

New England Biolabs Certificate of Analysis

Product Name: NotI-HF®
Catalog Number: R3189S
Concentration: 20,000 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: 10075132
Expiration Date: 01/2022
Storage Temperature: -20°C
Storage Conditions: 50 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA
Specification Version: PS-R3189S/L v1.0

| NotI-HF® Component List | | | |
|-------------------------|------------------------------|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| R3189SVIAL | NotI-HF® | 10062598 | Pass |
| B7204SVIAL | CutSmart® Buffer | 10074633 | Pass |
| B7024SVIAL | Gel Loading Dye, Purple (6X) | 10071081 | Pass |

| Assay Name/Specification | Lot # 10075132 |
|--|----------------|
| Endonuclease Activity (Nicking) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 100 Units of NotI-HF™ 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 CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 200 units of NotI-HF™ 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-HF™, >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-HF™. | Pass |
| Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of pBC4 DNA and a minimum of 200 Units of NotI-HF™ incubated for 16 hours at 37°C results in a DNA pattern free | Pass |

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| of detectable nuclease degradation as determined by agarose gel electrophoresis. | |

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



Penghua Zhang
Production Scientist
18 Jun 2020



Michael Tonello
Packaging Quality Control Inspector
18 Jun 2020