

Certificate of Analysis

Thunder™ reverse transcriptase

Product Number: 7100
Lot Number: 221227AL
Assay Date: 01/23
Expiration Date: 01/25
Storage Temperature: -20°C
Storage Buffer: 50% glycerol, 50 mM Tris-HCl, 50 mM KCl, 1 mM EDTA, 1 mM DTT, pH 7.5
Specification Version: DM-Thunder-v1.0

Warning: This product is distributed for laboratory research use only. **Caution: Not for diagnostic use.** The safety and efficacy of this product in diagnostic or other clinical uses has not been established.

Unit Activity: A known reverse transcriptase is used to create a standard curve with a reverse-transcription quantitative PCR assay against which the activity of this enzyme is measured.

Recommended concentration for LAMP assay: 12 U/25 µL reaction.

Physical Purity: Purified to > 95% homogeneity as determined by SDS-PAGE analysis using Coomassie Blue detection.

DNase contamination: A fluorescent probe-based detection kit is used to test for DNase contamination.
Specification: Below the lower limit of detection (1×10^{-4} U DNase I activity) in >36 U (3 rxns) for 25 minutes at 37 °C.

RNase contamination: A fluorescent probe-based detection kit is used to test for RNase contamination.
Specification: Below the lower limit of detection (2 pg RNase A activity) in >36 U (3 rxns) for 25 minutes at 37 °C.

DNA contamination: A nucleic acid stain-based kit is used to quantify contaminating DNA.
Specification: <0.05 ng/12 U (1 rxn).

Product meets all specifications.

SIGNATURE: 

Date: Jan 18, 2023