



## Product Information

### Green-2-Go qPCR Mastermix-No Dye

#### **Product information for QPCR006-NODYE:**

**Quantity:** 500X20ul Rxn (4X1.25mL)

#### **Product Description**

As a 2X concentrated mix of TaqFast DNA Polymerase, dNTPs, MgCl<sub>2</sub>, fluorescent dye (detection), reference dye and proprietary buffer components, the Green-2-Go PCR Mastermix-No Dye provides a convenient and reliable set-up for performing quantitative realtime analysis of DNA samples.

Designed specifically for this niche of application, the components of Green-2-Go qPCR Mastermix-No Dye promise top performance with respect to sensitivity, signal-to-noise ratio and elimination of primer dimers. Furthermore, BBI most efficient TaqFast DNA Polymerase included in this MasterMix allows for ultra fast PCR, conferring a significant reduction to the overall qPCR quantification and detection time, thus streamlining the experiment through cost and labor saving.

In light of the fact that the qPCR instruments can vary from user to user, BBI Green-2-Go PCR Mastermix- No Dye has been carefully optimized to confer the best performance according to the make and model of a qPCR machine. Please use the following table as a guide for selecting the qPCR MasterMix that will be most compatible with your choice of a particular instrument/model.

Product Code	Description	qPCR Instruments
QPCR006-NODYE	Green-2-Go qPCR Mastermix-No Dye	BioRad® CFX96, CFX384, Chromo4™, CFX Connect™, Opticon 2, MiniOpticon™; Roche LightCycler® (2.0, 1.5, 480, 1536, Nano); MJ Research Opticon™, Opticon™ 2, Chromo® 4; Corbett Rotor-gene® (3000, 6200, 62H0, 6500, 65H0, 6600)

#### **Product Application(s)**

The Green-2-Go qPCR Mastermix-No Dye is ideally suited for:

- Gene expression analysis
- Microarray validation
- Viral load determination



### Storage Conditions

Upon arrival, the Green-2-Go qPCR Mastermix-No Dye should be stored at -20°C and protected from light. After each experiment, the leftover mix (completely thawed and thoroughly homogenized) can be stored at 4°C if it is to be used within the next 3 months. Avoid repeated freeze-thaw cycles to retain maximum performance.

The Green-2-Go qPCR Mastermix-No Dye is stable for 1 year from the date of shipping when stored and handled properly.

### Protocol

1. Thaw the Green-2-Go qPCR Mastermix-No Dye, template DNA, primers and nucleasefree water on ice. Mix each solution well.
2. Set up the following reaction mixture (10 µl or 20 µl reaction volume):

Components	10 µl Reaction	20 µl Reaction	Final Concentration
Green-2-Go PCR Mastermix-No Dye	5 µl	10 µl	1X
Forward Primer (10 µM)	0.3 µl	0.6 µl	300 nM
Reverse Primer (10 µM)	0.3 µl	0.6 µl	300 nM
Template DNA	Variable	Variable	≤500 ng/reaction
Nuclease-free H <sub>2</sub> O	to 10 µl	to 20 µl	-

3. Perform qPCR reactions using the following cycling program:

Step	Temperature	Duration	Cycle(s)
Enzyme activation <sup>note 1</sup>	95°C	30 Sec	1
Denaturation	95°C	3 - 5 sec	35 - 40
Annealing/Extension <sup>note 2</sup>	55°C - 60°C	10 - 30 sec	
Melting curve	Refer to specific guidelines for instrument used		

### Important Notes:

1. For gDNA amplification, use 2 minutes enzyme activation time instead of 30 seconds.
2. 10 - 15 secs annealing/extension time is preferred unless restricted by the software.
3. Target amplicon size should not exceed 150 bp.
4. Aliquot reagents to avoid contamination and repeated freeze-thaw cycles.
5. Green-2-Go 2 X qPCR MasterMix components are light sensitive and therefore, avoid prolonged direct exposure to light.
6. Perform PCR as soon as the reaction mixture is prepared; otherwise keep everything chilled or frozen meanwhile.

For laboratory research only. Not for clinical applications.