AMV Reverse Transcriptase Component List

<table>
<thead>
<tr>
<th>NEB Part Number</th>
<th>Component Description</th>
<th>Lot Number</th>
<th>Individual QC Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>M0277SVIAL</td>
<td>AMV Reverse Transcriptase</td>
<td>10072041</td>
<td>Pass</td>
</tr>
<tr>
<td>B0277AVIAL</td>
<td>AMV Reverse Transcriptase Reaction Buffer</td>
<td>10072362</td>
<td>Pass</td>
</tr>
</tbody>
</table>

Assay Name/Specification

Endonuclease Activity (Nicking)
A 50 µl reaction in AMV Reverse Transcriptase Reaction Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 50 units of AMV Reverse Transcriptase incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.

Exonuclease Activity (Radioactivity Release)
A 50 µl reaction in AMV Reverse Transcriptase Reaction Buffer containing 1 µg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 50 units of AMV Reverse Transcriptase incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.

Non-Specific DNase Activity (16 Hour)
A 50 µl reaction in NEBuffer 2 containing 1 µg of T3 or T7 DNA in addition to a reaction containing Lambda-HindIII DNA and a minimum of 10 units of AMV Reverse Transcriptase incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.

RNAse Activity Assay (4 Hour Digestion)

Lot # 10074618
Pass
Pass
Pass
Pass
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<tr>
<th>Assay Name/Specification</th>
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</thead>
<tbody>
<tr>
<td>A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 1 µl of AMV Reverse Transcriptase is incubated at 37°C. After incubation for 4 hours, &gt;90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.</td>
<td></td>
</tr>
</tbody>
</table>

This product has been tested and shown to be in compliance with all specifications.

Christie Vazquez  
Production Scientist  
20 Jul 2020

Michael Tonello  
Packaging Quality Control Inspector  
20 Jul 2020