



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	66282820	
Reference Number	061325	
Expiration Date	06/30/2026	

#### **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			
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

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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.