

New England Biolabs Product Specification

<i>Product Name:</i>	<i>ATP Sulfurylase</i>
<i>Catalog #:</i>	<i>M0394S/L</i>
<i>Concentration:</i>	<i>300 units/ml</i>
<i>Unit Definition:</i>	<i>One unit is defined as the amount of enzyme that catalyzes the conversion of 1 μmol of APS and PPi to ATP in one minute at 30°C in a total reaction volume of 40 μl.</i>
<i>Shelf Life:</i>	<i>12 months</i>
<i>Storage Temp:</i>	<i>-20°C</i>
<i>Storage Conditions:</i>	<i>100 mM NaCl, 10 mM Tris-HCl, 1 mM DTT, 0.1 mM EDTA, 50 % Glycerol, (pH 7.4 @ 25°C)</i>
<i>Specification Version:</i>	<i>PS-M0394S/L v2.0</i>
<i>Effective Date:</i>	<i>11 Sep 2018</i>

Assay Name/Specification (minimum release criteria)

Non-Specific DNase Activity - A 50 μ l reaction in CutSmart® Buffer containing 1 μ 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.

Phosphatase Activity (pNPP) - A 200 μ l reaction in 1M Diethanolamine, pH 9.8, 0.5 mM MgCl₂ 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 <0.00001 unit of alkaline phosphatase activity as determined by spectrophotometric analysis.

Protein Purity Assay (SDS-PAGE) - ATP Sulfurylase is \geq 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.



Date 11 Sep 2018

Derek Robinson
Director of Quality Control

