

# **Certificate of Analysis**

# SuperScript<sup>™</sup> III Reverse Transcriptase

Product No.	180800	044, 10368252
	Lot No.	2953254
Date of Manufa	Date of Manufacture	
Expiration	Date	04-Jan-2026

## **Refractive Index**

Specification: 1.40 - 1.41

Result: Meet specifications.

#### **Unit Assay**

Specification: 200-270 U/µI

Result: Meets specification.

**Specific Activity** 

Specification: Must be > 280,000 U/mg.

Result: Meets specification.

#### Endonuclease Assay

Specification:  $\leq 20\%$  conversion of 1µg of  $\Phi$ X174RF 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  $\mu$ g 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  $\mu$ g 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.

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