

**Catalog No.:** qMX-TaqM

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

**Contents:**

Name:	Quantity:
2X qPCR Universal TaqProbe MasterMix	5x1000µl
ROX Dye	50µl

**Description:** 2X qPCR Universal TaqProbe MasterMix is a qPCR master mix designed for TaqMan Assays in quantitative, real-time PCR analysis. With the specially engineered DNA polymerase and its unique qPCR buffer system, this universal qPCR master mix offers superb performance in sensitivity and signal-to-noise ratio. Without any modifications, the 2X qPCR Universal TaqProbe MasterMix can be directly used for any TaqMan assays, such as SNP genotyping, gene expression analysis, microarray validation, and high throughput screening applications. The ROX reference dye is provided separately, making it more flexible and compatible with different qPCR machines.

**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 2X MasterMix directly. 2). If low ROX needed: add 1µl of ROX dye solution to the 1ml 2X MasterMix tube. 3). If high ROX needed, add 10µl ROX dye solution to the 1ml 2X MasterMix tube and mix well but gently before use.
- Assembling of the qPCR reactions as following:

Components	Volume: µl	Final Concentration
2X TaqProbe MasterMix	10 µl	1X
Forward Primer	Variable	100-500nM
Reverse Primer	Variable	100-500nM
TaqMan Probe	Variable	100-300nM
Template DNA	Variable	= or <100ng/reaction
Sterile Water	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 the the 2X MasterMix for repeated freeze-thaw cycles and long time light exposure.
- Regular optimization is always a good idea for any qPCR experiments.
- Start 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.