



## Product Datasheet

<b>Product Name</b>	Adenosine 5" Triphosphate Sulfurylase Yeast Recombinant
<b>Cata No</b>	CB500528
<b>Source</b>	<i>Escherichia Coli.</i>
<b>Synonyms</b>	Sulfate adenyltransferase, EC 2.7.7.4, Sulfate adenylate transferase, SAT, ATP-sulfurylase, Methionine-requiring protein 3, ATPS.

### Description

ATP sulphurylase synthesizes adenosine 5'-sul-phatophosphate from ATP and inorganic  $SO_4^{2-}$ . This is the first reaction of a two step sequence in the formation of "active sulphate", adenosine 3'-phosphate5'-sulphatophosphate, which is a sulphate donor for a wide variety of compounds and is also involved in the reduction of sulphate.

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.

### Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

### Biological Activity

12 Units/mg.

### Purity

Greater than 95.0% as determined by SDS-PAGE.

### Formulation

The ATP sulphurylase protein was lyophilized after dialysis against lyophilized from 10mM NaP buffer, 100mM NaCl, 10mM Lactose, 1% PEG pH 7.5 and 0.75mM DTT.

### 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.**

### Sequence

MPAPHGGILQ DLIARDALKK NELLSEAQSS  
DILVWNLTPR QLCDIELILN GGFSPLTGFL  
NENDYSSVVT DSRLADGTLW TIPITLDVDE  
AFANQIKPDT RIALFQDDEI PIAILTVQDV  
YKPNKTIEAE KVFRGDPEHP AISYLFNVAG  
DYYVGGGSLEA IQLPQHYDYP GLRKTPAQLR  
LEFQSRQWDR VVAFQTRNPM HRAHRELTVR  
AAREANAKVL IHPVVGLTKP GDIDHTRVR  
VYQEIIKRYP NGIAFLSLLP LAMRMSGDRE  
AVWHAIIRKN YGASHFIVGR DHAGPGKNSK  
GVDFYGPYDA QELVESYKHE DIEVPPFRM  
VTYLPDEDRY APIDQIDTTK TRTLNISGTE  
LRRRLRVGGE IPEWFSYPEV VKILRESNPP  
RPKQGFSSIVL GNSLTVSREQ LSIALLSTFL  
QFGGGRYKYI FEHNNKTELL SLIQDFIGSG  
SGLIIPNQWE DDKDSVVGKQ

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NVYLLDTSSS ADIQLESADE PISHIVQKV

LFLEDNGFFV F.

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