

## TaqProbe 5X qPCR MasterMix

Store at -20°C

Cat. No.	Description	Quantity
MasterMix-5P	TaqProbe 5X qPCR MasterMix- ROX	1000 X 20 µl reactions (4 ml)
MasterMix-5PL	TaqProbe 5X qPCR MasterMix- Low ROX	1000 X 20 µl reactions (4 ml)
MasterMix-5PC	TaqProbe 5X qPCR MasterMix- iCycler	1000 X 20 µl reactions (4 ml)
MasterMix-5PS	TaqProbe 5X qPCR MasterMix- No Dye	1000 X 20 µl reactions (4 ml)
MasterMix-5PM	TaqProbe 5X qPCR MasterMix- Multiplex	1000 X 20 µl reactions (4 ml)

### Product Description

TaqProbe qPCR MasterMix is designed for **TaqMan probe-based** real-time PCR analysis of DNA samples. The components of TaqProbe 5X qPCR MasterMix have been developed for superb performance in sensitivity, signal-to-noise ratio, and complete elimination of primer dimers. Up to four simultaneous targets are supported by multiplex formulation and its quantitative amplification and detection entail consistent high performance.

Guideline for your particular instrument model

Cat. No.	Product Name	qPCR Instruments
MasterMix-5P	TaqProbe 5X qPCR MasterMix-ROX	ABI® 7000, 7300, 7700, 7900, 7900HT; StepOnePlus™; StepOne™; OpenArray; PRISM™ Sequencing Detection Series
MasterMix-5PL	TaqProbe 5X qPCR MasterMix-LowROX	ABI® 7500; Vii™; QuantStudio; Illumina Eco; Stratagene®; Mx3000, Mx3005, Mx4000
MasterMix-5PC	TaqProbe 5X qPCR MasterMix- iCycler	BioRad®; iCycler®; iQ™5; MyiQ™
MasterMix-5PS	TaqProbe 5X 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)
MasterMix-5PM	TaqProbe 5X qPCR MasterMix- <b>Multiplex</b>	Suited for <b>Multiplex TaqMan assay</b> in the following instruments. ABI® 7000,7300,7500,7700,7900; StepOne™, StepOnePlus™; BioRad®iCycler®, iQ™5, CFX96, Opticon™2; Chromo® 4; Corbett Rotor-gene® 6000,3000; Stratagene® Mx3000, Mx4000; Roche LightCycler® 2.0, 480

### Product Application

TaqProbe qPCR MasterMix is ideally suitable for:

- SNP Genotyping assays
- Gene expression analysis
- Microarray validation
- High throughput screening

### Kit Components

TaqProbe qPCR MasterMix is a 5X mix of dNTPs, Hotstart Taq polymerase, MgCl<sub>2</sub>, reference dye, and proprietary buffer components.

### Shipping and Storage

Upon arrival, TaqProbe qPCR MasterMix 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. TaqProbe qPCR MasterMix is stable for 1 year from the date of shipping when stored and handled properly.

### Reaction Setup

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

Prepare a reaction mixture using the following:

Components	Volume 20µl	Volume 25µl	Volume 50 µl	Final Concentration
TaqProbe 5X qPCR MasterMix	4 µl	5 µl	10 µl	1X
Template DNA	Variable	Variable	Variable	≤10 ng/reaction
TaqMan Probe	Variable	Variable	Variable	100 - 300 nM
Forward Primer	Variable	Variable	Variable	100 - 500 nM
Reverse Primer	Variable	Variable	Variable	100 - 500 nM
RNase-free Water	Up to 20 µl	Up to 25 µl	Up to 50 µl	-
Total Volume	20 µl	25 µl	50 µl	-

Perform qPCR reactions using the following cycling program.

Step	Temperature	Duration (Standard)	Duration (Fast)	Cycles
Enzyme activation	95°C	10 mins	10 mins	1
Denaturation	95°C	15 secs	3 secs	40
Annealing/extension	60°C	60 secs	30 secs	

### Recommendations for Optimal Results

- Aliquot reagents to avoid contamination and to avoid repeating freeze-thaw cycles
- TaqProbe 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

### Notice to purchaser: Limited license

Use of this product is covered by one or more of the following US patents and corresponding patent claims outside the US: 5079352, 6217255, 5310652, 4889818, 5994056. Purchase of this product only grant use for scientific research applications. A separate license is required for commercial applications.

