

Thermo Reverse Transcription cDNA Kit

complete and ready to use kit for cDNA production

Cat. no: PR6901

Storage: -20°C

Description:

Thermo RT Kit is designed to perform reverse transcription. This kit contains all reagents necessary for the reverse transcription of RNA to cDNA: Thermo M-MLV Reverse Transcriptase, optimal reaction buffer, dNTPs, RNase inhibitor, RNase-free water and oligo(dT)18. Thermo M-MLV has no RNase H activity and is **stable at 42-65°C** and **suitable for GC-rich template or long template amplification**.

Components:

Product	50 reactions
Thermo M-MLV Reverse Transcriptase (200U/μl)	50 μl
5 × First-strand Buffer	250 μl
dNTP Mixture (10 mM each)	50 μl
RNase Inhibitor (40 U/μl)	50 μl
Oligo(dT)18 Primer (50μM)	50 μl
RNase-free H ₂ O	1 ml

Procedure:

1. Prepare the reverse transcript reaction solution follow by next:

Total RNA or Poly(A) RNA	<u>0.2-2 μg</u>
Oligo (dT)18 (50 μM)	<u>1 μl</u>
dNTP Mixture (10 mM each)	<u>1 μl</u>
RNase -free dH₂O	<u>up to 14 μl</u>

2. Incubate on thermal cycler at 65°C for 5 min, and then fast chill on ice.

3. Add the reverse transcript reaction solution into above PCR tube

5 × First-strand Buffer	<u>4 μl</u>
Thermo M-MLV RTase (200U/μl)	<u>1 μl</u>
RNase Inhibitor (40U/μl)	<u>1 μl</u>
Total	<u>20 μl</u>

4. Reverse transcript reaction on thermal cycler by next condition:

30°C	<u>10 min</u>
42°C	<u>30-60 min</u>
95°C	<u>5 min</u>

Note:

1. The solution used for cDNA synthesis must be treated with DEPC as possible.
2. RNA sample should be avoided of genome contamination.
3. Avoid repeated freezing and thawing RNA.
4. Every component should be stored at -20°C.
5. cDNA should be kept at -20°C.