# Quantabio

Product Information			
qScript <sup>®</sup> cDNA SuperMix			
95048-100			
100 Reactions			
20 μL			
-25ºC to -15ºC			
66161691			
040218			
03/31/2012			

### Product Specifications 95048-100 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). gScript 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. For gene-specific priming (GSP) or two-step RT-PCR of RNA exceeding 1kb total length, see our qScript Flex cDNA Kit.

Product Specifications				
95048				
Assay	cDNA SuperMix Functional qPCR Assay	DNase	RNase	
Result	Pass	Pass	Pass	

## **Quality Control Analysis and Specifications:**

**Nuclease Assay:** 

**Component Part Numbers:** 

84034 qScript cDNA SuperMix, 400µL

**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