



| Product Information    |                |  |
|------------------------|----------------|--|
| qScript® cDNA SuperMix |                |  |
| Part Number            | 95048-500      |  |
| Number of Reactions    | 500 Reactions  |  |
| Reaction Size          | 20 μL          |  |
| Storage Temperature    | -25°C to -15°C |  |
| Lot Number             | 66196924       |  |
| Reference Number       | 102521         |  |
| Expiration Date        | 12/31/2022     |  |

#### **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.

### **Component Part Numbers:**

84035 qScript cDNA SuperMix, 1000 μL

| Product Specifications |  |        |        |
|------------------------|--|--------|--------|
| 95048                  |  |        |        |
| Assay                  | cDNA SuperMix Functional gPCR Assay      | DNase  | RNase  |
| Assay                  | CDIVA Superività Futictional quett Assay | Divase | Milase |

## **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 ( $r^2$ )  $\geq$ 0.990 with a slope between -3.20 and -3.70.

### **Limitations of Use**

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