

New England Biolabs Certificate of Analysis

Product Name: M-MuLV Reverse Transcriptase
Catalog Number: M0253L
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: 10113987
Expiration Date: 05/2023
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
M0253LVIAL	M-MuLV Reverse Transcriptase	10111985	Pass
B0253SVIAL	M-MuLV Reverse Transcriptase Reaction Buffer	10104588	Pass

Assay Name/Specification	Lot # 10113987
<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
<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

Assay Name/Specification	Lot # 10113987
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.	Pass

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

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Production Scientist
16 Jul 2021



Michael Tonello
Packaging Quality Control Inspector
16 Jul 2021