Overview

All-in-One™ SYBR® Green qPCR Mix with validated gene-specific primers provide universal qPCR reaction conditions and robust quantitative PCR data without high costs.

The All-in-One™ qPCR Mix uses high-fidelity hot-start polymerase, an optimized reaction buffer and high-quality dNTPs to enable specific and sensitive amplification from even low-copy number RNA (cDNA) or DNA samples.

All-in-One™ qPCR Validated Primers get the job done by delivering reliable and reproducible high performance in quantitative PCR assays.

All-in-One™ First-Strand cDNA Synthesis Kit offers a robust solution for cDNA synthesis from almost any RNA source. The kit includes a reverse transcriptase and a specialized set of reagents designed to yield cDNA that is optimal for gene cloning, cDNA library creation and qPCR amplification.

Advantages

Uniform reaction condition
Reduce experimental design time

Robust efficiency and sensitivity
Ensure reliable quantitation even for low-copy genes

High specificity
Absence of non-specific amplification and primer-dimers ensures reproducible data

Validation and precision
Human-, mouse- and rat-specific primers are designed by a proprietary algorithm and validated for precision performance. Primer validation includes melting curve to ensure amplification of the correct target DNA

Figure 1. The amplification efficiency and detection sensitivity of the 2X All-in-One™ qPCR Mix are assessed by standard curves made by gradient dilution of plasmid DNA. The peak values from amplification and melting curves show that very high sensitivity can be obtained using All-in-One™ qPCR Mix which can detect as low as 5 molecules. At the same time, high amplification efficiency has also been shown by a good linear relationship among each concentration.
Table

<table>
<thead>
<tr>
<th>Catalog number</th>
<th>Product</th>
<th>Description</th>
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<tbody>
<tr>
<td>AOPR-0200</td>
<td>All-in-One qPCR Mix (20 µl x 200 or 600 qPCR reactions)</td>
<td>High-fidelity, hot-start DNA polymerase, optimized reaction buffer and dNTPs</td>
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<tr>
<td>AORT-0020</td>
<td>All-in-One First-Strand cDNA Synthesis Kit (20 or 50 synthesis reactions)</td>
<td>M-MLV RT (Rnase H-), reaction buffer, Rnase inhibitor, dNTPs, Oligo (dT) 18, random primer and ddH₂O</td>
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<tr>
<td>Variable</td>
<td>All-in-One qRT-PCR Primers (20 µl x 500 reactions)</td>
<td>Validated human, mouse and rat qPCR primers</td>
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Figure 2. Forty-five pairs of gene-specific All-in-One™ qPCR primers were experimentally validated to yield a single dissociation curve peak and to generate a single amplification of the correct size for the targeted genes. A cDNA pool, containing reverse transcribed products of total RNA from 10 different human tissues (lung, liver, testicle, ovary, spleen, brain, placenta, pancreas, heart and mammary), was used as the qPCR validation template.

To order

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