

New England Biolabs Certificate of Analysis

Product Name: Adenosine-5 Triphosphate (ATP)
Catalog Number: P0756S
Concentration: 10 mM
Unit Definition: N/A
Packaging Lot Number: 10190592
Expiration Date: 01/2025
Storage Temperature: -20°C
Storage Conditions: Milli-Q® Water as a sodium salt, (pH 7.0 @ 25°C)
Specification Version: PS-P0756S/L v2.0

Adenosine-5 Triphosphate (ATP) Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
P0756SVIAL	Adenosine 5'-Triphosphate (ATP)	10176561	Pass

Assay Name/Specification	Lot # 10190592
Endonuclease Activity (Nicking) A 50 µl reaction in CutSmart® Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 1 mM of ATP incubated for 4 hours at 30°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	Pass
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart® Buffer containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 1 mM of ATP incubated for 4 hours at 30°C releases <0.1% of the total radioactivity.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in NEBuffer 2 containing 1 µg of T3 or T7 DNA in addition to a reaction containing Lambda-HindIII DNA and a minimum of 10 µl of ATP incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
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 mM of ATP incubated for 4 hours at 37°C yields <0.0001 unit of alkaline phosphatase activity as determined by spectrophotometric analysis.	Pass

Assay Name/Specification	Lot # 10190592
<p>Protease Activity (SDS-PAGE) A 20 µl reaction in 1X CutSmart® Buffer containing 24 µg of a standard mixture of proteins and a minimum of 1 mM of ATP incubated for 16 hours at 37°C, results in no detectable degradation of the protein mixture as determined by SDS-PAGE with Coomassie Blue detection.</p>	Pass
<p>RNase Activity (Extended Digestion) A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 1 mM of ATP is incubated at 37°C. After incubation for 16 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.</p>	Pass

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

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Maxwell Elkus
Production Scientist
13 Jan 2023



Michael Tonello
Packaging Quality Control Inspector
13 Jun 2023