

New England Biolabs Certificate of Analysis

Product Name: SfaNI
Catalog Number: R0172S
Concentration: 2,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of PhiX174 RF I DNA in 1 hour at 37°C in a total reaction volume of 50 µl.
Packaging Lot Number: 10234519
Expiration Date: 02/2026
Storage Temperature: -20°C
Storage Conditions: 300 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 500 µg/ml BSA
Specification Version: PS-R0172S/L v1.0

| SfaNI Component List | | | |
|----------------------|------------------------------|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| R0172SVIAL | SfaNI | 10226118 | Pass |
| B7024AVIAL | Gel Loading Dye, Purple (6X) | 10221469 | Pass |
| B6003SVIAL | NEBuffer™ r3.1 | 10227733 | Pass |

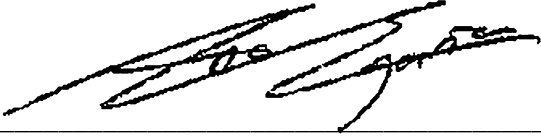
| Assay Name/Specification | Lot # 10234519 |
|---|----------------|
| Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 6 units of SfaNI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity. | Pass |
| Ligation and Recutting (Terminal Integrity) After a 2-fold over-digestion of PhiX174 DNA with SfaNI, ~75% 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 SfaNI. | Pass |
| Non-Specific DNase Activity (16 Hour) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of PhiX174 DNA and a minimum of 2 Units of SfaNI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis. | Pass |

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit



www.neb.com/trademarks for additional information.



Ana Egana
Production Scientist
28 Feb 2024



Josh Hersey
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28 Feb 2024