

## New England Biolabs Certificate of Analysis

**Product Name:** Quick CIP  
**Catalog Number:** M0525S  
**Concentration:** 5,000 U/ml  
**Unit Definition:** One unit is defined as the amount of enzyme that hydrolyzes 1  $\mu$ mol of p-Nitrophenyl Phosphate, PNPP in a total reaction volume of 1 ml in 1 minute at 37°C.  
**Packaging Lot Number:** 10057020  
**Expiration Date:** 10/2021  
**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 |
| M0525SVIAL               | Quick CIP             | 10054876   | Pass                 |
| B7204SVIAL               | CutSmart® Buffer      | 10046088   | Pass                 |

| Assay Name/Specification   | Lot # 10057020 |
|--|----------------|
| <b>Exonuclease Activity (Radioactivity Release)</b><br>A 50 $\mu$ l reaction in CutSmart® Buffer containing 1 $\mu$ g 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 <0.1% of the total radioactivity.   | Pass           |
| <b>Endonuclease Activity (Nicking)</b><br>A 50 $\mu$ l reaction in CutSmart® Buffer containing 1 $\mu$ g of supercoiled PhiX174 DNA and a minimum of 50 units of Quick CIP incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.   | Pass           |
| <b>RNase Activity (Extended Digestion)</b><br>A 10 $\mu$ l reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 1 $\mu$ l 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. | Pass           |
| <b>Non-Specific DNase Activity (16 Hour)</b><br>A 50 $\mu$ l reaction in NEBuffer 4 containing 1 $\mu$ g of PhiX174-HaeIII DNA and a minimum   | Pass           |

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|--|----------------|
| 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. |                |

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

  
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Doreen Duquette  
Production Scientist  
06 Sep 2019

  
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Jay Minichiello  
Packaging Quality Control Inspector  
16 Oct 2019