

## SIBER Q-PCR Master Mix

**Cat. No.** : DA0080-0001  
**Concentration** : 2X  
**Volume** : 1 ml  
**Storage** : -20 °C protected from light.

### Description

The SYBR Green Premix is a ready-to-use, 2X concentrated master mix reagent including Hotstart Taq and SYBR Green I, specially designed for real-time PCR with intercalator method.

### Content

2X SYBR Green Premix containing:

- Hotstart Taq DNA polymerase
- SYBR Green real-time PCR Buffer
- dNTP mix including dATP·dCTP·dGTP·dTTP
- 5mM MgCl<sub>2</sub>

### Procedure

#### A. Preparation of the PCR Mix

1. Preparing a master mix as follows:

Component	Volume / reaction	Final conc.
2x SYBR Green Premix	12.5 µl	
Forward Primer (10 µM)	variable	0.3~1.0 µM
Reversed Primer (10 µM)	variable	0.3~1.0 µM
H <sub>2</sub> O	upto 23.0 µl	

2. Mix the master mix thoroughly by pipetting up and down.
3. dispense 23 µl volumes into PCR tubes or plates.

4. Add 2 µl of the DNA or cDNA, Mix carefully by pipetting up and down.

### Performing PCR

1. Program your instrument as follows:

Step	Time	Temperature
Initial PCR activation step	10 min	95 °C
2-step cycling Denaturation	15~30 sec	94 °C
Annealing /Extension	30~60 sec	50-68 °C
Cycle number	35~45 cycles	
Optional:		
Data acquisition	15 sec	X* °C

\*T<sub>m</sub> dimmer < X < T<sub>m</sub> product

2. Place the PCR tubes or PCR plates in the thermal cycler and start the cycling program.
3. Perform a melting curve analysis of the PCR products.

### SYBR Green Premix performance test

- Consistently high specificity over a broad dynamic range. Ten fold serial dilution (10<sup>9</sup>~10<sup>0</sup>) of plasmid DNA were amplified using primers specific to the NNV gene, Triplicate reactions at each concentration were amplified along with no- template controls. Standard curve had r=0.999, efficiency=92.1%, Standard deviation of Ct < 1.0.

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