NEW ENGLAND BioLabs® Inc.

240 County Road
Ipswich, MA 01938-2723

Tel 978-927-5054
Fax 978-921-1350

www.neb.com
info@neb.com

New England Biolabs
Product Specification

Product Name:	*ATP Sulfurylase*
Catalog #:	*M0394S/L*
Concentration:	*300 units/ml*
Unit Definition:	*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.*
Shelf Life:	*12 months*
Storage Temp:	*-20°C*
Storage Conditions:	*10 mM Tris-HCl, 50 mM NaCl, 0.1 mM DTT, 0.1 mM EDTA, 50 % Glycerol, (pH 7.5 @ 25°C)*
Specification Version:	*PS-M0394S/L v1.0*
Effective Date:	*10 Aug 2018*

Assay Name/Specification (minimum release criteria)
Non-Specific DNase Activity - A 50 µl reaction in CutSmart® Buffer containing 1 µg 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 µl reaction in 1M Diethanolamine, pH 9.8, 0.5 mM $MgCl_2$ 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 ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.

Date 10 Aug 2018

Derek Robinson
Director of Quality Control

ISO 9001 Registered Quality Management
ISO 14001 Registered Environmental Management
ISO 13485 Registered Medical Devices