Product Information	
PerfeCTa® qPCR SuperMix	
Part Number	95050-500
Number of Reactions	500 reactions
Reaction Size	50 µL
Storage Temperature	-25ºC to -15ºC
Lot Number	66140773
Reference Number	102018
Expiration Date	11/30/2021

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™ Taq 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.

Component Part Numbers:

84008 PerfeCTa qPCR SuperMix 1.25mL

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 ß-actin Plasmid DNA Functional Assay: Detection of β-actin from 10 copies to 1 x 10^7 copies. Correlation of determination (R^2) ≥ 0.990 from Ct standard curve analysis. Slope from Ct standard curve analysis between -3.20 and -3.70.