



Product Information			
qScript® cDNA SuperMix			
Part Number	95048-100		
Number of Reactions	100 Reactions		
Reaction Size	20 μL		
Storage Temperature	-25°C to -15°C		
Lot Number	66265214		
Reference Number	022123		
Expiration Date	09/30/2025		

#### **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.

## Component Part Numbers: 84034 qScript cDNA SuperMix, 400μL

Product Specifications			
95048			
	D. 1. 0. 1. 1. 1. D. 0. 1.		501
Assay	cDNA SuperMix Functional qPCR Assay	DNase	RNase

# **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

Quantabio, UltraPlex, qScript, GelTrack, ToughMix, PerfeCTa, and FastMix are registered trademarks of Quantabio, LLC. Applied Biosystems, StepOne, StepOnePlus and ROX are trademarks of Thermo Fisher Scientific and or its subsidiaries. Please contact Quantabio for more information.

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.