



SuScript cDNA Synthesis Kit

Catalog No	Size
• RT01A025	25 Rxn (100µl)
• RT01A026	100 Rxn (400µl)

Description:

SuScript cDNA Synthesis Kit is a cDNA synthesis kit containing all the components necessary to obtain cDNA in a high yield from RNA samples. The RNase Inhibitor presented in the kit adequately protects RNA templates against degradation. Optimized reaction buffer, MgCl₂, Oligo-dTs, random hexamers and reverse transcriptase are also included in the 5X RTMix. The first strand of cDNA can be directly used as a template in downstream applications (PCR, Real-Time PCR, etc).

Kit Components:

Components	RT01A025	RT01A026
5X RT Mix	100 µl	400 µl
DNase/RNase Free Water	250 µl	1000 µl

General Considerations:

- High purity template RNA is essential for reliable efficient cDNA synthesis. A A260 / A280 ratio of 1.7 or higher is strongly recommended.
- The amount of template RNA is depended on the expected copy number of the sequence of interest. In general, 1 µg – 1 ng of total RNA is recommended, 0.05 – 100 ng if you are working with isolated mRNA.
- This protocol recommends cDNA synthesis for 1 hour at 42°C.
- To enhance the template coverage, the 5X RTMix also contains random hexamer primers. This provides multiple priming sites along the RNA for the detection of multiple short sequences.

This protocol is exemplary for one reaction, and for multiple reactions it is necessary to calculate the components in a proportional manner. Mix the kit components in a micro tube in the recommended proportions below. Briefly centrifuge the tube to spin down the contents and to eliminate any air bubbles. Place the tube on ice until to reverse transcriptase reaction.

Reaction Components	Volume
5X RTMix	4 µl
Total RNA	1-6 µl
DNase/RNase Free Water	Up to 20 µl
Total Volume	20 µl

Mix gently and carry-out reverse transcriptase reaction conditions:

RT Steps	Temp (°C)	Time	Cycle
RT Reaction	42	1 hour	1
RT Deactivation	80	10 min	1

Notice:

The synthesized cDNA can be used immediately, without purification, or stored at -20°C for future use.

Storage Conditions:

Store all contents at -20°C in a freezer.

Quality Control:

Nicking activity, priming activity, exonuclease activity, or endonuclease activity has not been detected.



Recommended Protocol: