

SuPrimeScript RTase

Product Name	Cat. No.	Size
SuPrimeScript RTase	SR-1000	50 Units X 1
	SR-1001	50 Units X 2
	SR-1002	50 Units X 4

Package information

	1. SuPrimeScript RTase	
SR-1000	(RNase Inhibitor included, 50 Units X 1, 1 U/யி, 50யி)	
	2. 2X Reaction Buffer (600 μ L X 1)	
	3. 10 mM dNTPs Mixture (each 2.5 mM, 125μ X 1)	

Description

SuPrimeScript RTase is a mutant of MMLV RTase with reduced RNase H activity and increased thermal stability.

This product provides the necessary components to generate cDNA from RNA except primer.

Usage Information

- The reaction temperature for cDNA synthesis is **50°**C.
- The reaction time for cDNA synthesis is **60 min**.
- The concentration of Reaction Buffer is 2X.
- SuPrimeScript RTase is RNase H⁻.

Protocol

The following 20 ₩ reaction volume can be used for cDNA synthesis.

1. Prepare the following components to a PCR tube.

Components	Volume
10 mM dNTPs Mixture	2μl
2X Reaction Buffer	10 <i>µ</i> l
- oligo dT primer (50~100 pmoles/\(\mu\)) - Random primer (50~100 pmoles/\(\mu\)) - Gene specific primer (15~20 pmoles/\(\mu\))	1~2 <i>µ</i> l
- Total RNA (1 ng~5 μg) - mRNA (100 pg~0.5 μg)	×μl
SuPrimeScript RTase (RNase Inhibitor included, 1 U/μl)	1 μl
DEPC treated D.W.	add up to 20µl
Total Reaction Volume	20 <i>µ</i> l

- 2. Mix gently and centrifuge briefly.
- 3. If an oligo dT primer or gene specific primer is used, incubate for 60 minutes at 50°C.
 - If a random hexamer primer is used, incubate for 10 minutes at 25°C followed by 60 minutes at 50°C.
- 4. Stop the reaction by heating at 70°C for 10 minutes and chill on ice.

Note: When performing PCR, no more than 1/5 of the final PCR volume should derive from the finished RT reaction. ex) for a 20 μ L PCR assay, use \leq 4 μ L of the finished RT reaction.