

## New England Biolabs Certificate of Analysis


**Product Name:** Quick CIP  
**Catalog Number:** M0525L  
**Concentration:** 5,000 U/ml  
**Unit Definition:** One unit is defined as the amount of enzyme that hydrolyzes 1  $\mu\text{mol}$  of p-Nitrophenyl Phosphate, PNPP in a total reaction volume of 1 ml in 1 minute at 37°C.  
**Lot Number:** 10047913  
**Expiration Date:** 06/2021  
**Storage Temperature:** -20°C  
**Storage Conditions:** 25 mM Tris-HCl , 1 mM MgCl<sub>2</sub> , 0.1 mM ZnCl<sub>2</sub> , 50 % Glycerol, (pH 7.5 @ 25°C)  
**Specification Version:** PS-M0525S/L v1.0

Quick CIP Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0525LVIAL	Quick CIP	10047903	Pass
B7204SVIAL	CutSmart® Buffer	10043351	Pass

Assay Name/Specification	Lot # 10047913
<p><b>Non-Specific DNase Activity (16 Hour)</b>            A 50 <math>\mu\text{l}</math> reaction in NEBuffer 4 containing 1 <math>\mu\text{g}</math> of PhiX174-HaeIII DNA and a minimum of 50 units of Quick CIP incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.</p>	Pass
<p><b>Exonuclease Activity (Radioactivity Release)</b>            A 50 <math>\mu\text{l}</math> reaction in CutSmart® Buffer containing 1 <math>\mu\text{g}</math> of a mixture of single and double-stranded [<sup>3</sup>H] E. coli DNA and a minimum of 50 units of Quick CIP incubated for 4 hours at 37°C releases &lt;0.1% of the total radioactivity.</p>	Pass
<p><b>Endonuclease Activity (Nicking)</b>            A 50 <math>\mu\text{l}</math> reaction in CutSmart® Buffer containing 1 <math>\mu\text{g}</math> of supercoiled PhiX174 DNA and a minimum of 50 units of Quick CIP incubated for 4 hours at 37°C results in &lt;10% conversion to the nicked form as determined by agarose gel electrophoresis.</p>	Pass
<p><b>RNase Activity (Extended Digestion)</b>            A 10 <math>\mu\text{l}</math> reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA</p>	Pass

Assay Name/Specification	Lot # 10047913
and a minimum of 1 µl of Quick CIP is incubated at 37°C. After incubation for 16 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using gel electrophoresis using fluorescent detection.	

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




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Doreen Duquette  
Production Scientist  
21 May 2019




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Jay Minichiello  
Packaging Quality Control Inspector  
21 Jun 2019