

## Easy™ cDNA Synthesis Kit(New)

Cat A101161 (50 Reactions)

Store at -20°C

### Contents

Component	Volume
Buffer-Mix (2x)	500 µL
Enzyme Mix	100 µL
DEPC-treated water	500 µL
cDNA Con. Primer Mix(B2M)	50µL

### Description

Easy cDNA Synthesis kit contains all necessary components for conversion of total RNA or mRNA to **the single stranded cDNA**. The 2X Buffer mix solutions contains, RTbuffer, 1mM dNTP mixture, 8mM MgCl<sub>2</sub>, Oligo d(t)<sub>16</sub>, Randomhexamer and stabilizer. Enzyme mix contains thermostable H-minus MMLV, RNase Inhibitor and stabilizer.

### Features

- Easy protocol & Minimum pipetting steps
- RNase minus MMLV enzyme
- Long mRNA synthesis
- High temperature reaction to destabilize RNA secondary structures

### General Reaction Protocol (first strand cDNA synthesis):

1- Mix the template RNA (total RNA or Poly(A)mRNA) and other kit components in RNase-free tube as below table.

Template RNA	1 ng~5 µg	XµL
Buffer-Mix (2x)		10
Enzyme Mix		2
<b>DEPC-treated water</b>		<b>Up to 20 µL</b>

- 2- Mix the above mixture by quick vortex.
- 3- Incubate 10 min at 25 °C.
4. Incubate 60 min at 47°C.
5. Stop the reaction by heating at 85°C for 5 minutes. Chill on the ice or at 4°C.

**Note:** To perform PCR, you can add the finished RT reaction up to 1/5 of the final PCR volume.

### cDNA Control PCR Reaction

- 1- Prepare a reaction mix according to the table.
- 2- For negative tube use 2µl of PCR grade water. The

Component	Vol (µL)
Taq 2X Premix	10
cDNA Control primer mix	1
cDNA	2
PCR Grade Water	7
<b>Final volume</b>	<b>20 µL</b>

final volume in each PCR reaction tubes is 20µl. Note: It is recommended that all of the PCR components be premixed in a sufficient quantity for daily needs and then dispensed into the individual reaction tubes.

### Amplification protocol

Cycle	Time	Temp °C
1	4 Min	95
	30 Sec	94
35	30 Sec	57
	30 Sec	72
1	5 Min	72

### Agarose gel Electrophoresis

Run the total 5-7 µL of PCR products alongside 3µL DNA marker on a 2% agarose gel containing Green viewer DNA safe stain.

The B2M primers amplify a band of approximately 230bp from human, mouse and rat B2M cDNA.

### Disclaimers and Addresses

This product is for research use only and should only be used by trained professionals.