

2X RT Smart Mix

Cat.No.ODR41-M01

Description: RTase used in this kit is a thermostable mutant of M-MLV reverse transcriptase (RNase H-) which is a recombinant type and purified from *E.coli*. This mutant type of RNase H enables more efficient cDNA synthesis.

Product contents:

Contents	Volume
2X RT Smart Mix	50 Preps (10μL/test)
Oligo (dT) ₁₈ (2.8nmol)	Lyophilized Dissolve in 56μL nuclease free water
Random hexamer (2.8nmol)	Lyophilized Dissolve in 56μL nuclease free water

Storage

- Store at -20°C

Protocol

- Prepare the following mixture in a PCR tube.

PCR mixture (Reaction volume 20μL)		
RNA	10ng – 1μg total RNA 10ng – 0.5μg mRNA	- μg
Primer	1μL Oligo (dT) ₁₈ / 1μL Random hexamer or 0.5μL Oligo (dT) ₁₈ + 0.5μL Random hexamer or 1μL Gene-specific Primer (15 – 20μM)	
2X RT Smart Mix		10μL
Make up the volume with RNase-free Water to		20μL

- Spin down the tube by centrifugation briefly and incubate the reaction mixture at 25°C for 5 minutes and then proceed with the next step.
- Incubate at 50°C for 60 minutes.
- Inactivate the reaction mixture by heating at 95°C for 5 minutes.
Note: Use heating block or PCR machine. DO NOT use water bath.
- The product can be used for PCR immediately or stored at -20°C.
Note: As a recommendation; cDNA product should compose 10% of total reaction volume of PCR.