## SuPrimeScript cDNA Synthesis Kit

| Product Name | Cat. No. | Size |
| :---: | :---: | :---: |
| SuPrimeScript cDNA <br> Synthesis Kit | SRK-1000 | 50 Units $\times 1$ |

## Package information

1. SuPrimeScript RTase
(RNase Inhibitor included, 50 Units $X 1,1 \mathrm{U} / \mu \ell, 50 \mu \ell$ )
SRK-1000
2. 2X Reaction Buffer ( $600 \mu \ell \times 1$ )
3. 10 mM dNTPs Mixture (each $2.5 \mathrm{mM}, 125 \mu \ell \times 1$ )
4. 10X oligo $\left(\mathrm{dT}_{20}\right)(125 \mu \ell \times 1)$
5. 10X random hexamer $(125 \mu \ell \times 1)$

## Description

SuPrimeScript cDNA Synthesis Kit provides all the necessary components to generate cDNA from RNA. SuPrimeScript RTase is a mutant of MMLV RTase with reduced RNase H activity and increased thermal stability.

## Usage Information

- The reaction temperature for cDNA synthesis is $50^{\circ} \mathrm{C}$.
- The reaction time for CDNA synthesis is 60 min .
$\square$ The concentration of Reaction Buffer is 2 X .
$\square$ SuPrimeScript RTase is RNase $\mathrm{H}^{-}$.


## Protocol

The following $20 \mu \ell$ reaction volume can be used for cDNA synthesis.

1. Prepare the following components to a PCR tube.

| Components | Volume |
| :--- | :---: |
| 10 mM dNTPs Mixture | $2 \mu \ell$ |
| 2 X Reaction Buffer | $10 \mu \ell$ |
| 10 X oligo $\left(\mathrm{dT}_{20}\right)$ or 10 X random hexamer | $2 \mu \ell$ |
| - Total RNA (1 ng~5 $\mu \mathrm{g})$ <br> - mRNA $(100 \mathrm{pg} \sim 0.5 \mu \mathrm{~g})$ | $\mathrm{X} \mu \ell$ |
| SuPrimeScript RTase <br> (RNase Inhibitor included, $1 \mathrm{U} / \mu \ell)$ | $1 \mu \ell$ |
| DEPC treated D.W. | add up to $20 \mu \ell$ |
| Total Reaction Volume | $20 \ell \ell$ |

2. Mix gently and centrifuge briefly.
3. If an oligo dT primer or gene specific primer is used, incubate for 60 minutes at $50^{\circ} \mathrm{C}$.
If a random hexamer primer is used, incubate for 10 minutes at $25^{\circ} \mathrm{C}$ followed by 60 minutes at $50^{\circ} \mathrm{C}$.
4. Stop the reaction by heating at $70^{\circ} \mathrm{C}$ 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 $20 \mu \ell$ PCR assay, use $\leq 4 \mu \ell$ of the finished RT reaction.

