

## 32-2170: ATP sulfurylase Yeast Recombinant Protein (Discontinued)

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

### Description

Source : Escherichia Coli. 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. ATP sulphurylase synthesizes adenosine 5'-sulphatophosphate from ATP and inorganic SO<sub>4</sub><sup>2-</sup>. 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.

### Product Info

<b>Amount :</b>	50 IU
<b>Purification :</b>	Greater than 95.0% as determined by SDS-PAGE.
<b>Content :</b>	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.
<b>Storage condition :</b>	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.
<b>Amino Acid :</b>	MPAPHGGILQ DLIARDALKK NELLSEAQSS DILVWNLTPR QLCDIELILN GGFSPLTGFL NENDYSSVVT DSRLADGTLW TIPITLDVDE AFANQIKPDT RIALFQDDEI PIAILTVQDV YKPNKTIEAE KVFRGDPEHP AISYLFNVAG DYYVGGSLA IQLPQHYDYP GLRKTPAQLR LEFQSRQWDR VVAFQTRNPM HRAHRELTVR AAREANAKVL IHPVVGLTKP GDIDHHTRVR VYQEIKRYP NGIAFLSLLP LAMRMSGDRE AVWHAIIRKN YGASHFIVGR DHAGPGKNSK GVDFYGPYDA QELVESYKHE DIEVVPFRM VTYLPDEDRY APIDQIDTTK TRTLNISGTE LRRRLRVGGE IPEWFSYPEV VKILRESNPP RPKQGFIVL GNSLTVSREQ LSIALSTFL QFGGGRYKI FEHNNKTELL SLIQDFIGSG SGLIIPNQE DDKDSVVGKQ NVYLLDTSSS ADIQLESADE PISHIVQKW LFLEDNGFFV F.

### Application Note

Spin vial before opening. Reconstitute ATP sulphurylase with 5mM NaP pH-7.5 & 0.75mM DTT at a concentration ranging from 0.1mg - 1mg per ml. Can be diluted further into other aqueous buffers. pH range between 7.0 - 8.5 is best. 12 Units/mg.