

SYBR® Green Real Time PCR Master Mix (2X) + ROX

Cat: C101021

1ml

Cat: C101022

5 x 1ml

Store at -20 °C
Contents:

Component	C101021	C101022
SYBR® Green Master Mix (2X)	1ml	5x 1ml
50X ROX dye	50µl	5 x 50µl

Description:

2X SYBR® Green Real Time PCR Master Mix is a very sensitive and easy to use for real-time quantitative analysis of DNA and cDNA targets from various sources. This product is based on the SYBR Green I and a Hot-start *Taq* DNA polymerase (chemically modified and anti *Taq*) plus the pre-optimized buffer solution.

Buffers and Reagents:

Storage Buffer: 20 mM Tris-HCl (pH 8.0), 100 mM KCl, 0.5 mM EDTA, 0.1 mM DTT, 0.5% Tween 20, 0.5% Nonidet P-40, 50% Glycerol
2X Master Mix (per 10 µl): 1unit *HS Prime Taq* DNA Polymerase, 5 mM MgCl₂, 2mM dNTPs mixture and 2X SYBR Green I

Kit storage:

This kit should be stored at -20°C. Unnecessary repeated freeze/thawing should be avoided. Under these conditions reagents are stable for one year from the date of production.

For frequent use, SYBR® Green Real Time PCR Master Mix can be stored at 2-8 C for 2 months.

General Reaction Protocol:

Component	Volume	Final concentration
2X Master Mix	10 µl	1X
50X ROX dye (If needed)	0.4 µl	1X
Forward Primer (10 pmoles/µl)	0.2~2.0 µl	0.1~1.0 pmoles
Reverse Primer (10 pmoles/µl)	0.2~2.0 µl	0.1~1.0 pmoles
Template DNA	Variable	10 fg~1 µg
PCR Grade D.W.	Variable	-
Total Volume	20 µl	-

1. Thaw 2X SYBR® Green Real Time PCR Master Mix.
2. Prepare a master mix. Gently mix reagents by inverting the tube and centrifuge. DO NOT vortex and avoid producing bubble.
3. Mix the master mix thoroughly and dispense appropriate volumes into PCR tubes or plates.

4. Add templates DNA to the individual PCR tubes or wells containing the master mix.
5. Program the Real-Time PCR machine according to the program outlined.
6. Place the PCR tubes or PCR plates in the terminal cycler and start the cycling program.
7. **Perform a melting curve analysis of the PCR product(s).**

Cycle	Time	Temp °C
1	<u>15 Min*</u>	<u>95</u>
	<u>15 Sec*</u>	<u>95</u>
25 ~35	30 Sec	50~60
	30 ~60	72
1	5 Min	72

Disclaimers:

This product is for **Research Use Only** and should only be used by trained professionals.