**Product Name:** Gel Loading Dye, Purple (6X)  
**Catalog #:** B7024S  
**Concentration:** 6X Concentrate  
**Lot #:** 0221803  
**Expiry Date:** 03/2021  
**Storage Temp:** 25°C  
**Composition (1X):** 3.3 mM Tris-HCl, 10 mM EDTA, 2.5 % Ficoll® 400, 0.08 % SDS, 0.02 % Dye 1, 0.0008 % Dye 2, (pH 8.0 @ 25°C)  
**Specification Version:** PS-B7024S v1.0  
**Effective Date:** 16 Feb 2018

<table>
<thead>
<tr>
<th>Assay Name/Specification (minimum release criteria)</th>
<th>Lot #0221803</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Endonuclease Activity (Nicking)</strong> - A 50 µl reaction in CutSmart® Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 10 µl of Gel Loading Dye, Purple (6X) incubated for 4 hours at 37°C results in &lt;10% conversion to the nicked form as determined by agarose gel electrophoresis.</td>
<td>Pass</td>
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<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 10 µl of Gel Loading Dye, Purple (6X) incubated for 4 hours at 37°C releases &lt;0.1% of the total radioactivity.</td>
<td>Pass</td>
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<tr>
<td><strong>Non-Specific DNase Activity (16 Hour)</strong> - A 50 µl reaction in CutSmart® Buffer containing 1 µl of digested 2-Log Ladder DNA and a minimum of 10 µl of Gel Loading Dye, Purple (6X) incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.</td>
<td>Pass</td>
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<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 1 µl of Gel Loading Dye, Purple (6X) 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>Pass</td>
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</tbody>
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Authorized by  
Derek Robinson  
16 Feb 2018

Inspected by  
Tony Spear-Alfonso  
06 Apr 2018