

# **Certificate of Analysis**

# M-MLV Reverse Transcriptase (200 U/µL)

Product No. 28025013, 10338842

Lot No. 2676859

Date of Manufacture 19-Jun-2023

Expiration Date 17-Aug-2025

#### Refractive Index

Specification: 1.40-1.41

Result: Meets specification.

# **Unit Assay**

Specification: > 200 U/µl

Result: Meets specification.

# **Lowry Protein Concentration Assay**

Specification: Specific activity must be > 280,000 U/mg.

Result: Meets specification.

# **Endonuclease Assay**

Specification:  $\leq$  20% conversion of  $\Phi$  X174RF DNA to Form II and no conversion to Form III when 1,000 actual units of enzyme are incubated for 5 hours at +37° C

Result: Meets specification.

#### **Exonuclease Assay**

Specification: ≤ 0.05% of the termini released per unit of enzyme when incubated for 1 hour at 37° C.

Result: Meets specification.

#### RNase Assay

Specification: No downward smearing below the 0.5 Kb band as compared to control lanes when 1,000 units of enzyme are incubated with 5  $\mu$ g of RNA ladder for 30 minutes at +37° C

Result: Meets specification.

#### SDS Gel Electrophoresis

Specification: At 2, 5, and 10 µg of protein, > 95% of protein is homogeneous at approximately 78,000 daltons

Result: Meets specification.

# **RNA Functional Assay**

Specification: 200 units of enzyme incubated with 2.5  $\mu$ g of 8.0 Kb RNA for 1 hour at 37° C must synthesize at least 0.2  $\mu$ g of cDNA

Result: Meets specification.

Specification:  $\geq$  10% of the cDNA must be >6Kb and  $\geq$  50% must be >3Kb when analyzed by alkaline agarose gel electrophoresis

Result: Meets specification.

For Research Use Only. Not for use in diagnostic procedures.

Thermo Fisher Scientific Life Sciences Solutions 5781 Van Allen Way Carlsbad, CA, USA 92008 https://www.thermofisher.com

For inquiries, contact us at cofarequests@thermofisher.com

Chevohn Joseph Director, Quality Issued on 22-Jun-2023