

## TECHNICAL DATASHEET

## PRODUCT NAME

# One-Step RT-PCR Mastermix (no ROX)

For research purposes only. Not for use in diagnostic procedures for clinical purposes. Please refer to the Certificate of Analysis for the expiration date and the lot number FOR IN VITRO USE ONLY

Cat. No. GMO-RTNR-600

### **Product Description**

The One-Step RT-PCR Mastermix is a HotStart Mastermix designed to simplify the preparation of a single tube reverse transcriptase real-time PCR assay. The Mastermix contains Hotstart Taq DNA polymerase, optimised reaction buffer, 5mM (final concentration) MgCl2 and nucleotides (including dUTP) and a separate tube of Reverse transcriptase combined with RNAse Inhibitor.

#### Storage and stability

The One-Step RT-PCR Mastermix reagents are stable for a minimum of twelve months when stored at -70°C in a constant temperature freezer. The Mastermix can be stored at -20°C but we recommend storage of the RT enzyme tube at -70°C.

#### Kit Contents

The Mastermix contains enough PCR reagents for up to 600 reactions (25µl).

Reagent	Volume
2X Reaction Buffer	7.5ml
50mM MgCl <sub>2</sub>	1.5ml
Reverse transcriptase combined with RNAse Inhibitor	75µl

## Materials Required But Not Supplied

The following items will be required in addition to the reagents supplied in the qPCRTM Mastermix.

## Reagents:

Deionised or distilled water Unlabelled primers

#### Materials:

Optical 96-Well Reaction Plate
Optical Tubes and Caps as needed
Microcentrifuge
Polypropylene tubes
Pipettes, preferably positive displacement
Pipette tips, with filter plugs
Vortex
Disposable Gloves



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#### **PCR Reaction Mix**

A typical 25µl PCR Mix would contain the following:

Component	Volume (µl)	Final concentration in 25µl
One-Step RT-PCR Mastermix	12.5	1x
Forward primer (1µM)	2.5	0.1μΜ
Reverse primer (1µM)	2.5	0.1μΜ
Probe	2.5	0.3μΜ
Template	Z	-
H <sub>2</sub> 0	4.875- z	-
RT Enzyme/RNase Inhibitor	0.125	
Total	25µl	

#### Typical cycling conditions for this kit are

1st strand reaction	30min. 45°C
Hot Taq activation	10min. 95°C
40 Cycles	15sec. 95°C
	60sec. 60°C
Hold	25°C

#### **Quality Control**

The One-Step RT-PCR Mastermix has been tested for performance on an authorised real-time sequence detector.

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