Yeastern Biotech Co., Ltd

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Ver. L0307

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Deoxy+

HiSpec Reverse Transcriptase

Cat. No.

FYT501-50R
FYT501-100R

Deoxy+ HiSpec Reverse Transcriptase

Concentration: 200 U/μl **Storage:** - 20 ℃

Description

Deoxy+ HiSpec Reverse Transcriptase (RT) is genetically engineered by introducing point mutations to MMLV RT that increase half-life, reduce RNase activity and increase thermal stability. Those designed mutations lead to increased specificity of Deoxy+ HiSpec RT and the highest cDNA yield of all RTs. It is ideal for RT-PCR of a specific gene or generating cDNA from total or poly(A)+ RNA samples. It synthesizes a complementary DNA strand from total RNA, mRNA, or an RNA:DNA hybrid.

Content

- Deoxy+ HiSpec Reverse Transcriptase
- 2✕ Deoxy+ RT premix:
  100 mM Tris-HCl pH 8.3，150 mM KCl，6 mM $MgCl_2$，20 mM DTT，
  1 mM dNTPs

Unit Definition

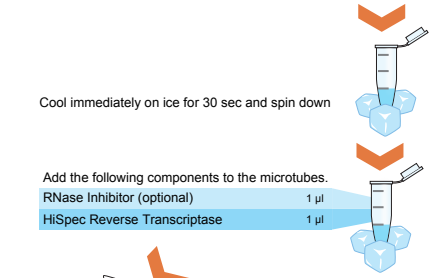
One unit incorporates 1 nmole of dTTP into acid precipitable material in 10 min at 37℃ using poly(A)-oligo(dT) as template primer.

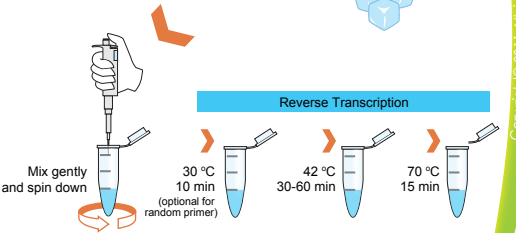
Standard Protocol for First-Strand cDNA Synthesis

Add the following components to the microtubes on ice.

Oligo (dT) primer	50 pmole
or Random primer	50 pmole
or Gene specific primer	2 pmole
2✕ Deoxy+ RT premix	10 μl
Template RNA	(total RNA ≤ 5μg or mRNA ≤ 1μg)
ddH_2O	variable

Total volume 18 μl





PCR (Recommended)

Use only 2 μl of the first-strand reaction for PCR.

1. Add the following components to a PCR tube.
   10✕ PCR Buffer ..... 5 μl
   10 mM dNTPs Mixture ..... 1 μl
   10 μM Forward primer ..... 1 μl
   10 μM Reverse primer ..... 1 μl
   5 U/μl Taq DNA polymerase ..... 1 μl
   The first-strand reactant ..... 2 μl
   ddH_2O ..... to 50 μl
2. Mix gently and spin down.
3. Perform 20 to 40 cycles of PCR.

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