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New England Biolabs Certificate of Analysis

Product Name: Haell
Catalog Number: R0107S
Concentration: 20,000 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: 10125572 Expiration Date: 10/2023 Storage Temperature: -20°C

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

Glycerol, 200 µg/ml BSA

Specification Version: PS-R0107S/L v1.0

Haell Component List				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
R0107SVIAL	Haell	10125571	Pass	
B6004SVIAL	rCutSmart™ Buffer	10124441	Pass	

Assay Name/Specification	Lot # 10125572
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of Lambda DNA with Haell, >95% of the DNA fragments can be ligated with T4 DNA ligase in 4 hours at 25°C. Of these ligated fragments, >95% can be recut with Haell.	Pass
Non-Specific DNase Activity (16 hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of 20 units of Haell incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis. NOTE: although no nuclease degradation is detected under these conditions, extended incubations and/or high concentrations of this enzyme may result in star activity. See the product FAQ for recommended reaction conditions for this enzyme.	Pass
Exonuclease Activity (Radioactivity Release) 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 100 units of Haell incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass

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



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Production Scientist

23 Nov 2021

Michael Tonello

Packaging Quality Control Inspector

23 Nov 2021



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