

# AddScript cDNA Synthesis Kit

Research Use Only

## Product Code

22701

## Component

1. 20x AddScript Enzyme Solution 50  $\mu$ l
2. 2x Reaction Buffer 0.5 ml
3. 10mM dNTP Mixture (2.5mM each) 0.1 ml
4. 10x oligo dT<sub>20</sub> 0.1 ml
5. 10x random hexamer 0.1 ml
6. Nuclease-free H<sub>2</sub>O 1.0 ml

## Storage Condition

Store at -20°C

## Description

AddScript cDNA Synthesis Kit provides sensitive and easy-to-use components which contain all the reagents for first strand cDNA synthesis.

Especially, thermostable MMLV RTase (RNase H-) and RNase Inhibitor are included in 20x AddScript Enzyme Solution. This kit can be also applied to real-time PCR by fluorescent intercalating dye like SYBR Green I<sup>®</sup> and TaqMan<sup>®</sup> Probe.

## Quality Control

The performance of AddScript cDNA Synthesis Kit is tested in an RT reaction using human total RNA with oligo dT<sub>20</sub> and random hexamer each. The sensitivity of the kit is verified by the detection of GAPDH and Actin transcript in 10 pg total RNA after 30 cycles.

## Storage and Stability

AddScript cDNA Synthesis Kit is stable for 1 years when stored in a constant temperature freezer at less than -20°C.

**Made in KOREA**

This product was manufactured through ISO 9001 & 13485 system.

## Reaction Assembly

1. Add the following components to a thin-walled PCR tube:

Nuclease-Free H <sub>2</sub> O	x µl
2x Reaction Buffer	10 µl
10mM dNTP Mixture	2.0 µl
10x oligo dT <sub>20</sub> [or 10x random hexamer]	2.0 µl
RNA template	x µl
20x AddScript Enzyme Solution	1.0 µl
Total reaction volume	20 µl

\* Recommendation for template RNA concentration in a 20 µl reaction volume

1) total RNA: 100 fg ~ 1 µg

2) mRNA: 10 fg ~ 1 µg

2. Temperature cycling Protocol

Priming	25°C, 10 min
Reverse transcription	50°C, 60 min
RT inactivation	80°C, 5 min
Hold	12°C, ∞

## Recommendation for downstream PCR

For downstream PCR amplification, the volume of cDNA product should not exceed 1/5 of the PCR reaction volume, typically 1 ~ 4 µl in 20 µl PCR reaction.