

## 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:** 10153266  
**Expiration Date:** 03/2024  
**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	10143608	Pass
B0253SVIAL	M-MuLV Reverse Transcriptase Reaction Buffer	10131962	Pass

Assay Name/Specification	Lot # 10153266
<p><b>Exonuclease Activity (Radioactivity Release)</b>            A 50 µl reaction in M-MuLV Reverse Transcriptase Reaction Buffer containing 1 µg of a mixture of single and double-stranded [<sup>3</sup>H] E. coli DNA and a minimum of 200 units of M-MuLV Reverse Transcriptase incubated for 4 hours at 37°C releases &lt;0.1% of the total radioactivity.</p>	Pass
<p><b>RNase Activity Assay (2 Hour Digestion)</b>            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>	Pass
<p><b>Endonuclease Activity (Nicking)</b>            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 &lt;10% conversion to the nicked form as determined by agarose gel electrophoresis.</p>	Pass
<p><b>Non-Specific DNase Activity (16 Hour)</b></p>	Pass

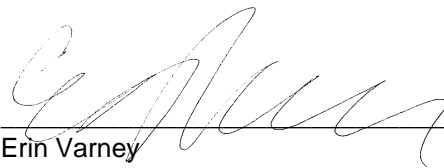
Assay Name/Specification	Lot # 10153266
A 50 µl reaction in M-MuLV Reverse Transcriptase Reaction Buffer containing 1 µg of T3 or T7 DNA in addition to a reaction containing Lambda-HindIII DNA and a minimum of 200 units of M-MuLV Reverse Transcriptase incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit [www.neb.com/trademarks](http://www.neb.com/trademarks) for additional information.



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