

Yeast Sulfate adenylyltransferase - Purified

Catalog No.:	AR10437PU-S
Quantity:	10 IU
Background:	ATP sulphurylase synthesizes adenosine 5'-sulphatophosphate 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'-phosphate 5'-sulphatophosphate, which is a sulphate donor for a wide variety of compounds and is also involved in the reduction of sulphate.
Uniprot ID:	P08536
NCBI:	NP_012543.1
GeneID:	853466
Species:	Yeast
Source:	<i>E. coli</i>
Format:	<p>State: Sterile Filtered White lyophilized (freeze-dried) powder</p> <p>Buffer System: Lyophilized after dialysis against lyophilized from 10mM NaP buffer, 100mM NaCl, 10mM Lactose, 1% PEG pH 7.5 and 0.75mM DTT.</p> <p>Reconstitution: Spin vial before opening. Restore ATP sulphurylase with 5mM NaP pH-7.5 and 0.75mM DTT at a concentration ranging from 0.1-1 mg/ml. Can be diluted further into other aqueous buffers. pH range between 7.0-8.5 is best.</p>
Description:	<p>Recombinant Yeast Adenosine 5" Triphosphate Sulfurylase produced in <i>E.coli</i> is a non-glycosylated, polypeptide chain containing 511 amino acids and having a Molecular weight of 57.7 kDa.</p> <p>Recombinant Yeast Adenosine 5" Triphosphate Sulfurylase 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.</p> <p>Unit Definition: One unit produces 1.0 μmole of ATP from APS and inorganic phosphate per min. at pH 8.0 and 30°C.</p> <p>AA Sequence:</p> <pre>MPAPHGILQ DLIARDALKK NELLSEAQSS DILVWNLTPR QLCDIELILN GGFSPLTGFL NENDYSSVVT DSRLADGTLW TIPITLDVDE AFANQIKPDT RIALFQDDEI PIAILTVQDV YKPNKTIEAE KVFRGDPEHP AISYLFNVAG DYYVGGSLA IQLPQHYDYP GLRKTPAQLR LEFQSRQWDR VVAFQTRNPM HRAHRELTVR AAREANAKVL IHPVVGLTGP GDIDHHTVRV VYQEIIKRYP NGIAFLSLLP LAMRMSGDRE AVWHAIIRKN YGASHFIVGR DHAGPGKNSK GVDFYGPYDA QELVESYKHE DIEVVPFRM VTYLPDEDRY APIDQIDTTK TRTLNISGTE LRRRLRVGGE IPEWFSYPEV VKILRESNPP RPKQGFSLV GNSLTVSREQ LSIALLSTFL QFGGGRYYKI FEHNNKTELL SLIQDFIGSG SGLIIPNQWE DDKDSVVGKQ NVYLLDTSSS ADIQLESAD PISHIVQKVV LFLEDNGFFV F.</pre> <p>Biological Activity: 12 Units/mg</p>

Storage:

Prior to reconstitution store at 2-8°C for one month or desiccated below -18°C.

Following reconstitution store undiluted at 2-8°C for one month
or (in aliquots) at -20°C for longer.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.