## Assay Name/Specification (minimum release criteria)

<table>
<thead>
<tr>
<th>Assay Name/Specification</th>
<th>Specification</th>
<th>Lot #0011803</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Endonuclease Activity (Nicking)</strong> - A 50 µl reaction in SplintR® Ligase Reaction Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 125 units of SplintR® Ligase incubated for 4 hours at 37°C results in &lt;10% conversion to the nicked form as determined by agarose gel electrophoresis.</td>
<td></td>
<td>Pass</td>
</tr>
<tr>
<td><strong>Exonuclease Activity (Radioactivity Release)</strong> - A 50 µl reaction in SplintR® Ligase Reaction Buffer containing 1 µg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 125 units of SplintR® Ligase incubated for 4 hours at 37°C releases &lt;0.1% of the total radioactivity.</td>
<td></td>
<td>Pass</td>
</tr>
<tr>
<td><strong>Protein Purity Assay (SDS-PAGE)</strong> - SplintR® Ligase is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.</td>
<td></td>
<td>Pass</td>
</tr>
<tr>
<td><strong>RNase Activity (Extended Digestion)</strong> - A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 25 units of SplintR® Ligase is incubated at 37°C. After incubation for 16 hours, &gt;90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.</td>
<td></td>
<td>Pass</td>
</tr>
</tbody>
</table>

Authorized by
Derek Robinson
08 Feb 2018

Inspected by
Bo Wu
16 Mar 2018