Product Information	
qScript™ cDNA Synthesis Kit	
Part Number	95047-100
Number of Reactions	100 Reactions
Reaction Size	20 µL
Storage Temperature	-25ºC to -15ºC
Lot Number	028000
Reference Number	042517, 062818
Expiration Date	06/30/2021

Product Description:
The qScript cDNA Synthesis Kit is a sensitive and easy-to-use solution for RNA quantification using two-step RT-PCR. The novel qScript Reaction Mix provides all the necessary components for cDNA synthesis except enzyme and RNA template. The optimized blend of random and oligo(dT) primers provides robust, consistent and unbiased first-strand synthesis over a broad range of RNA template concentrations. qScript reverse transcriptase is a mixture of an engineered MMLV RT and a ribonuclease inhibitor protein. The simplified reaction procedure is ideally suited for high throughput expression studies using real-time quantitative RT-PCR. The resulting cDNA product is directly compatible with current real-time PCR methods or conventional end-point RT-PCR of targets ≤1 kb in length.

Component Part Numbers:
84002 qScript RT 0.10 mL
84005 qScript Reaction mix (5X) 0.40 mL
84007 Nuclease-Free Water 1.5 mL

Product Specifications					
95047					
Assay	**cDNA SuperMix Functional qPCR Assay**	**β-actin SYBR Green qRT-PCR Assay**	**DNase**	**RNase**	**pH**
Result	Pass	Pass	Pass	Pass	Pass

Quality Control Analysis and Specifications:
cDNA SuperMix Functional qPCR Assay: Detection of ß actin mRNA from 100 ng to 100 fg of total RNA. The Cq standard curve analysis must have a coefficient of determination (R^2) ≥ 0.990 with a slope between -3.20 to -3.70

β-actin SYBR Green qRT-PCR Assay for qScript Reverse Transcriptase: Detection of ß actin mRNA from 100 ng to 100 fg of total RNA. The Cq standard curve analysis must have a coefficient of determination (R^2) ≥ 0.990 with a slope between -3.20 to -3.70

pH: Measured pH of 1X concentrated qScript Reaction Mix at ambient temperature (20-22°C) must be 8.45 ± 0.1.

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.

Limitations of Use

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.