Product Specifications 95076-05K Rev 01

<table>
<thead>
<tr>
<th>Product Information</th>
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<tr>
<td>PerfeCTa qPCR FastMix, UNG</td>
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<tr>
<td>Part Number</td>
</tr>
<tr>
<td>Number of Reactions</td>
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<tr>
<td>Reaction Size</td>
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<tr>
<td>Storage Temperature</td>
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<tr>
<td>Lot Number</td>
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<tr>
<td>Reference Number</td>
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<tr>
<td>Expiration Date</td>
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Product Description:
PerfeCTa qPCR FastMix, UNG is a 2X concentrated, ready-to-use reaction cocktail that contains all components, except primers, probe(s), and template for real-time quantitative PCR systems that do not require an internal reference dye. The proprietary buffer and stabilizers have been specifically optimized to deliver maximum PCR efficiency, sensitivity, and robust fluorescent signal with TaqMan® or TaqMan MGB probe chemistry when using rapid PCR cycle times and reduced reaction volumes. This affords greater reagent economy and laboratory throughput on conventional or rapid ramp rate qPCR systems. The enhanced specificity of this FastMix suppresses cross-reactivity between homologous sequences, improving detection and discrimination in SNP applications. A key component of this FastMix is AccuFast™ Taq DNA polymerase. This hot-start Taq contains a proprietary mixture of monoclonal antibodies that bind to the polymerase and keep it inactive prior to the initial PCR denaturation step (> 48 hours at room temperature).

Product Specifications
95076

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<tr>
<th>Assay</th>
<th>qPCR β-actin Plasmid DNA Functional Assay</th>
<th>DNase</th>
<th>RNase</th>
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<tbody>
<tr>
<td>Result</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
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Quality Control Analysis and Specifications:
qPCR β-actin Plasmid DNA Functional Assay: Real-time PCR detection of log-fold serial dilutions of a control DNA from 10 to 1 x 10^7 copies. Cq standard curve analysis must have coefficient of determination (R^2) ≥0.990 with a slope between –3.20 and –3.70.

Nuclease Assay:
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.

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.

100 Cummings Center, Suite 407J, Beverly, MA 01915 • Ph (888) 927-7027 • Fax (978) 867-5724 • www.QuantaBio.com FMWI016.2 Rev 01