

SYBR® Select Master Mix

Robust performance for real-time PCR instruments

Searching for a high-performing SYBR® master mix for your real-time PCR detection system? Look no further. SYBR® Select Master Mix (Cat. No. 44729) offers robust performance on many different real-time PCR systems, such as the Bio-Rad® CFX96™, Roche® LightCycler® LC480, and Stratagene® MX3005P® systems, at a cost-effective price.

Benefits

- **Specific**—minimizes primer-dimer and nonspecific amplification through use of a highly purified DNA polymerase with a proprietary hot-start mechanism
- **Reproducible and sensitive**—consistent amplification across a wide dynamic range
- **Bright**—contains SYBR® GreenER™ dye for maximum brightness
- **Fast mode**—can be used in Fast mode with no impact on performance
- **Carryover contamination control**—contains heat-labile UDG
- **Broad instrument compatibility**—compatible with most real-time PCR instruments



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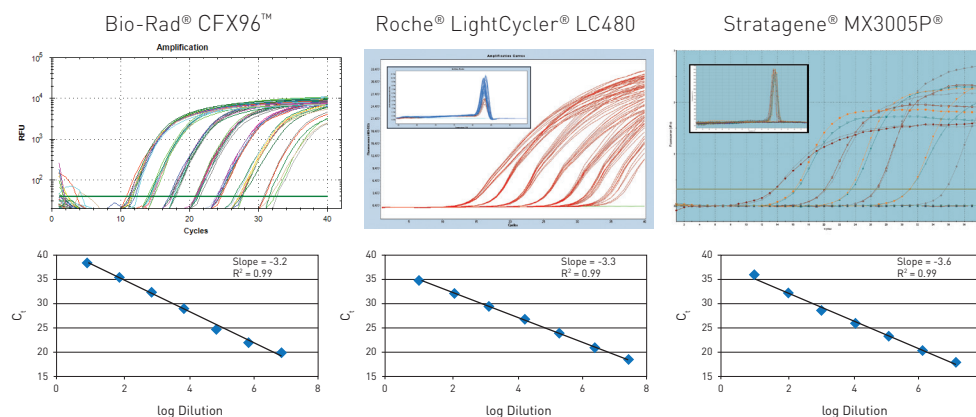


Figure 1. Amplification of the *PGK1* gene at 7 dilution points (100 ng to 0.1 pg of input cDNA) using three different real-time PCR systems. The single peak of each melt curve (insets) demonstrates the specificity of the assay on the (A) Bio-Rad® CFX96™ system, (B) Roche® LightCycler® LC480 system, and (C) Stratagene® MX3005P® system.

Table 1. Universal cycling parameters. SYBR® Select Master Mix uses the same cycling parameters on all real-time PCR systems.

Standard cycling mode (use with primers with $T_m \geq 60^\circ\text{C}$ *)			
Step	Temperature	Duration	Cycles
UDG activation	50°C	2 min	Hold
AmpliTaq® DNA Polymerase, UP activation	95°C	2 min	Hold
Denaturation	95°C	15 sec	40
Annealing/extension	60°C	60 sec	

*For primers with $T_m < 60^\circ\text{C}$, use a separate annealing step at 55–60°C for 15 sec/40 cycles and an extension step at 72°C for 60 sec.

Table 2. Cycling parameters for Fast mode.

Fast cycling mode			
Step	Temperature	Duration	Cycles
UDG activation	50°C	2 min	Hold
AmpliTaq® DNA Polymerase, UP activation	95°C	2 min	Hold
Denaturation	95°C	1 or 3 sec**	40
Annealing/extension	60°C	30 sec	

**Bio-Rad® CFX96™ Touch and CFX384™ Touch, ViiA7™, and QuantStudio™ 12K Flex Real-Time PCR Systems: 1 sec denature; StepOne™, StepOnePlus™, and 7500 Fast Real-Time PCR Systems: 3 sec denature