SYBR Green qPCR Master Mix

With broad instrument and workflow compatibility

The Fisherbrand™ SYBR™ Green qPCR Master Mix is a 2X, ready-to-use master mix designed for dye-based, quantitative amplification of DNA (cDNA and gDNA) targets by real-time PCR (qPCR).

Features include:

- Adaptable workflow compatibility—Seamlessly work with a range of qPCR instruments and reverse transcriptases (RTs). SYBR Green qPCR Master Mix easily fits into diverse workflows.
- **High specificity and sensitivity**—Attain low-level detection of your target of interest.
- Wide linear dynamic range—Experience the advantage of precise measurements across a linear dynamic range spanning six logarithmic units. Achieve accurate detection with both low- and high-concentration samples.¹

Other features include:

- Stability of preassembled reactions for up to 72 hours in a dark room at room temperature.²
- Reduction in carryover contamination due to the uracil-DNA glycosylase (UDG) and dUTP included in the mix to help ensure leftover DNA residue is not reamplified in subsequent experiments.



Broad instrument compatibility

SYBR Green qPCR Master Mix can be used in either standard or fast cycling mode, and is compatible with a wide variety of qPCR instruments.

Comprehensive workflow adaptability

Compatible with a variety of RT enzymes, SYBR Green qPCR Master Mix provides flexibility for varying primer melting temperatures (T_m), between 55°C and 65°C.



^{1.} See user guide for specific sample concentration recommendations.

^{2.} Pre-PCR stability is influenced not only by the master mix, but also by the target being analyzed. For maximum confidence, researchers should confirm stability profiles of their specific targets.

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Highly sensitive and specific

SYBR Green qPCR Master Mix enables low-level detection and contains an antibody-mediated hot-start mechanism to mitigate nonspecific early polymerase activity. See Figure 1 for a performance comparison versus other leading master mixes.

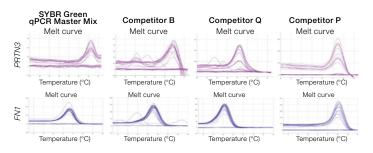


Figure 1. Target specificity. Real-time PCR was performed using universal human reference (UHR) cDNA and primers targeting *PRTN3* (proteinase 3) and *FN1* (fibronectin 1). A single melt curve was obtained using the SYBR Green qPCR Master Mix demonstrating specific amplification. In contrast, nonspecific amplification was observed when using competitor mixes, represented by multiple peaks in the melt curve.

Wide linear dynamic range

Yielding up to a 6-log dynamic range for cDNA (Figure 2), SYBR Green qPCR Master Mix shows equivalent or better dynamic range in the detection of various targets compared to other master mixes.

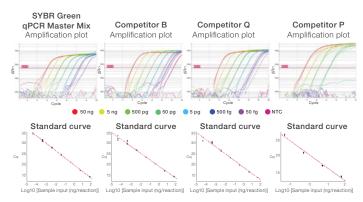


Figure 2. Linear dynamic range. Reactions (10 μL) were run in quadruplicate according to master mix manufacturer's protocol on an Applied Biosystems™ QuantStudio™ 5 Real-Time PCR System with 384-well block. Amplification curves were obtained over a 6-log dilution series of UHR cDNA with the *FN1* (fibronectin 1) assay. SYBR Green qPCR Master Mix facilitates accurate results over a wide dynamic range, as shown by tight curves between replicates and PCR efficiency. Efficiency = 100.9%, R² = 0.998.

Ordering information

Description	Quantity	Cat. No.
Fisherbrand SYBR™ Green qPCR Master Mix	1ml	A59528
Fisherbrand SYBR™ Green qPCR Master Mix	5ml	A59529
Fisherbrand SYBR™ Green qPCR Master Mix	50ml	A59530

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