

Product Specifications 95054-02K Rev 02

| Product Information | | | |
|--------------------------------|----------------|--|--|
| PerfeСта® SYBR® Green SuperMix | | | |
| Part Number | 95054-02K | | |
| Number of Reactions | 2000 reactions | | |
| Reaction Size | 50 μL | | |
| Storage Temperature | -25°C to -15°C | | |
| Lot Number | 66287465 | | |
| Reference Number | 091724 | | |
| Expiration Date | 09/30/2027 | | |

Product Description:

PerfeCTa SYBR Green SuperMix is a user-friendly, 2X concentrated reaction mix that simplifies setup for optimized performance on qPCR systems that do not require an internal reference dye. 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 overreported 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:

95054-02K PerfeCta SYBR Green SuperMix, 50mL

| Product Specifications | | | | |
|------------------------|---|-------|-------|--|
| 95054 | | | | |
| Assay | qPCR ß 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 β actin Plasmid DNA Functional Assay for SYBR Green SuperMix: Real-time PCR detection of log-fold serial dilutions of a control DNA from 10 copies to 1 x 10^7 copies. Cq standard curve analysis must have coefficient of determination (r^2) \geq 0.990 with a slope between -3.20 and -3.65.

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.

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