

ATP Sulfurylase



1-800-632-7799
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M0394S 023170318031

M0394S



10 units 300 U/ml Lot: 0231703

RECOMBINANT Store at -20°C Exp: 3/18

Description: ATP 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.

Source: An *E.coli* strain carrying a plasmid expressing the *S. cerevisiae* gene MET3.

Supplied in: 10 mM Tris-HCl (pH 7.5), 50 mM NaCl, 0.1 mM EDTA, 0.1 mM DTT and 50% glycerol.

Unit Definition: One unit is defined as the amount of enzyme that catalyzes the conversion of 1 μ mol of APS and PPi to ATP in one minute at 30°C in a total reaction volume of 40 μ l.

Unit Assay Conditions: 115 mM Tris-HCl (pH 8.0), 0.58 mM β -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.

Quality Controls Assays

Phosphatase Contamination: After incubation of 1.5 units of ATP Sulfurylase with 0.05 μ mol p-nitrophenol phosphate for 20 hours at 37°C, no phosphatase activity could be detected by spectrophotometric analysis.

Nuclease Contamination: Incubation of 1.5 units of ATP Sulfurylase for 20 hours in the recommended assay buffer with 2-log DNA Ladder revealed no detectable endonuclease activity as determined by agarose gel electrophoresis.

CERTIFICATE OF ANALYSIS

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