

# Certificate of Analysis

## SuperScript™ III Reverse Transcriptase

Product No. 18080093, 10432122

Lot No. 2907257

Date of Manufacture 17-May-2024

Expiration Date 13-Nov-2025

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### Refractive Index

Specification: 1.40 - 1.41

Result: Meet specifications.

### Unit Assay

Specification: 200-270 U/μl

Result: Meets specification.

### Specific Activity

Specification: Must be  $\geq$  280,000 U/mg.

Result: Meets specification.

### Endonuclease Assay

Specification:  $\leq$ 20% conversion of 1μg of ΦX174RF DNA to Form II and no conversion to Form III when incubated for 5 hours at 37°C.

Result: Meets specification.

### Exonuclease Assay

Specification: With 1 pmole of relevant substrate and incubated for 1 hour at 37°C, enzyme demonstrates an absence of exonuclease activity.

Result: Meets specification.

## RNAse Assay

Specification: When 1,000 units of enzyme are incubated with 5 µg of RNA ladder at 37°C for 30 minutes, there must be no downward smearing below the 0.5 kb band as compared to the control.

Result: Meets specification.

## Purity

Specification: When analyzed by SDS-PAGE,  $\geq 95\%$  of the protein at 10 µg must be homogeneous at approximately 78,000 daltons.

Result: Meets specification.

## RNA Functional Assay

Specification: 200 units of enzyme incubated with 1.5 µg of 8.0 kb RNA for 1 hour at 45°C must synthesize  $\geq 65\%$  cDNA.  $\geq 45\%$  of the cDNA must be  $\geq 6$  kb when analyzed by alkaline agarose gel electrophoresis.

Result: Meets specification.

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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](mailto:cofarequests@thermofisher.com)



Chevoyn Joseph  
Director, Quality  
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