

## New England Biolabs Certificate of Analysis

**Product Name:** ATP Sulfurylase  
**Catalog Number:** M0394S  
**Concentration:** 300 U/ml  
**Unit Definition:** One unit is defined as the amount of enzyme that catalyzes the conversion of 1  $\mu$ mol of APS and PPI to ATP in one minute at 30°C in a total reaction volume of 40  $\mu$ l.  
**Lot Number:** 10015046  
**Expiration Date:** 04/2019  
**Storage Temperature:** -20°C  
**Storage Conditions:** 100 mM NaCl, 10 mM Tris-HCl, 1 mM DTT, 0.1 mM EDTA, 50 % Glycerol, (pH 7.4 @ 25°C)  
**Specification Version:** PS-M0394S/L v2.0

ATP Sulfurylase Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0394SVIAL	ATP Sulfurylase	10015045	Pass

Assay Name/Specification	Lot # 10015046
<p><b>Non-Specific DNase Activity</b>            A 50 <math>\mu</math>l reaction in CutSmart® Buffer containing 1 <math>\mu</math>g of 1 kb Plus DNA Ladder and a minimum of 1.5 units of ATP Sulfurylase incubated for 20 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.</p>	Pass
<p><b>Phosphatase Activity (pNPP)</b>            A 200 <math>\mu</math>l reaction in 1M Diethanolamine, pH 9.8, 0.5 mM MgCl<sub>2</sub> containing 2.5 mM p-Nitrophenyl Phosphate (pNPP) and a minimum of 1.5 units of ATP Sulfurylase incubated for 20 hours at 37°C yields &lt;0.00001 unit of alkaline phosphatase activity as determined by spectrophotometric analysis.</p>	Pass
<p><b>Protein Purity Assay (SDS-PAGE)</b>            ATP Sulfurylase is <math>\geq</math> 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.</p>	Pass

This product has been tested and shown to be in compliance with all specifications.



Tony Spear-Alfonso  
Production Scientist  
16 Oct 2018



Michael Tonello  
Packaging Quality Control Inspector  
16 Oct 2018