

### Applications

1. Gene expression analysis
2. Single cell RT-qPCR
3. Virus detection kits

### Product features

- Contains enzymes purified by a variety of chromatography methods in several stages.
- Contains Reverse Transcriptase enzyme that is stable in rising temperature and activates in temperature range of 42 - 70°C.
- The DNA polymerase included in the mix, is inactive at room temperature and its activation requires preheating at 95 °C for 5 min.
- The enzyme with hot start capability increases reaction specificity and sensitivity
- HS-Taq DNA polymerase activation requires not more than 5min heating
- High sensitivity for detection of viral RNA or low RNA concentration
- Using a specific antibody for the Taq DNA polymerase enzyme to inactivate the enzyme at room temperature
- Can be used with all standard Real Time PCR apparatus
- High efficiency of product production
- High speed and accuracy during testing
- High repeatability
- No contamination with bacterial DNA

### Recommended RT-qPCR reaction mix







1. Defrost the reaction mixture and stir thoroughly.
2. Put thin-wall PCR tubes on ice and add the following components considering the final volume of a reaction mixture equal to 20µl:

Component	Volume	Final concentration
<b>ONE Step RT-qPCR Master Mix, 2X</b>	10µl	1X
<b>Primer &amp; Prob Mix</b>	variable	-
<b>RNA template</b>	Variable	1pg – 1µg
<b>Sterile water</b>	up to 20µl	-

### Recommended RT-qPCR cycles

Step	Temperature	Incubation time	Number of cycles
<b>RT enzyme activity</b>	55°C	10 min	1
<b>Taq DNA Polymerase activation</b>	95°C	5 min	1
<b>Denaturation</b>	95°C	10 sec	40-45
<b>Annealing and extension</b>	60°C	45 sec	

## Signs

Signs	Definitions
	Temperature range on product use
	For Research Use Only
	Name and address of the manufacturer of the product
	Product technical code
	Product shipping conditions
	Number of usable tests



شکایات مشتری

**SinaClon**  
شرکت سیناکلون BioScience



نظرسنجی از مشتری

Unit 9, Rouyesh building, Science and Technology Park,  
Tarbiat Modares University, Pajouhesh Blvd, Tehran, Iran

+982191082111  
hi@sinaclon.com  
www.sinaclon.com

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شرکت سیناکلون BioScience

## ONE Step RT-qPCR Master Mix, 2X

 MM2191

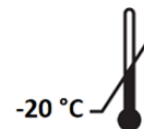


1ml/100 reaction



Wet or Dry Ice





(Not more than 50 Freeze-Thawing cycles)

### Components

ONE Step RT-qPCR Master Mix, 2X

1ml

### Description

ONE Step RT-qPCR Master Mix, 2X is developed for synthesize first-strand cDNA and simultaneously amplify the desired sequence in a single reaction. It includes all of components necessary to cDNA synthesis and Real-time PCR (the high efficiency Reverse Transcriptase and Hot Start Taq DNA polymerase, dNTPs, Mg<sup>2+</sup>, stabilizers, RNase inhibitor and RT-qPCR reaction components) except primers, probes and RNA template. This master mix enables fast and highly reproducible procedures on the most common real-time PCR apparatus, from either total RNA or mRNA, and it was specifically developed for probe-detection technology.