

## Product Information

Version 4.2, Revision 2013-08-07

### Product: iGreen qPCR Master Mix

Code	Product Name
A4197	iGreen qPCR Master Mix-ROX, 4x1.25ml, 500RXN (20µL)
A4183	iGreen qPCR Master Mix-Low ROX, 4x1.25ml, 500RXN (20µL)
A4184	iGreen qPCR Master Mix-iCycler, 4x1.25ml, 500RXN (20µL)
A4198	iGreen qPCR Master Mix, 4x1.25ml, 500RXN (20µL)

### Product Description

The iGreen qPCR Mastermix is designed for quantitative real-time analysis of DNA samples. The components of iGreen qPCR Mastermix have been developed for superb performance in sensitivity, signal-to-noise ratio, and complete elimination of primer dimers. The chemically modified Hotstart Taq polymerase included in our Mastermix significantly reduces non-specific PCR amplification observed with regular Taq polymerase.

Due to variations in qPCR instruments, we offer different iGreen qPCR Mastermix formulations optimized for different machines. Please use the following table as a guideline for the selection of qPCR Mastermix appropriate for your particular instrument model.

Code	Product Name	qPCR Instruments
A4197	iGreen qPCR Master Mix-ROX, 4x1.25ml, 500RXN (20µL)	-ABI® 7000,7300,7700,7900, StepOnePlus™ StepOne™-Eppendorf® Realplex 4
A4183	iGreen qPCR Master Mix-Low ROX, 4x1.25ml, 500RXN (20µL)	-ABI® 7500-Stratagene® Mx3000, Mx3005, Mx4000
A4184	iGreen qPCR Master Mix-iCycler, 4x1.25ml, 500RXN (20µL)	-BioRad® iCycler®, iQ™5, MyiQ™
A4198	iGreen qPCR Master Mix, 4x1.25ml, 500RXN (20µL)	-BioRad® CFX96 -Roche LightCycler® 480 -MJ Research Opticon™ and Opticon™ 2 -MJ Research Chromo® 4 -Corbett Rotor-gene® 600,3000 -Eppendorf® Realplex 2

### Product Application

The iGreen qPCR Mastermix is ideally suited for:

- Gene expression analysis
- Microarray validation
- Viral load determination

### Kit Components

The iGreen qPCR Mastermix is a 2X mix of dNTPs, Hotstart Taq polymerase, MgCl<sub>2</sub>, fluorescent detection dye, reference dye, and proprietary buffer components.

### Shipping and Storage

Upon arrival, iGreen qPCR Mastermix should be stored at -20°C and protected from light. After each experiment, the leftover thawed mix 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 iGreen qPCR Mastermix is stable for 1 year from the date of shipping when stored and handled properly.

## Reaction Setup

Thaw iGreen qPCR Mastermix, template DNA, primers and RNase-free water on ice. Mix each solution well.

Prepare a reaction Mastermix using the following:

Components	Volume/Reaction	Final Concentration
iGreen Mastermix	10µl	1X
Primer A	Variable	100-500nM
Primer B	Variable	100-500nM
Sterile water	Variable	
Template DNA	Variable	≤ 10ng/reaction
Total Volume	20µl	

Perform qPCR reactions using the following cycling program.

Step	Temperature	Duration (Standard)	Duration (Fast)	Cycles
Enzyme activation	95°C	10min	10min	Hold
Denature	95°C	15sec	3sec	40
Anneal/extend	60°C	60sec	30sec	
Melting curve	According to the instrument guidelines			

## Recommendations for Optimal Results

- Aliquot reagents to avoid contamination and to avoid repeated freeze-thaw cycles
- iGreen qPCR Mastermix components are light sensitive; avoid exposure to light
- Start PCR as soon as the reaction mixture is prepared and always keep the reaction mixture chilled in an ice box prior to PCR reactions

*This material is for laboratory research purpose and/or in vitro use only and is not to be used in humans or animals.*