

Certificate of Analysis

DirecTaq™ DNA polymerase 1X Master Mix

Product Number: 2200
Lot Number: P230313AL
Assay Date: 04/23
Expiration Date: 04/25
Storage Temperature: -20 °C
Storage Buffer: 10 mM Tris-HCl, 1.5 mM MgCl₂, 50 mM KCl, 0.1% Triton X-100, 15% Sucrose, 0.0268% Orange G, 0.0022% Xylene cyanol FF.
Specification Version: DM-DirectTaqMM-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: DirecTaq 1X Master Mix contains 3.25 U of DirecTaq. A known polymerase is used to create a standard curve with a real-time primer extension assay against which the activity of this enzyme is measured.

Reagent Testing: DirecTaq 1X Master Mix is tested in standard 25 µL PCR for amplification of several targets from human genomic DNA and 16S rRNA colony PCR of *Escherichia coli* and colony PCR of *Streptomyces rimosus*.

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 3.25 Units of DirecTaq 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 3.25 Units of DirecTaq 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 3.25 U of DirecTaq.

Product meets all specifications.

SIGNATURE:



Date: Apr 17, 2023