

# NOYA-cDNA synthesis kit

Catalog number: N-1131 « Research Use Only »

## **Overview**

NOYA cDNA first strand synthesis Kit is a complete system for highly efficient synthesis of first strand cDNA. The kit uses the specific H minus reverse transcriptase (RT), which is an advanced enzyme derived by in vitro evolution of M-MuLV RT. The enzyme features the highest thermostability among the derivatives of M-MuLV RT and lacks RNase H activity. Kit cocktail designated for random hexammer based cDNA synthesis and fully optimized for efficient synthesis especially for low abundant RNAs. The protocol is very robust. cDNA which is synthesized by this method can be used directly for PCR amplification process.

#### **Storage**

1-Revert-RNA MMX1 (store at -20°C)

2-RT-Enzyme (store at -20°C)

### **Kit contents**

1- Revert-RNA MMX1; 25 rxn, 125ul

2- RT-Enzyme; 10ul

#### **Protocol**

- Take the kit out of the freezer, defrost the contents of tubes. Store all the tubes in the sample-cooler or cool box
- Mark 0.2 ml microtube of, one tube for positive control sample (+) & one tube for negative control sample (-) & one or more tubes for the test sample.
- Prepare the working solution of RT-MIX in master tube. The calculation of components for preparation of RT-MIX was represented in the following table:

Master-tube	RT-MIX	RT-Enzyme/μl
(n+1)	(n+1) x 5	(n+1) x 0.4

- Vortex & microfuge the Master microtest-tube for 5-10 seconds.
- Add 5 μl of working solution of RT-MIX in all the test-tubes.
- Add 5 μl of negative control sample in the tube and mark as (C-).
- Add 5 μl of RNAs in the test tubes.
- Add 5 µl of positive control sample in the tube and mark as (C+).
- Vortex & microfuge tubes for 2-3 seconds.
- put one drop (not less than 30 μl) of Ampliwax in each tubes.
- put tubes 5 min at room temperature.
- Put all the tubes into thermelcycler & start the program:
- Program 1:  $\rightarrow$  10 min 25 °C  $\rightarrow$  (1 cycle)

• Program 2:  $\rightarrow$  60 min 42 °C  $\rightarrow$  (1 cycle)

• Program 3:  $\rightarrow$  3 min 95 °C  $\rightarrow$  (1 cycle)

### **Caution**

All reagents in this kit are intended for research purposes. Do not use for diagnosis or clinical purposes. Please observe general laboratory precaution and utilize safety while using this kit.

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