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New England Biolabs Certificate of Analysis

Product Name: Fnu4HI Catalog Number: R0178L Concentration: 10,000 U/ml

Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg

of Lambda DNA in 1 hour at 37°C in a total reaction volume of 50 μl.

Packaging Lot Number: Expiration Date: 03/2023 Storage Temperature: -20°C

50 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Storage Conditions:

Glycerol, 200 µg/ml BSA

Specification Version: PS-R0178S/L v1.0

Fnu4HI Component List				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
R0178LVIAL	Fnu4HI	10101609	Pass	

Assay Name/Specification	Lot # 10103319
Protein Purity Assay (SDS-PAGE)	Pass
Fnu4HI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	
Non-Specific DNase Activity (16 Hour)	Pass
A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of	
30 Units of Fnu4HI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	
Exonuclease Activity (Radioactivity Release)	Pass
A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and	
double-stranded [³H] E. coli DNA and a minimum of 10 units of Fnu4HI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	
Ligation and Recutting (Terminal Integrity)	Pass
After a 20-fold over-digestion of Lambda DNA with Fnu4HI, 95% can be recut with Fnu4HI.	

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



R0178L / Lot: 10103319

www.neb.com/trademarks for additional information.

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Production Scientist

14 Apr 2021

Michael Tonello

Packaging Quality Control Inspector

14 Apr 2021