of sulphate.

Description:

Adenosine 5" Triphosphate Sulfurylase Yeast Recombinant produced in E.Coli is a non-glycosylated, polypeptide chain which 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.

Source:

Escherichia Coli.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

The protein was lyophilized after dialysis against 10mM NaP, 100mM NaCl, 10mM Lactose, 1% PEG, pH 7.5.

Solubility:

It is recommended to reconstitute the lyophilized ATP-sulfurylase in sterile 18MΩ-cm H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability:

Lyophilized Sulfate adenylate transferase although stable at 4°C for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution ATPS should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity:

Greater than 95.0% as determined by SDS-PAGE.

Biological Activity: 12 Units/mg.

Storage and stability:

This item is for LABORATORY ESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals. If supplied in powder then reconstitute it in 100 ul water for 1 mg/ml stock and store in liquid at 4°C for ~1 week or aliquots in suitable size and store at -20°C for long term storage.

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