

qRT-PCR

Ning Chen

Abstract

qRT-PCR for each gene was carried out using a thermal cycler (Bio-Rad, Hercules, CA, USA) and amplification conditions were 40 cycles of 30s at 95°C, 3 s at 95°C, and 30 s at 60°C.

Citation: Ning Chen qRT-PCR. **protocols.io**

dx.doi.org/10.17504/protocols.io.ixecfje

Published: 17 Jul 2017

Protocol

Step 1.

1. Gene specific primers are retrieved from Primer Premier 6.0 and Beacon designer 7.8 Software. These primers are ordered from the Bioneer (TaKaRa, Japan).

The reagent composition	Volume 20 ul
SYBR Premix Ex Tap	10.0 ul
Forward Primer (10 uM)	0.4 ul
Reverse Primer (10 uM)	0.4ul
cDNA	2ul
DEPC H ₂ O	to 20ul
1. 95°C 30sec	
2. 95°C 3sec → 60°C 30sec 40 cycles	

Step 2.

After PCR is finished, remove the tubes from the machine. The PCR specificity is examined by 3% agarose gel using 5 ml from each reaction.

Step 3.

Put the tubes back in SDS 7000 and perform dissociation curve analysis with the saved copy of the setup file.

Step 4.

Analyze the real-time PCR result with the SDS 7000 software. Check to see if there is any bimodal dissociation curve or abnormal amplification plot.