

## 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.*  
**Lot Number:** *10030066*  
**Expiration Date:** *11/2020*  
**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	10030067	Pass
B7204SVIAL	CutSmart® Buffer	10021120	Pass
B0706SVIAL	10X DTT	0051802	Pass

Assay Name/Specification	Lot # 10030066
<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>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>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 # 10030066
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.



Tony Spear-Alfonso  
Production Scientist  
02 Nov 2018



Michael Tonello  
Packaging Quality Control Inspector  
28 Nov 2018