Certificate of Analysis

Promega

Plexor® HY System, 200 reactions

Cat.# DC1001 **Lot# 0000376906**

Cat.# DC1001 provides sufficient reagents to perform 200 reactions. Includes:

Part#	Name	Size
DP120A	Plexor® HY 2X Master Mix	2 × 1ml
DK716A	Plexor® HY 20X Primer/IPC Mix	200µl
DD149A	Plexor® HY Male Genomic DNA Standard, 50ng/µl	150µl
DW099A	Water, Amplification Grade	2 × 1.25ml

Instructions for use of this product can be found in the Plexor® HY System for the Applied Biosystems 7500 and 7500 FAST Real-Time PCR Systems Technical Manual #TM293, available at: **www.promega.com/protocols**
Instructions for use with other real time instruments are available at: **www.promega.com/plexorhy**

Forensic Grade: The Plexor® HY System and all system components were manufactured in accordance with ISO 18385:2016.

Storage Conditions: Store at –30°C to –10°C.

Expiration Date: See product label for expiration date.

Quality Control Assays

This lot passes the following Quality Control specifications:

Amplification of standard curve: The Plexor® HY System is tested in amplification of a standard curve using an Applied Biosystems 7500 Real-Time PCR System. Three replicate samples of the Plexor® HY Male Genomic DNA Standard are amplified at concentrations of 0.016, 0.08, 0.4, 2, 10 and 50 ng/µl. Both the autosomal (Fluorescein) and Y-specific (CAL Fluor® Orange 560) amplifications must meet the following specifications for linearity, specificity and efficiency:

Primer set	Autosomal	Y
Slope	–3.5 ± 0.3	–3.3 ± 0.3
Y-Intercept	23.3 ± 1 cycle	24.2 ± 1 cycle
R^2	≥0.990	≥0.990
Melt temperature	80.2 ± 1.5°C	81.7 ± 1.5°C

Human DNA Contamination: Sixteen replicate no-template control (NTC) samples are tested in the Plexor® HY System. The Water, Amplification Grade, is tested in 24 replicate NTC samples. All replicate samples must have no quantification cycle (C_q) value or a C_q value greater than the average C_q value for the 0.5pg/µl of the Plexor® HY Male Genomic DNA Standard samples.

Amplification of Internal Positive Control (IPC): The IPC must amplify in at least 12 of 16 no-template control (NTC) replicates.

The Plexor® HY 2X Master Mix (Part# DP120), Plexor® HY 20X Primer/IPC Mix (Part# DK716) and Plexor® HY Male Genomic DNA Standard (Part # DD149) also are tested in amplification of a standard curve using an Applied Biosystems 7500 Real-Time PCR System.

Sensitivity: The Plexor® HY Male Genomic DNA Standard is detected at 3.2pg/µl when tested alongside the standard curve listed above. Detection is determined by the presence of amplified product, as defined by a detectable C_q value, with the appropriate melt temperature.

Male Genomic DNA Standard: Quantitation of the Plexor® HY Male Genomic DNA Standard is compared to quantitation of a reference lot for consistency.

Signed by:
R. Wheeler, Quality Assurance

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