



## EvaGreen qPCR Mastermix

Store at -20°C

Cat. No.	Description	Quantity
Mastermix-R	EvaGreen qPCR Mastermix- ROX	500 X 20 µl reactions (5ml)
Mastermix-LR	EvaGreen qPCR Mastermix- low ROX	500 X 20 µl reactions (5ml)
Mastermix-iC	EvaGreen qPCR Mastermix- iCycler	500 X 20 µl reactions (5ml)
Mastermix-S	EvaGreen qPCR Mastermix	500 X 20 µl reactions (5ml)

### Product Description

EvaGreen qPCR Mastermix is designed for quantitative real-time analysis of DNA samples. The components of EvaGreen 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 EvaGreen 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.

Cat. No.	Product Name	qPCR Instruments
Mastermix-R	2X EvaGreen qPCR Mastermix- ROX	-ABI® 7000, 7300, 7700, 7900, StepOnePlus™ StepOne™ -Eppendorf® Realplex 4
Mastermix-LR	2X EvaGreen qPCR Mastermix- low ROX	-ABI® 7500 -Stratagene® Mx3000, Mx3005, Mx4000
Mastermix-iC	2X EvaGreen qPCR Mastermix- iCycler	-BioRad® iCycler®, iQ™5, MyiQ™
Mastermix-S	2X EvaGreen qPCR Mastermix	-BioRad® CFX96 -Roche LightCycler® 480 -MJ Research Opticon™ and Opticon™ 2 -MJ Research Chromo® 4 -Corbett Rotor-gene® 600, 3000 -Eppendorf® Realplex 2

### Kit Components

EvaGreen 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, EvaGreen 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. EvaGreen qPCR Mastermix is stable for 1 year from the date of shipping when stored and handled properly.

### Reaction Setup

Thaw EvaGreen 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
EvaGreen 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			

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Recommendations for Optimal Results

- Aliquot reagents to avoid contamination and to avoid repeated freeze-thaw cycles
- EvaGreen 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

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