

## 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 gbmC-modified) in 1 hour at 25°C in a total reaction volume of 50 µl.*  
**Lot #:** *0021507*  
**Assay Date:** *07/2015*  
**Expiration Date:** *7/2017*  
**Storage Temp:** *-20°C*  
**Storage Conditions:** *100 mM KCl , 10 mM Tris-HCl (7.4), 1 mM DTT , 0.1 mM EDTA , 50 % Glycerol , 0.5 % Tween-20 , 0.5 % IgepalCA -630*  
**Specification Version:** *PS-R0665S v1.0*  
**Effective Date:** *27 Sep 2013*

Assay Name/Specification (minimum release criteria)	Lot #0021507
<b>Endonuclease Activity (Nicking)</b> - A 50 µl reaction in NEBuffer 4 containing 1 µg of supercoiled pBR322 dcm+ DNA and a minimum of 30 units of <i>AbaSI</i> 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 NEBuffer 4 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 <i>AbaSI</i> 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 NEBuffer 4 containing 1 µg of T4 GT7 (dC) DNA and a minimum of 50 units of <i>AbaSI</i> 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> - <i>AbaSI</i> is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	<b>Pass</b>



Authorized by  
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27 Sep 2013



Inspected by  
Mala Samaranayake  
11 Aug 2015

