

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 (10 μ L/test)
Oligo (dT) ₁₈ (2.8nmol)	Lyophilized Dissolve in 56 μ L nuclease free water
Random hexamer (2.8nmol)	Lyophilized Dissolve in 56 μ L nuclease free water

Storage

- Store at -20°C

Protocol

1. Prepare the following mixture in a PCR tube.

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

2. 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.
3. Incubate at 50°C for 60 minutes.
4. Inactivate the reaction mixture by heating at 95°C for 5 minutes.
Note: Use heating block or PCR machine. DO NOT use water bath.
5. 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.