

New England Biolabs Certificate of Analysis

Product Name: NotI
Catalog Number: R0189S
Concentration: 10,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of pBC4 DNA in 1 hour at 37°C in a total reaction volume of 50 µl.
Packaging Lot Number: 10081427
Expiration Date: 03/2022
Storage Temperature: -20°C
Storage Conditions: 250 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 0.15% Triton X-100, 200 µg/ml BSA
Specification Version: PS-R0189S/L v1.0

| NotI Component List | | | |
|---------------------|------------------------------|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| R0189SVIAL | NotI | 10068944 | Pass |
| B7203SVIAL | NEBuffer™ 3.1 | 10077593 | Pass |
| B7024AVIAL | Gel Loading Dye, Purple (6X) | 10082935 | Pass |

| Assay Name/Specification | Lot # 10081427 |
|--|----------------|
| Endonuclease Activity (Nicking) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of supercoiled PhiX174 DNA and a minimum of 100 Units of NotI incubated for 4 hours at 37°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 NEBuffer 3.1 containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 100 units of NotI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity. | Pass |
| Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of pBC4 DNA with NotI, >95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, >95% can be recut with NotI. | Pass |
| Non-Specific DNase Activity (16 Hour) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of pBC4 DNA and a minimum of 100 Units of NotI incubated for 16 hours at 37°C results in a DNA pattern free of | Pass |

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|---|----------------|
| 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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Production Scientist
24 Sep 2020



Michael Tonello
Packaging Quality Control Inspector
24 Sep 2020