Product Description:
PerfeCTa SYBR Green SuperMix low ROX 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:
84020 PerfeCTa SYBR Green SuperMix Low ROX 1.25mL

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 for SYBR Green SuperMix and SYBR Green FastMix: Detection of ß-actin from 10 copies to 1 x 10⁷ copies. The Coefficient of Determination (r²) ≥ 0.990 with a slope analysis between -3.20 and -3.65