

| Product Information                        |                |
|--|----------------|
| <b>PerfeCta SYBR Green SuperMix for iQ</b> |                |
| Part Number                                | 95053-500      |
| Number of Reactions                        | 500 Reactions  |
| Reaction Size                              | 50 $\mu$ L     |
| Storage Temperature                        | -25°C to -15°C |
| Lot Number                                 | 022298         |
| Reference Number                           | 120716         |
| Expiration Date                            | 12/31/2019     |

**Product Description:**

PerfeCta SYBR Green SuperMix is a user-friendly, 2X concentrated reaction mix that simplifies setup and reduces errors with optimized reference dye and pre-blended AccuVue plate loading dye for visual confirmation of reagent addition and mixing. This proprietary buffer technology stabilizes a high concentration of SYBR Green I dye to ensure maximum optical signal with low abundance or small targets (such as microRNA). Successful detection with a non-specific, dsDNA intercalating dye requires precise target amplification as off-target primer elongation will contribute to overall fluorescent signal and lead to over-reported relative abundance values. This reagent is powered by a highly-processive, ultra-pure Taq DNA polymerase mutant with stringent, ultra-pure AccuStart™II antibody hot start technology that allows ambient room-temperature setup and maximal enzyme kinetics after rapid, irreversible denaturation at 95°C.

**Component Part Numbers:**

84014 PerfeCta SYBR Green SuperMix, for iQ 1.25 mL

| Product Specifications |  |       |       |
|------------------------|--|-------|-------|
| 95053                  |  |       |       |
| Assay                  | qPCR $\beta$ -actin Plasmid DNA Functional Assay for SYBR Green SuperMix | 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  $\beta$ -actin Plasmid DNA Functional Assay for SYBR Green SuperMix:** Detection of  $\beta$ -actin from 10 copies to  $1 \times 10^7$  copies. The Cq standard curve analysis must have a coefficient of determination ( $R^2$ )  $\geq$  0.990 with a slope between -3.20 to -3.65

**Limitations of Use**

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