SMARTer® RACE 5’/3’ Kit

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**Description**

The SMARTer RACE 5’/3’ Kit allows the synthesis of first-strand cDNA from poly A+ or total RNA via SMART® (Switching Mechanism at 5’ End of RNA Template) technology, and facilitates the performance of 5’- and 3’-RACE (Rapid Amplification of cDNA Ends) PCR with the kit's Universal Primer Mix. Our carefully designed, specially modified SMARTer Oligo preferentially captures the 5’ ends of the cDNA during cDNA synthesis. Using this SMARTer Oligo, our procedure enriches cDNA pools for 5’ sequences, thus increasing the likelihood you will amplify the entire sequence of your gene.

RACE PCR products are amplified with the provided SeqAmp™ DNA Polymerase and cloned into the linearized pRACE vector with In-Fusion® Cloning. The SMARTer RACE 5’/3’ Kit has been improved to accommodate larger RNA input volumes and perform better on challenging targets than the original SMARTer RACE cDNA Amplification Kit. The In-Fusion Snap Assembly Master Mix, NucleoSpin Gel and PCR Clean-Up Kit, and Stellar™ Competent Cells are included for your convenience in cloning RACE products. Gene-specific RACE primers are supplied by the user.

**Package Contents**

**634858 (10 Rxns):**
- SMARTer RACE 5’/3’ Kit Components (Cat. No. 634860) (Not sold separately) [>>View Components]
- SeqAmp DNA Polymerase (Cat. No. 638504) [>>View Components]
- In-Fusion Snap Assembly Master Mix (Cat. No. 638947) [>>View Components]
- NucleoSpin Gel and PCR Clean-Up Kit (Cat. No. 740609.10) (Not sold separately) [>>View Components]
- Stellar Competent Cells (Cat. No. 636763) [>>View Components]

**634859 (20 Rxns):**
- 2 x SMARTer RACE 5’/3’ Kit Components (Cat. No. 634860) (Not sold separately) [>>View Components]
- 2 x SeqAmp DNA Polymerase (Cat. No. 638504) [>>View Components]
- 2 x In-Fusion Snap Assembly Master Mix (Cat. No. 638947) [>>View Components]
- 2 x NucleoSpin Gel and PCR Clean-Up Kit (Cat. No. 740609.10) (Not sold separately) [>>View Components]
- 2 x Stellar Competent Cells (Cat. No. 636763) [>>View Components]

For storage conditions, please see the Certificate of Analysis supplied with each component.
Product Components List
SMARTer RACE 5’/3’ Kit

Product Documents
Documents for our products are available for download at takarabio.com/manuals.

The following documents apply to this product:

- SMARTer RACE 5’/3’ Kit User Manual
- SMARTer RACE 5’/3’ Kit Protocol-at-a-Glance
- Linearized pRACE Vector Information
- SeqAmp DNA Polymerase Protocol-At-A-Glance
- In-Fusion Snap Assembly User Manual
- NucleoSpin PCR Clean-Up & Gel Extraction User Manual
- Stellar Competent Cells Protocol-At-A-Glance

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This document has been reviewed and approved by the Quality Department.