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New England Biolabs Certificate of Analysis

Product Name: AbaSI
Catalog Number: R0665S
Concentration: 10,000 U/ml

Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg

of T4 wild-type phage DNA (fully ghmC-modified) in 1 hour at 25°C in

a total reaction volume of 50 μl.

Packaging Lot Number: 10163211
Expiration Date: 09/2024
Storage Temperature: -20°C

Storage Conditions: 10 mM Tris-HCl, 100 mM KCl, 1 mM DTT, 0.1 mM EDTA, 0.5 % Tween®

20 , 0.5 % IGEPAL® CA-630 , 50 % Glycerol, (pH 7.4 @ 25°C)

Specification Version: PS-R0665S v3.0

AbaSI Component List				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
R0665SVIAL	AbaSI	10163212	Pass	
B6004SVIAL	rCutSmart™ Buffer	10156430	Pass	
B0706SVIAL	10X DTT	10123416	Pass	

Assay Name/Specification	Lot # 10163211
Protein Purity Assay (SDS-PAGE)	Pass
AbaSI is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	
Endonuclease Activity (Nicking)	Pass
A 50 µl reaction in CutSmart® Buffer containing 1 µg of supercoiled pBR322 DNA and a	
minimum of 30 units of AbaSI incubated for 4 hours at 25°C results in <20%	
conversion to the nicked form as determined by agarose gel electrophoresis.	
Exonuclease Activity (Radioactivity Release)	Pass
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 AbaSI incubated for	
4 hours at 25°C releases <0.1% of the total radioactivity.	
Non-Specific DNase Activity (16 Hour)	Pass
A 50 µl reaction in CutSmart® Buffer containing 1 µg of PhiX174-HaeIII DNA and a	
minimum of 50 units of AbaSI incubated for 16 hours at 25°C results in a DNA pattern	



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Assay Name/Specification	Lot # 10163211
free of detectable nuclease degradation as determined by agarose gel	Lot # 10103211
electrophoresis.	

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.

Mala-Samaranavake

Production Scientist

13 Sep 2022

Michael Tonello

Packaging Quality Control Inspector

14 Sep 2022



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