# Quantabio

| Product Information                       |               |  |  |
|---|---------------|--|--|
| qScript <sup>®</sup> cDNA SuperMix        |               |  |  |
| Part Number 95048-500                     |               |  |  |
| Number of Reactions                       | 500 Reactions |  |  |
| Reaction Size                             | 20 μL         |  |  |
| <b>Storage Temperature</b> -25°C to -15°C |               |  |  |
| Lot Number                                | 66272064      |  |  |
| Reference Number                          | 022123        |  |  |
| Expiration Date                           | 12/31/2025    |  |  |

### Product Specifications 95048-500 Rev 01

## Product Description:

qScript cDNA SuperMix is a 5X concentrated, sensitive, and easy-to-use 1-tube reagent for first-strand cDNA synthesis that combines a highly-modified RNAse H+ mutant of M-MLV together with ribonuclease inhibitor protein (RIP) in a rigorously optimized formulation for real-time qPCR applications. The stabilized SuperMix formulation has been rigorously optimized to deliver sensitive, linear assay performance across a spectrum of relative abundance and input RNA (10pg - 1ug). qScript cDNA SuperMix reagent performance is unaffected by repetitive freeze/thaw cycling (>20X), conferring greater ease-of-use and consistent assay performance. Oligo (dT) and random primers are preblended in a precise ratio to provide equal representation of 5' and 3'-sequences for accurate gene expression quantification.

## <u>Component Part Numbers:</u> 84035 qScript cDNA SuperMix, 1000 μL

| Product Specifications |                                     |       |       |
|------------------------|-------------------------------------|-------|-------|
| 95048                  |                                     |       |       |
| Assay                  | cDNA SuperMix Functional qPCR 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.

**cDNA SuperMix Functional qPCR Assay:** First-strand synthesis is performed on a 10-fold serial dilution over 6 orders of dynamic range (1  $\mu$ g to 1 pg) using a Universal Reference total RNA preparation. One tenth of each first strand reaction is used as template for real-time PCR of a reference gene in duplicate reactions. Cq standard curve analysis must have coefficient of determination (r<sup>2</sup>)  $\geq$ 0.990 with a slope between -3.20 and -3.70.

#### Limitations of Use

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This product was developed, manufactured, and sold for *in vitro* use only. The product is not suitable for administration to humans or animals. SDS sheets relevant to this product are available upon request. 100 Cummings Center, Suite 407J, Beverly, MA 01915 • Ph (888) 927-7027 • Fax (978) 867-5724 • <u>www.QuantaBio.com</u> FMWI016.2 Rev 01