# Quantabio

Product Information			
qScript <sup>®</sup> cDNA SuperMix			
Part Number	95048-025		
Number of Reactions	25 Reactions		
Reaction Size	20 μL		
Storage Temperature	-25ºC to -15ºC		
Lot Number	ber 66249693		
Reference Number	083122		
Expiration Date	03/31/2025		

## Product Specifications 95048-025 Rev 02

## 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. 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:** 

84033 qScript cDNA SuperMix, 100 μL

**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>) ≥0.990 with a slope between -3.20 and -3.70.

### Limitations of Use

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