Certificate of Analysis



DirecTaq[™] DNA polymerase

Product Number: 2001

Lot Number: P221201PB
Assay Date: 03/23
Expiration Date: 03/25
Storage Temperature: -20 °C

Storage Buffer: 50% glycerol, 50 mM Tris-HCl, 50 mM KCl, 1 mM DTT, 0.1 mM EDTA, 0.5% Tween-20, 0.5% NP-40

Substitute, pH 7.5

Specification Version: DM-DirectTaq-v1.1

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 polymerase is used to create a standard curve with a real-time qPCR assay against which the activity of this enzyme is measured.

Recommended concentration for PCR: 1.25 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 $(1x10^{-4} \text{ U DNase I activity})$ in 5 Units 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 (1 pg RNase A activity) in 1.25 Units for 25 minutes at 37 °C.

DNA contamination: A nucleic acid stain-based kit is used to quantify contaminating DNA.

Specification: <0.05 ng in 1.25 U.

Product meets all specifications.

SIGNATURE: Date: Mar 13, 2023