

## New England Biolabs Certificate of Analysis

**Product Name:** NruI  
**Catalog Number:** R0192L  
**Concentration:** 10,000 U/ml  
**Unit Definition:** One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA in 1 hour at 37°C in a total reaction volume of 50 µl.  
**Packaging Lot Number:** 10123966  
**Expiration Date:** 08/2023  
**Storage Temperature:** -20°C  
**Storage Conditions:** 50 mM KCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA  
**Specification Version:** PS-R0192S/L v1.0

| NruI Component List |                       |            |                      |
|---------------------|-----------------------|------------|----------------------|
| NEB Part Number     | Component Description | Lot Number | Individual QC Result |
| R0192LVIAL          | NruI                  | 10118711   | Pass                 |
| B6003SVIAL          | NEBuffer™ r3.1        | 10110766   | Pass                 |

| Assay Name/Specification   | Lot # 10123966 |
|--|----------------|
| <p><b>Endonuclease Activity (Nicking)</b><br/>           A 50 µl reaction in NEBuffer 3.1 containing 1 µg of supercoiled pUC19 DNA and a minimum of 100 units of NruI 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>Exonuclease Activity (Radioactivity Release)</b><br/>           A 50 µl reaction in NEBuffer 3.1 containing 1 µg of a mixture of single and double-stranded [<sup>3</sup>H] E. coli DNA and a minimum of 50 units of NruI incubated for 4 hours at 37°C releases &lt;0.1% of the total radioactivity.</p>    | Pass           |
| <p><b>Non-Specific DNase Activity (16 Hour)</b><br/>           A 50 µl reaction in NEBuffer 3.1 containing 1 µg of Lambda DNA and a minimum of 100 units of NruI 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>Ligation and Recutting (Terminal Integrity)</b><br/>           After a 10-fold over-digestion of Lambda DNA with NruI, ~50% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, &gt;95% can be recut with NruI.</p>                                      | Pass           |

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|--|----------------|
| <b>Protein Purity Assay (SDS-PAGE)</b><br>Nrul is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection. | <b>Pass</b>    |

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

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04 Oct 2021




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04 Oct 2021