

240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

## New England Biolabs Certificate of Analysis

Product Name: BsiHKAI
Catalog Number: R0570S
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 65°C in a total reaction volume of 50 μl.

Lot Number: 10050371
Expiration Date: 07/2021
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-R0570S/L v1.0

BsiHKAI Component List				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
R0570SVIAL	BsiHKAI	10050372	Pass	
B7204SVIAL	CutSmart® Buffer	10047860	Pass	

Assay Name/Specification	Lot # 10050371
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 BsiHKAI incubated for 4 hours at 65°C releases <0.1% of the total radioactivity.	Pass
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of Lambda DNA with BsiHKAI, >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 BsiHKAI.	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 BsiHKAl incubated for 16 hours at 65°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass

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



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Production Scientist 20 Jun 2019

Jay Minichiello

Packaging Quality Control Inspector

08 Aug 2019