

| Product Information    |  |
|------------------------|--|
| qScript® Flex cDNA Kit |  |
| Part Number            | 95049-025                              |
| Number of Reactions    | 25 Reactions                           |
| Reaction Size          | 20 µL                                  |
| Storage Temperature    | -25°C to -15°C                         |
| Lot Number             | 66270431                               |
| Reference Number       | 111723, 091224, 102022, 110222, 112124 |
| Expiration Date        | 11/30/2025                             |

**Product Description:**

The qScript Flex cDNA Synthesis Kit is configured in separate components for supporting multiple RT priming strategies. The kit provides optimized, flexible components for priming with oligo-dT(20), random hexamers, gene-specific primer (GSP), or any combination thereof. This unique 5X master mix of buffer, magnesium, stabilizers and dNTPs simplifies reaction assembly and ensures robust and reproducible synthesis of first strand product from 10 pg to 4µg of total RNA or purified polyA+ RNA template. The resulting cDNA product is directly compatible with current real-time RT-PCR methods or end-point RT-PCR. Length of cDNA product is dependent upon priming strategy and quality of the RNA template. Oligo dT or GSP can be used for two-step RT-PCR of RNA targets up to 12 kb. Random primer is suitable for RT-PCR of RNA targets less than 1 kb. Any of the three priming methods are suitable for real-time quantitative RT PCR (RT-qPCR).

**Component Part Numbers:**

84001 qScript RT 0.025 mL

84039 5X qScript Flex Reaction Mix 0.10 mL

84040 Oligo dT 0.050 mL

84041 Random Primer 0.050 mL

84042 GSP Enhancer 0.050 mL

84007 Nuclease Free Water 1.50 mL

| Product Specifications |                                   |  |       |       |
|------------------------|-----------------------------------|--|-------|-------|
| 95049                  |                                   |  |       |       |
| Assay                  | Functional PCR Assay for Flex Kit | β-actin SYBR Green qRT-PCR Assay for qScript Reverse Transcriptase | DNase | RNase |
| Result                 | Pass                              | Pass   | Pass  | Pass  |

**Quality Control Analysis and Specifications:**

**Functional PCR Assay for Flex Kit Reaction Mix (5X):** Detection of β-actin mRNA from 100 ng to 100 fg of total RNA. Coefficient of determination ( $R^2$ ) ≥ 0.990 with a slope analysis between -3.20 and -3.70

Single bands visible at 6kb and 8kb from 35 cycles of PCR using 100 ng Oligo-dT cDNA

**β-actin SYBR Green qRT-PCR Assay for qScript Reverse Transcriptase:** Detection of β-actin mRNA from 100ng to 100fg of total RNA. Coefficient of determination ( $R^2$ ) ≥ 0.990 with a slope analysis between -3.20 and -3.70

**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.

**Limitations of Use**

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