

Certificate of Analysis

SuperScript™ III Reverse Transcriptase

Product No. 18080044, 10368252

Lot No. 3021082

Date of Manufacture 04-Oct-2024

Expiration Date 04-Jan-2026

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, ≥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 ≥65% cDNA. ≥45% of the cDNA must be ≥6 kb 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 07-Oct-2024