

## New England Biolabs Certificate of Analysis

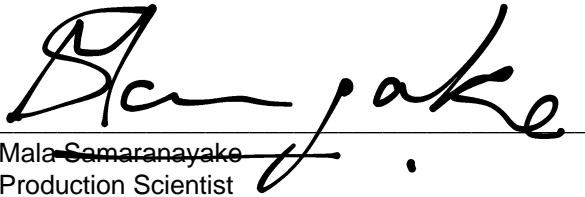
**Product Name:** *AbaSI*  
**Catalog Number:** *R0665S*  
**Concentration:** *10,000 U/ml*  
**Unit Definition:** *One unit is defined as the amount of enzyme required to digest 1 µg of T4 wild-type phage DNA (fully ghmC-modified) in 1 hour at 25°C in a total reaction volume of 50 µl.*  
**Packaging Lot Number:** *10065377*  
**Expiration Date:** *01/2022*  
**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 v2.0*

AbaSI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0665SVIAL	AbaSI	10065376	Pass
B7204SVIAL	CutSmart® Buffer	10071077	Pass
B0706SVIAL	10X DTT	10039987	Pass

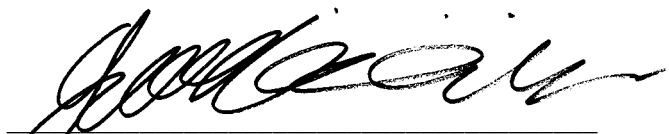
Assay Name/Specification	Lot # 10065377
<b>Exonuclease Activity (Radioactivity Release)</b> A 50 µl reaction in CutSmart® Buffer containing 1 µg of a mixture of single and double-stranded [ <sup>3</sup> H] E. coli DNA and a minimum of 100 units of AbaSI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
<b>Endonuclease Activity (Nicking)</b> A 50 µl reaction in CutSmart® Buffer containing 1 µg of supercoiled pBR322 dcm+ DNA and a minimum of 30 units of AbaSI incubated for 4 hours at 16°C results in <20% conversion to the nicked form as determined by agarose gel electrophoresis.	Pass
<b>Non-Specific DNase Activity (16 Hour)</b> A 50 µl reaction in CutSmart® Buffer containing 1 µg of T4 GT7 (dC) DNA and a minimum of 50 units of AbaSI incubated for 16 hours at 25°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
<b>Protein Purity Assay (SDS-PAGE)</b>	Pass

Assay Name/Specification	Lot # 10065377
AbaSI is $\geq 95\%$ pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	

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



Mala Samaranyake  
Production Scientist  
16 Apr 2020



Jay Minichiello  
Packaging Quality Control Inspector  
16 Apr 2020