

New England Biolabs Certificate of Analysis

Product Name: M-MuLV Reverse Transcriptase
Catalog Number: M0253S
Concentration: 200,000 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: 10203660
Expiration Date: 02/2025
Storage Temperature: -20°C
Storage Conditions: 50 mM Tris-HCl, 150 mM NaCl, 1 mM DTT, 0.1 mM EDTA, 0.1 % IGEPAL® CA-630, 50 % Glycerol, (pH 7.6 @ 25°C)
Specification Version: PS-M0253S/L v2.0

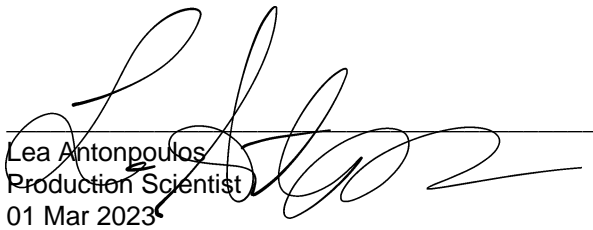
| M-MuLV Reverse Transcriptase Component List | | | |
|---|--|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| M0253SVIAL | M-MuLV Reverse Transcriptase | 10178662 | Pass |
| B0253SVIAL | M-MuLV Reverse Transcriptase Reaction Buffer | 10163751 | Pass |

| Assay Name/Specification | Lot # 10203660 |
|--|----------------|
| <p>Endonuclease Activity (Nicking) A 50 µl reaction in M-MuLV Reverse Transcriptase Reaction Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 200 units of M-MuLV 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 M-MuLV Reverse Transcriptase Reaction Buffer containing 1 µg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 200 units of M-MuLV 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 M-MuLV Reverse Transcriptase Reaction Buffer containing 1 µg of T3 or T7 DNA in addition to a reaction containing Lambda-HindIII DNA and a minimum of 200 units of M-MuLV 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 |

| Assay Name/Specification | Lot # 10203660 |
|---|--------------------|
| <p>RNase Activity Assay (2 Hour Digestion) A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 1 µl of M-MuLV Reverse Transcriptase incubated for 2 hours at 37°C results in no detectable degradation of the RNA as determined by gel electrophoresis using fluorescent detection.</p> | <p>Pass</p> |

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

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Lea Antonopoulos
Production Scientist
01 Mar 2023



Josh Hersey
Packaging Quality Control Inspector
21 Aug 2023