

Product Information			
PerfeCτa® SYBR® Green FastMix®, Low ROX™			
Part Number	95074-05K		
Number of Reactions	5000 Reactions		
Reaction Size	20 μL		
Storage Temperature	-25°C to -15°C		
Lot Number	66294544		
Reference Number	111425		
<b>Expiration Date</b>	07/31/2028		

#### **Product Description:**

PerfeCTa SYBR Green FastMix Low ROX is a 2X concentrated, ready-to-use reaction cocktail that contains all components, except primers and DNA template. This rigorously optimized master mix contains of proprietary buffer technology, stabilizers and AccuFast Taq DNA polymerase to deliver maximum assay precision, sensitivity, and PCR efficiency for accelerated or conventional thermal cycling conditions for SYBR Green detection. Dye-based detection methods are critically dependent on highly specific amplification because dsDNA dyes will bind to any amplicon, including off-target primer elongation and primer dimerization. AccuFast hot start Taq DNA polymerase contains a proprietary mixture of ultra-pure monoclonal antibodies that stringently suppress primer elongation prior to the initial PCR denaturation step and allows for setup and multi-day storage at ambient room temperature prior to thermal cycling. AccuFast provides rapid release of fully active enzyme to support accelerated thermal cycling conditions.

# Component Part Numbers: 95074-05K PerfeCta SYBR Green FastMix, Low ROX, 50mL

Product Specifications			
95074			
Assay	qPCR B-actin Plasmid DNA Functional Assay SYBR Green Fast Mix	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 B-actin Plasmid DNA Functional Assay SYBR Green Fast Mix: Detection of  $\beta$ -actin from 10 copies to 1 x 10<sup>7</sup> copies. The Cq standard curve analysis must have a coefficient of determination ( $R^2$ )  $\geq$  0.990 with a slope between -3.20 to -3.70

#### 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.