



Product Information		
PerfeСта® qPCR SuperMix		
Part Number	95050-02K	
Number of Reactions	2000 reactions	
Reaction Size	50 μL	
Storage Temperature	-25°C to -15°C	
Lot Number	66245434	
Reference Number	083023	
Expiration Date	08/31/2026	

#### **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™ 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 Tag DNA polymerase. This enables specific and efficient primer extension with the convenience of room temperature reaction assembly.

# Component Part Numbers: 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 β-actin from 10 copies to 1 x  $10^7$  copies. Correlation of determination ( $R^2$ )  $\geq 0.990$  from Ct standard curve analysis. Slope from Ct standard curve analysis between -3.20 and -3.70.

#### **Limitations of Use**

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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.