



SYBR Master (2x conc.)

Catalog No. MDE106

100 preparations

Description

Add SYBR Master (2x conc.) is a high-performance reagent designed for high sensitivity and specificity on various real-time instruments. This Master Mix consists of the hot-start Taq DNA Polymerase and all the components necessary for real-time PCR, including the SYBR Green I dye, dNTPs mixture, protein stabilizers and enhancers.

Content

1. Add SYBR Master (2x conc.) 1.0 ml

20mM Tris-HCl (pH8.8), 100mM KCl, 0.2% Triton® X-100, 5mM MgCl₂. 2x SYBR Green I, Protein stabilizer and 0.5mM each of dATP, dCTP, dGTP, and dTTP

Storage and Stability

Beta SYBR Master is stable for 2 year when stored in a constant temperature freezer at less than -20°C.

Nucleic Acid Amplification Protocol

1. Add the following components to a thin-walled PCR tube:

Nuclease-Free D.W	x µl
Add SYBR Master Mix (2x conc.)	10 µl
Forward primer (10 µM)	0.25–2.0 µl
Reverse primer (10 µM)	0.25–2.0 µl
(Optional) 50x ROX dye	x µl
DNA template (0.01 ng ~ 1 µg)	x µl
Total reaction volume	20 µl

2. PCR cycling

Initial Denaturation	95°C, 10 min
PCR Cycling (30 – 40 cycles)	95°C, 15 – 30 sec
	55 - 65°C, 15 – 30 sec
	72°C, 30 – 60 sec
Melting Analysis	60°C → 90°C

[Note] 50x ROX dye

ROX dye can be included in the reaction to normalize the fluorescent reporter signal, for instruments which are compatible with that option. 50x ROX is a 25 µM concentration. Use the following table to determine the amount of ROX to use with a particular instrument.

Instrument	Final ROX concentration
AB 7000, 7300, 7700, 7900HT, 7900 Fast, StepOne and StepOnePlus	500 nM
AB 7500, 7500 Fast, Stratagene Mx3000P, Mx3005P and Mx4000	50 nM