

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.*
Lot Number: *10017502*
Expiration Date: *08/2020*
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-R0178S/L v1.0*

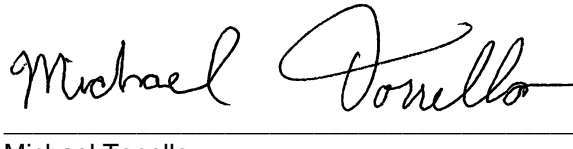
Fnu4HI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0178LVIAL	Fnu4HI	10017503	Pass
B7204SVIAL	CutSmart® Buffer	10013537	Pass
B7024SVIAL	Gel Loading Dye, Purple (6X)	10007497	Pass

Assay Name/Specification	Lot # 10017502
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 10 units of Fnu4HI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Ligation and Recutting (Terminal Integrity) After a 20-fold over-digestion of Lambda DNA with Fnu4HI, 95% can be recut with Fnu4HI.	Pass
Non-Specific DNase Activity (16 Hour) 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.	Pass
Protein Purity Assay (SDS-PAGE) Fnu4HI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	Pass

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



Tony Spear-Alfonso
Production Scientist
14 May 2018



Michael Tonello
Packaging Quality Control Inspector
07 Aug 2018