

New England Biolabs Certificate of Analysis

Product Name: AMV Reverse Transcriptase
Catalog Number: M0277S
Concentration: 10,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to incorporate 1 nmol of dTTP into an acid-insoluble form in 10 minutes at 37°C.
Packaging Lot Number: 10183868
Expiration Date: 02/2025
Storage Temperature: -20°C
Storage Conditions: 200 mM KPO₄, 2 mM DTT, 0.2 % Triton®X-100, 50 % Glycerol, (pH 7.2 @ 25°C)
Specification Version: PS-M0277S/L v2.0

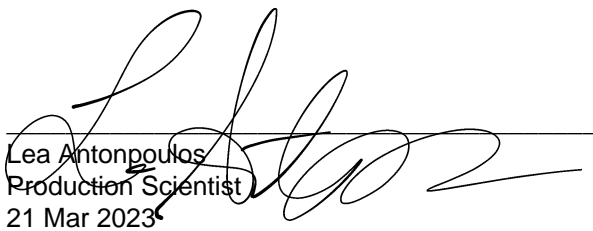
| AMV Reverse Transcriptase Component List | | | |
|------------------------------------------|-------------------------------------------|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| M0277SVIAL | AMV Reverse Transcriptase | 10179756 | Pass |
| B0277AVIAL | AMV Reverse Transcriptase Reaction Buffer | 10177226 | Pass |

| Assay Name/Specification | Lot # 10183868 |
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| <p>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.</p> | Pass |
| <p>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.</p> | Pass |
| <p>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.</p> | Pass |
| <p>RNase Activity Assay (4 Hour Digestion)</p> | Pass |

| Assay Name/Specification | Lot # 10183868 |
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| 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, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection. | |

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

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21 Mar 2023



Michael Tonello
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11 Apr 2023