Quantabio

| Product Information | | | |
|--|---|--|--|
| qScript [®] MicroRNA cDNA Synthesis | | | |
| Part Number | 95107-100 | | |
| Number of Reactions | 100 Reactions | | |
| Reaction Size | 20 μL | | |
| Storage Temperature | -25ºC to -15ºC | | |
| Lot Number | 027335 | | |
| Reference Number | 22619, 061217, 051717, 042618, 160550828, 191716390 | | |
| Expiration Date | 04/30/2020 | | |

Product Specifications 95107-100 Rev 01

Product Description:

The qScript microRNA cDNA Synthesis Kit is an optimized reagent system that reverse transcribes small singlestranded RNA into 5'-labeled cDNA using either total RNA or miRNA enriched samples.

Single-stranded RNA is first polyadenylated by poly(A) polymerase before reverse transcription into universal cDNA using high performance *qScript* RT with a proprietary adapter oligo(dT) primer. The universal cDNA template enables simple and cost-effective microRNA profiling when used together with wet-lab validated PerfeCTa microRNA Assays, PerfeCTa Universal PCR Primer and PerfeCTA SYBR Green SuperMix.

<u>Component Part Numbers:</u> 84002 qScript RT 0.10 mL

84173 Poly (A) Tailing Buffer (5X) 84175 Poly (A) Polymerase 84177 MicroRNA cDNA Reaction Mix 84179 PerfeCta Universal PCR Primer 84181 PerfeCta Human Positive Control Primer 84007 Nuclease Filled Water 1.50 mL

| Product Specifications | | | | |
|------------------------|-------------------------------------|---|-------|-------|
| 95107 | | | | |
| Assay | qScript microRNA cDNA Synthesis Kit | β-actin SYBR Green qRT-PCR Assay for qScript Reverse Transcriptase | DNase | RNase |
| Result | Pass | Pass | Pass | Pass |

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.

qScript microRNA cDNA Synthesis Kit Must have detection of microRNA from 100 ng to 10 pg. Correlation of determination $(R^2) \ge 0.990$ from Ct standard curve analysis. Slope from Ct standard curve analysis between -3.20 and -3.75. The +PAP reactions must show a \ge 11 Ct difference from the "no-PAP" reactions. There must be at least three negative template controls with "undetermined" values.

β-actin SYBR Green qRT-PCR Assay for qScript Reverse Transcriptase: Detection of β-actin mRNA from 100ng to 100fg of total RNA. Coefficient of determination (R^2) ≥ 0.990 with a slope analysis 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