**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 #:** 0021802  
**Assay Date:** 02/2018  
**Expiration Date:** 2/2020  
**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

<table>
<thead>
<tr>
<th>Assay Name/Specification (minimum release criteria)</th>
<th>Lot #0021802</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Endonuclease Activity (Nicking)</strong> - 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 &lt;20% conversion to the nicked form as determined by agarose gel electrophoresis.</td>
<td>Pass</td>
</tr>
<tr>
<td><strong>Exonuclease Activity (Radioactivity Release)</strong> - 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 37°C releases &lt;0.1% of the total radioactivity.</td>
<td>Pass</td>
</tr>
<tr>
<td><strong>Non-Specific DNase Activity (16 Hour)</strong> - 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.</td>
<td>Pass</td>
</tr>
<tr>
<td><strong>Protein Purity Assay (SDS-PAGE)</strong> - AbaSI is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.</td>
<td>Pass</td>
</tr>
</tbody>
</table>

Authorized by  
Derek Robinson  
25 Jan 2016

Inspected by  
Mala Samaranayake  
21 Mar 2018