PCR denaturation step (>48 hours at room temperature). Similar to our AccuStart™ Taq DNA polymerase, these antibodies are irreversibly inactivated during the initial PCR denaturation step. However, unlike other antibody hot-start polymerases, activation of AccuFast Taq is instantaneous at 95°C. Rapid recovery of fully active, unmodified Taq DNA polymerase is critical for efficient extension kinetics. Replication of fragments up to 200 bp is complete in less than 20s at 60°C. Additionally, the dNTP mix in this FastMix contains dUTP in place of dTTP. Inclusion of uracil-N-glycosylase (UNG) prevents amplification of carry-over contamination from previous dU-containing PCRs.

**Component Part Numbers:**
84077: PerfeCta qPCR FastMix, UNG (2X)

**Quality Control Analysis and Specifications:**
**Real-time quantitative PCR:** Real-time PCR detection of log-fold serial dilutions of a control DNA from 10^7 to 10 copies. Cq standard curve analysis must have coefficient of determination (r^2) ≥0.990 with a slope between −3.20 and −3.60.

**DNase:** Detectable 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:** Detectable 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.

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