



AviSYBR™

Cat. No.: A10910

0.5 ml

Cat. No.: A10911

1.0 ml

Cat. No.: A10912

5.0 ml

Store at -20 °C

Component	A10910	A10911	A10912
SYBR Green			
Master Mix (2x)	0.5 ml	1.0 ml	5 x 1ml
50x ROX dye	25 µl	50 µl	250 µl

Description:

AviSYBR™ is a very sensitive and easy to use for real-time quantitative analysis of DNA and cDNA targets from various sources.

AviSYBR™ 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:

I. 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

II. 2X Master Mix (per 10 µL):

- 1unit HS Prime Taq DNA Polymerase
- 5 mM MgCl₂

- 2mM dNTPs mixture
- 2X SYBR Green I

Kit storage:

AviSYBR™ should be stored at **-20°C**.

Unnecessary repeated freeze/thawing should be avoided.

Under these condition 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:

1. Thaw **AviSYBR™**

Component	Volume	Final conc.
AviSYBR™	10 µL	1X
50X ROX dye (If needed)	0.4 µL	1X
Forward Primer (10 pmol/µl)	0.2~2.0 µl	0.1~1.0 pmol
Reverse Primer (10 pmol/µl)	0.2~2.0 µL	0.1~1.0 pmol
Template DNA	Variable	10 fg~1 µg
PCR Grade D.W.	Variable	-
Total Volume	20 µL	-

2. Prepare **AviSYBR™** gently mix reagents by inverting the tube and centrifuge.

DO NOT vortex and avoid producing bubble.

3. Mix **AviSYBR™** 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.

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

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).**

Disclaimers:

AviSYBR™ is for **Research Use Only** and should only be used by trained professionals.