

**Catalog No.:** qMX-Green-25ml

**Product Name:** 2X qPCR Universal Green MasterMix

<b>Contents:</b>	<b>Name:</b>	<b>Quantity:</b>
	2X qPCR Universal Green MasterMix	25ml
	ROX Dye	250µl

**Description:** 2X qPCR Universal Green MasterMix is qPCR master mix contains a EvaGreen fluorescent dye for SYBR Green Assays in quantitative, real-time PCR analysis. With the heat stable EvaGreen dye and new generation of DNA polymerase, this specially formulated qPCR master mix will significantly increase the processivity and sensitivity; reduce primer dimmers and non-specificity; and shorten the required total qPCR time. Without any modification, it can be directly used for different SYBR Green assays.

**Storage:** Stored at -20°C for long term. However, after each experiment, the leftover mix can be stored at 4°C for up to three months.

## **Protocol:**

- Determination of the ROX dye for your specific equipment: 1). If no ROX dye needed: use the MasterMix directly. 2). If low ROX needed: add 1µl ROX dye solution to every 1ml of the MasterMix. 3). If high ROX needed, add 10µl ROX dye solution to every 1ml of the MasterMix. Mix the MasterMix well but gently before use.
- Assembling of the qPCR reactions as following:

Components	Volume: µl	Final Concentration
2X Green MasterMix	10µl	1X
Forward Primer (10µM)	0.5-1µl	250-500nM
Reverse Primer (10µM)	0.5-1µl	250-500nM
Template DNA	Variable	= or <100ng/reaction
Sterile Water	Variable	~
Total Volume	add H <sub>2</sub> O up to 20µl	~

- Mix and perform qPCR using the following cycling program:

Step	Temperature	Duration – Standard	Duration - Fast	Cycles
Enzyme Activation	95°C	3min	20 sec	1
Denature	95°C	15sec	1-3sec	40
Anneal/extend	60°C	60sec	10-20sec	
Melting Curve	Refer to the guideline for your specific equipment under using.			

### **Recommendations for Optimal Results**

- Avoid repeated freeze-thaw cycles and long time light exposure to the 2X qPCR MasterMix.
- Regular optimization is always a good idea for any qPCR experiments.
- Start the qPCR cycle as soon as the reaction mixture is prepared, and always keep the reaction mixture chilled on ice prior to qPCR thermo cycling.

This product is for laboratory research only; Not for clinical testing.

For technical questions, call 1-800-631-5009, or visit [www.LamdaBio.com](http://www.LamdaBio.com)