

Product information

One Step RT-PCR Kit

QF 24 V4
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Catalog #: 9K-005-0011
Size: 100 Prep
Storage: -20°C

The One Step RT-PCR Kit is a product for easy reverse transcription and PCR in "One Step" with an optimal recombinant Reverse Transcriptase and HotStart h-Taq DNA Polymerase mixture. The kit has dual advantages of high efficiency for cDNA synthesis and high specificity of hot start polymerase, to set up optimal PCR conditions easily and conveniently.

Contents:

| Description | Size |
|--|--------|
| One Step RT-PCR Enzyme Mix | 0.2 ml |
| 5X One Step RT-PCR Buffer | 1.0 ml |
| 10mM dNTP Mix (dATP, dTTP, dGTP, dCTP) | 0.2 ml |
| 5X Band Sharpener | 1.0 ml |
| RNase-free water | 1.0 ml |

Features:

| Feature Type | Description |
|-------------------------------|-------------------------------------|
| RTase | M-MLV RTase (RNase H ⁻) |
| Temperature of synthesis cDNA | At 42 - 55°C |
| Synthesis length | < 1 kb |
| Synthesis primer | Gene specific primer |
| Expiration date | 1 Years |

Recommended PCR mixture & cycling:

| PCR Mixture | (Reaction vol. : 30 ul) | Cycle | | | |
|-------------------------------|-------------------------|-------|----------|-------------------|--|
| 5X One Step RT-PCR Buffer | 6 ul | 50°C | 30 min | X 1 | |
| 10mM dNTP mix | 1 ul | 95°C | 15 min | X 1 | |
| Forward Primer (10 pmole /ul) | 1 ul | 95°C | 20 sec | } X 35 - 40 | |
| Reverse Primer (10 pmole /ul) | 1 ul | AT | 40 sec | | |
| Template DNA (< 300 ng) | - ul | 72°C | 1 min/Kb | | |
| 5X Band Sharpener | 0-6ul | 72°C | 5 min | X 1 | |
| One Step RT-PCR Enzyme Mix | 2 ul | 8°C | ∞ | | |
| Add RNase - free water to | 30 ul | | | | |

| Reaction mixture (conc. of 5X Band Doctor™) | Mix I (0X) | Mix II (0.5X) | Mix III (1X) |
|--|---------------|------------------|-----------------|
| 5X One Step RT-PCR Buffer | 6 ul | 6 ul | 6 ul |
| 10 mM dNTP mix | 1 ul | 1 ul | 1 ul |
| Forward Primer (10 pmole/ul) | 1 ul | 1 ul | 1 ul |
| Reverse Primer (10 pmole/ul) | 1 ul | 1 ul | 1 ul |
| Template DNA | - ul | - ul | - ul |
| 5X Band Sharpener | 0 ul | 3 ul | 6 ul |
| One Step RT-PCR Enzyme Mix | 2 ul | 2 ul | 2 ul |
| Add RNase-free water (Provided) to | 30 ul | 30 ul | 30 ul |

5X Band Sharpener:

Improved results can be obtained by adjusting of 5X Band Sharpener if template has high G+C region or secondary structure. Please add "5X Band Sharpener" to a final concentration of 0.5X-2X (5-20ul for 50ul reaction) if needed.

◀ **Example of using for 5X Band Sharpener (Reaction vol.: 30 ul)**