

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.
Packaging Lot Number: 10070684
Expiration Date: 04/2022
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			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0570SVIAL	BsiHKAI	10070683	Pass
B7204SVIAL	CutSmart® Buffer	10071077	Pass

Assay Name/Specification	Lot # 10070684
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
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 BsiHKAI incubated for 4 hours at 65°C releases <0.1% of the total radioactivity.	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 BsiHKAI 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.



Penghua Zhang
Production Scientist
13 Apr 2020



Jay Minichiello
Packaging Quality Control Inspector
13 Apr 2020