

## 2X OneStep RT-PCR Smart Mix (with dye)

Cat.No. ODR31-M01

**Description:** OneStep RT-PCR Smart Mix is a product for easy reverse transcription and PCR at “One Step” with optimal recombinant of Reverse Transcriptase and HotStart h-*Taq* DNA polymerase mixture. This mix has dual advantages of high efficiency for cDNA synthesis and high specificity of HotStart polymerase to set up of optimal PCR condition easily and conveniently. The inert tracer dye enables the PCR product to be loaded directly on to an agarose gel. The inert tracer dye migrates approximately at 125 base pairs in a 1% agarose gel run in 1X TBE buffer.

### Storage

- Store at  $-20^{\circ}\text{C}$  for 12 months
- Prepare aliquots to avoid multiple freeze-thaw cycles.

### Features

|                               |                          |
|-------------------------------|--------------------------|
| RTase                         | M-MLV RTase (RNase H)    |
| Temperature of cDNA synthesis | 42-55 $^{\circ}\text{C}$ |
| Synthesis length              | < 1kb                    |
| Synthesis primer              | Gene specific primer     |

### Recommended PCR mixture and cycling

| PCR mixture (Reaction vol. 30 $\mu\text{L}$ )    |                  | Cycle                 |          |                  |
|--|------------------|-----------------------|----------|------------------|
| 2X OneStep RT-PCR Smart Mix                      | 15 $\mu\text{L}$ | 50 $^{\circ}\text{C}$ | 30 min   | $\times 1$       |
| Forward primer (10 $\mu\text{mol}/\mu\text{L}$ ) | 1 $\mu\text{L}$  | 95 $^{\circ}\text{C}$ | 15 min   | $\times 1$       |
| Reverse primer (10 $\mu\text{mol}/\mu\text{L}$ ) | 1 $\mu\text{L}$  | 95 $^{\circ}\text{C}$ | 20 sec   | } $\times 35-40$ |
| Template RNA ( 20ng - 1 $\mu\text{g}$ )          | - $\mu\text{L}$  | AT                    | 40 sec   |                  |
| Add D.W to                                       | 30 $\mu\text{L}$ | 72 $^{\circ}\text{C}$ | 1 min/kb |                  |
|  |                  | 72 $^{\circ}\text{C}$ | 5 min    | $\times 1$       |

**Note:** You may modify the amount of template, extension time, annealing temperature, and the number of PCR cycle according to the target size, primers  $T_m$  and the type of templates for amplification.