

## SMARTer® PCR cDNA Synthesis Kit

Catalog No.	Amount	Lot Number
634926	20 rxns	Specified on product label.

### Description

A kit for performing twenty cDNA syntheses from nanogram amounts of total or poly A<sup>+</sup> RNA. The kit utilizes our SMART® (Switching Mechanism At 5' end of RNA Template) technology coupled with PCR amplification to generate high yields of full-length double-stranded cDNA suitable for various applications, including Clontech® PCR-Select™ cDNA subtraction, nondirectional cloning and preparation of complex cDNA probes. The SMARTer PCR cDNA Synthesis Kit includes the same components as the original SMART PCR cDNA Synthesis Kit plus an improved SMARTer II A oligo and SMARTScribe™ Reverse Transcriptase, which provide higher specificity and increased yield.

### Package Contents

#### Package 1:

- 2x10 µl SMARTer II A Oligonucleotide (12 µM)
- 5 µl Control Mouse Liver Total RNA (1 µg/µl)

#### Package 2:

- 20 µl 3' SMART CDS Primer II A (12 µM)
- 80 µl 5X First-Strand Buffer (RNase-Free)
- 400 µl 5' PCR Primer II A (12 µM)
- 200 µl dNTP Mix (10 mM of each dNTP)
- 50 µl DTT (100 mM)
- 1 ml Deionized H<sub>2</sub>O
- 25 µl SMARTScribe Reverse Transcriptase (100 U/µl)
- 10 µl RNase Inhibitor (40 U/µl)

#### Package 3:

- 20 CHROMA SPIN™ +TE-1000 Columns

### Storage Conditions

- Store CHROMA SPIN +TE-1000 Columns at room temperature.
- Store RNA and SMARTer II A Oligo at -70°C.
- Store all other components at -20°C.

### Expiration Date

- Specified on product label.

### Shipping Conditions

- Package 1 & Package 2: Dry ice
- Package 3: Room temperature

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#### Takara Bio USA, Inc.

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## Product Documents

Documents for our products are available for download at [takarabio.com/manuals](http://takarabio.com/manuals)

The following documents apply to this product:

- SMARTer PCR cDNA Synthesis Kit User Manual

## Quality Control Data

A sample kit from each lot was tested as follows: 1  $\mu$ l (2 ng) of the Control Mouse Liver Total RNA was subjected to first-strand cDNA synthesis. 40  $\mu$ l of TE buffer was added to the first-strand reaction product, and 10  $\mu$ l of the diluted first-strand reaction product was used for PCR. A range of PCR cycles (18, 21, 24, and 27) was performed. 5  $\mu$ l of the PCR product was electrophoresed on a 1.2% agarose/EtBr gel. A moderately strong smear from 0.5–5 kb was observed.

It is certified that this product meets the above specifications, as reviewed and approved by the Quality Department.

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### NOTICE TO PURCHASER:

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