# Quantabio

Product Information			
qSCript 1-Step SYBR Green qRT-PCR Kit			
95087-200			
200 Reactions			
25 μL			
-25ºC to -15ºC			
66198496			
012921, 071321			
01/31/2024			

## Product Description:

The qScript One-Step SYBR Green RT-qPCR Kit is a convenient and highly sensitive solution for quantitative RT-PCR of RNA templates (RT-qPCR) using SYBR Green I dye detection and gene-specific primers. cDNA synthesis and PCR amplification are carried out in the same tube without opening between procedures. The proprietary reaction buffer has been specifically formulated to maximize activities of both reverse transcriptase and Taq DNA polymerase while minimizing the potential for primer-dimer and other non-specific PCR artifacts. This reagent is compatible with both fast and standard qPCR cycling protocols. Precise amplification is essential for successful RT-qPCR with SYBR Green I technology since this dye binds to all dsDNA generated during amplification.

Component Part Numbers: 84023 qSCript 1-Step RT 0.20 mL 84139 1-Step SYBR Green MasterMix 1.25 mL 84007 Nuclease Filled Water 1.50 mL

Product Specifications			
95087			
Assay	GAPDH qScript 1-Step RT PCR Functional Assay	DNase	RNase
Result	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.

**GAPDH qScript 1-Step RT PCR Functional Assay:** Detection of GAPD gene from 1.0 pg to 100 ng of Universal Human Reference RNA. Correlation of determination ( $R^2$ )  $\ge$  0.990 from Ct standard curve analysis. Slope from Ct standard curve analysis between -3.20 and -3.65. No Template controls below threshold: Not detected or produced non-specific product < 1 pg standards (Melt Curve Analysis Results) for at least two replicates.

#### 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