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## 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: 10059015 Expiration Date: 10/2021 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			
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result
R0172SVIAL	SfaNI	10055788	Pass
B7203SVIAL	NEBuffer™ 3.1	10053972	Pass
B7024SVIAL	Gel Loading Dye, Purple (6X)	10053978	Pass

Assay Name/Specification	Lot # 10059015
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of a mixture of single and double-stranded [ ³H] 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.



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Ay Minichiello
Packaging Quality Control Inspector

25 Nov 2019