

TransScript[®] All-in-One First-Strand cDNA Synthesis SuperMix for PCR

Cat. No. AT321

Storage: at -20°C for two years

Description

TransScript[®] All-in-One First-Strand cDNA Synthesis SuperMix for PCR provides all the necessary components for cDNA synthesis from total RNA or mRNA. The SuperMix is provided at 5× concentration and used at 1× concentration by adding RNA and H₂O.

The resulting cDNA are suitable for regular PCR, not for qPCR.

Highlights

- One-tube format for simple and fast setup and reduce pipetting variability.
- The optimal ratio of oligo(dT)₁₈ primer to random primer(N9) for PCR ready cDNA.
- PCR ready cDNA in 30 minutes (unsuitable for qPCR).
- cDNA up to 12 kb.

Application

Multiple copy and low copy gene detection

Kit Contents

Component	AT321-01 (50 rxns)
5× <i>TransScript</i> [®] All-in-One SuperMix for PCR	200 μl
RNase-free Water	1 ml

First-Strand cDNA synthesis

1. Reaction Components

Component	Volume
Total RNA/mRNA	50 ng -5 μg/5-500 ng
5× <i>TransScript</i> [®] All-in-One SuperMix for PCR	4 μl
RNase-free Water	to 20 μl

2. Incubation

- For RNA template with poly(A)⁺, incubate at 42°C for 30 minutes.
- For RNA template without poly(A)⁺, incubate at 25°C for 10 minutes, then at 42°C for 30 minutes.

3. Incubate at 85°C for 5 seconds to inactivate enzymes.

RT-PCR

Reaction Components

Component	Volume	Final Concentration
Template	2 μ l	as required
Forward Primer (10 μ M)	1 μ l	0.2 μ M
Reverse Primer (10 μ M)	1 μ l	0.2 μ M
2 \times <i>TransTaq</i> [®] HiFi PCR SuperMix II	25 μ l	1 \times
Nuclease-free Water	Variable	-
Total volume	50 μ l	-

Thermal cycling conditions

94°C	2-5 min	} 30-35 cycles
94°C	30 sec	
50-60°C	30 sec	
72°C	1-2 kb/min	
72°C	5-10 min	

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