

Certificate of Analysis

Product Name/Description:	PrimeScript™ III Reverse Transcriptase		
Cat. #:	TCH013		
Lot#:	Specified on product label		
Storage Conditions:	-20°C		
Expiration Date:	Specified on product label or package		
Package Size:	2,000 U		
Package Contents:	1. PrimeScript III RTase	200 U/μl	2,000 U
	2. 5X PrimeScript III Buffer	500 μl	
Source:	<i>E. coli</i> . carrying the plasmid that encodes reverse transcriptase gene.		

Quality Control Data:

1st – strand cDNA synthesis test:

According to the standard protocol, 1st strand cDNA was synthesized by incubating 100 ng of total RNA prepared from rat brain and 50 pmol of Oligo dT(20) primer with 200 units of this enzyme for 60 minutes at 50° C. Then, PCR was performed with this RT reactant as a template and it was confirmed by agarose gel electrophoresis that the 12 kbp target was properly amplified by PCR.

Real time RT-PCR test:

Consistent amplification was confirmed by real-time RT-PCR using a control RNA as a template. No specific amplification was observed without template.

Nuclease contamination test:

Nuclease activity in this product was not detected by agarose gel electrophoresis following each reaction below:

- 1) Incubating 1 μg of λ-Hind III digest with 200 units of the enzyme for 1 hour at 37° C.
- 2) Incubating 1 μg of supercoiled pBR322 DNA with 200 units of the enzyme for 1 hour at 37° C.
- 3) Incubating 1 μg of 16S, 23S rRNA with 200 units of the enzyme for 1 hour at 37° C.