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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: 10114704
Expiration Date: 07/2023
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	10114705	Pass	
B7024AVIAL	Gel Loading Dye, Purple (6X)	10093123	Pass	
B6003SVIAL	NEBuffer™ r3.1	10110766	Pass	

Assay Name/Specification	Lot # 10114704
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
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
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

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



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www.neb.com/trademarks for additional information.

Penghua Zhang **Production Scientist** 

NEW ENGLAND

03 Aug 2021

Josh Hersey Packaging Quality Control Inspector 03 Aug 2021



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