# Quantabio

Product Information			
PerfeCTa <sup>®</sup> qPCR SuperMix			
Part Number	95050-02K		
Number of Reactions	2000 reactions		
Reaction Size	50 μL		
Storage Temperature	-25°C to -15°C		
Lot Number	66175251		
Reference Number	122220		
Expiration Date	12/31/2023		

### Product Description:

PerfeCTa qPCR SuperMix is a 2X concentrated, ready-to-use reaction cocktail that contains all components, except primers, probe(s), and template for real-time quantitative PCR systems. The proprietary buffer and stabilizers have been specifically optimized to deliver maximum PCR efficiency, sensitivity, and robust fluorescent signal with TaqMan® or TaqMan MGB probe chemistry. The enhanced specificity of this supermix suppresses cross-reactivity between homologous sequences, improving detection and discrimination in SNP applications. A key component of this supermix is AccuStart<sup>™</sup> Tag DNA polymerase, which contains monoclonal antibodies that bind to the polymerase and keep it inactive prior to the initial PCR denaturation step. Upon heat activation (2 minutes at 95°C), the antibodies denature irreversibly, releasing fully active, unmodified Taq DNA polymerase. This enables specific and efficient primer extension with the convenience of room temperature reaction assembly.

## <u>Component Part Numbers:</u> 84009 PerfeCta qPCR SuperMix 50.0 mL

Product Specifications			
95050			
Assay	qPCR ß-actin Plasmid DNA 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.

**qPCR β**-actin Plasmid DNA Functional Assay: Detection of  $\beta$ -actin from 10 copies to 1 x 10<sup>7</sup> copies. Correlation of determination ( $R^2$ )  $\ge$  0.990 from Ct standard curve analysis. Slope from Ct standard curve analysis between -3.20 and -3.70.

#### Limitations of Use

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