

New England Biolabs Certificate of Analysis

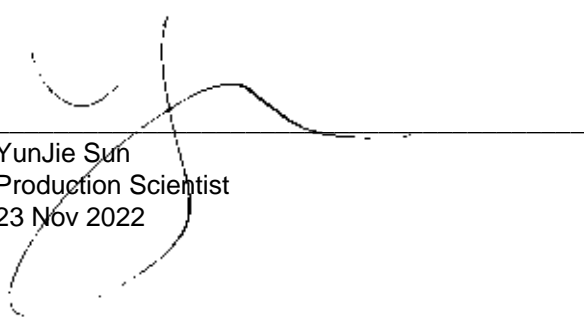
Product Name: *HaeIII*
Catalog Number: *R0108S*
Concentration: *10,000 U/ml*
Unit Definition: *One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA in 1 hour at 37°C in a total reaction volume of 50 µl.*
Packaging Lot Number: *10171976*
Expiration Date: *11/2024*
Storage 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-R0108S/L v1.0*

HaeIII Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0108SVIAL	HaeIII	10171971	Pass
B7024AVIAL	Gel Loading Dye, Purple (6X)	10162784	Pass
B6004SVIAL	rCutSmart™ Buffer	10165689	Pass

Assay Name/Specification	Lot # 10171976
Ligation and Recutting (Terminal Integrity) After a 20-fold over-digestion of Lambda DNA with HaeIII, >95% 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 HaeIII.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of 100 Units of HaeIII incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
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 100 units of HaeIII incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Protein Purity Assay (SDS-PAGE) HaeIII 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.

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.


YunJie Sun
Production Scientist
23 Nov 2022


Michael Tonello
Packaging Quality Control Inspector
28 Nov 2022