| Product Information | |
|---|---|
| **qScript® 1-Step qRT-PCR Kit** | |
| **Part Number** | 95057-200 |
| **Number of Reactions** | 200 Reactions |
| **Reaction Size** | 50 µL |
| **Storage Temperature** | -25°C to -15°C |
| **Lot Number** | 66263610 |
| **Reference Number** | 102023, 090723 |
| **Expiration Date** | 09/30/2026 |

**Component Part Numbers:**
**84022 qScript 1-Step RT 0.05 mL**
**84024 1-Step Master Mix (2X) 1.25 mL**
**84007 Nuclease Free Water 1.5 mL**

**Product Description:**
The qScript One-Step qRT-PCR Kit is a convenient and highly sensitive solution for reverse transcription quantitative PCR (RT-qPCR) of RNA templates using hybridization probe detection chemistries such as TaqMan(r) 5'-hydrolysis probes. cDNA Synthesis and PCR amplification are carried out in the same tube without opening between procedures. The system has been optimized to deliver maximum RT-PCR efficiency, sensitivity, and specificity, enabling unbiased co-amplification of low copy transcripts in the presence of higher copy reference genes. The proprietary reaction buffer has been specifically formulated to maximize activities of both reverse transcriptase and Taq DNA polymerase while minimizing the potential for primer-dimer and other non-specific PCR artifacts.

| Product Specifications | | | |
|---|---|---|---|
| 95057 | | | |
| **Assay** | **qScript 1 Step qRT-PCR Functional Assay** | **DNase** | **RNase** |
| **Result** | Pass | Pass | Pass |

**Quality Control Analysis and Specifications:**

**Nuclease Assay:**

**DNase:** DNase activity must be below the detectable limits of 100 pg DNase I equivalent as assayed using a fluorogenic substrate following a 1 hour incubation at 37°C with each kit component at 1X concentration.

**RNase:** RNase activity must be below the detectable limits of 1 pg RNase A equivalent as assayed using a fluorogenic substrate following a 1 hour incubation at 37°C with each kit component at 1X concentration.

**qScript 1-Step qRT-PCR Functional Assay:** Detection of ACTB gene from 1.0 pg to 1.0 µg of UHR RNA. Ct standard curve analysis must have a coefficient of determination $R^2 \geq 0.990$ with a slope between -3.20 and -3.65. No template controls below threshold for at least two replicates.