

## New England Biolabs Certificate of Analysis

*Product Name:* **AbaSI**  
*Catalog #:* **R0665S**  
*Concentration:* **10,000 units/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 #:* **0021605**  
*Assay Date:* **05/2016**  
*Expiration Date:* **5/2018**  
*Storage Temp:* **-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**  
*Effective Date:* **25 Jan 2016**

Assay Name/Specification (minimum release criteria)	Lot #0021605
<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.	<b>Pass</b>
<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] <i>E. coli</i> DNA and a minimum of 100 units of AbaSI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	<b>Pass</b>
<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.	<b>Pass</b>
<b>Protein Purity Assay (SDS-PAGE)</b> - AbaSI is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	<b>Pass</b>



Authorized by  
Derek Robinson  
25 Jan 2016



Inspected by  
Mala Samaranayake  
13 May 2016

