

## SMART-Seq® v4 Reagent Kit for the Apollo™ System

Catalog No.	Amount	Lot Number
640170	96 rxns	Specified on product label.

### Description

The SMART-Seq v4 Reagent Kit for the Apollo System is part of the fourth generation of SMARTer® Ultra® Low products used to generate high-quality cDNA from ultra-low amounts of total RNA, or directly from 1–1,000 intact cells. The components of the kit are specially formulated for automation on the Apollo platform. The kit is tested with 10-pg inputs of total RNA, and has been shown to perform robust cDNA synthesis from one cell (equivalent to 10 pg of total RNA), yielding data with the highest sensitivity compared to previous generations. This kit incorporates locked nucleic acid (LNA) technology and improves on the SMART-Seq2 method. cDNA libraries generated with this kit have been tested for compatibility with Illumina® sequencing platforms. SMART® technology offers unparalleled sensitivity and unbiased amplification of cDNA transcripts. Most importantly, SMART technology enriches for full-length transcripts and maintains the true representation of mRNA from the original sample, critical factors for transcriptome sequencing and gene expression analysis.

### Package Contents

#### Package 1:

**640170**  
**(96 rxns)**  
5 µl Control Total RNA (1 µg/µl)

#### Package 2:

**640170**  
**(96 rxns)**  
1.85 ml Lysis 1  
350 µl Lysis 2  
150 µl RT 1  
600 µl RT 2  
300 µl RT 3  
135 µl PCR 1  
200 µl PCR 2  
4 x 1.25 ml PCR 3  
240 µl RI  
2 x 6.8 ml EB  
4 ml NFW

### Storage Conditions

- Store Control Total RNA at –70°C.
- Store Lysis 1 at –20°C. Once thawed, Lysis 1 can be stored at 4°C.
- Store EB at –20°C. Once thawed, EB can be stored at room temperature.
- Store all other reagents at –20°C.

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#### Takara Bio USA, Inc.

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**Shelf Life**

- 1 year from date of receipt under proper storage conditions.

**Shipping Conditions**

- Dry ice (–70°C)

**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:

- SMART-Seq v4 Reagent Kit for the Apollo System User Manual

**Quality Control Data**

A sample kit from each lot was manually tested as follows: 10 pg of Control Total RNA was subjected to the manual equivalent of the first-strand cDNA synthesis protocol described in the SMART-Seq v4 Reagent Kit for the Apollo System User Manual. The first-strand cDNA was then used as template for PCR using 17 cycles. PCR products were purified with an Agencourt AMPure XP Kit (Beckman Coulter, Part No. A63880 or A63881), and resuspended in 17 µl of EB. 1 µl of the PCR reaction was analyzed with an Agilent 2100 Bioanalyzer and a High Sensitivity DNA Kit (Agilent, Cat. No. 5067-4626). The resultant analysis indicated the cDNA size range was approximately 300 bp to 10,000 bp. A peak was manually integrated from 300 bp to 9,000 bp. To calculate the total cDNA output, the concentration, defined by Bioanalyzer software, was multiplied by 17 µl. Outputs ranged from 3.4–17 ng.

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

## SMART-Seq® v4 Reagent Kit for the Apollo™ System

### CATALOG NO.

640170

### NOTICE TO PURCHASER:

Our products are to be used for **Research Use Only**. They may not be used for any other purpose, including, but not limited to, use in humans, therapeutic or diagnostic use, or commercial use of any kind. Our products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products or to provide a service to third parties without our prior written approval.

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### STATEMENT 275

SMART-Seq2 Technology. This product is sold under exclusive license from Ludwig Institute of Cancer Research, Ltd. and is covered by US Patent No. 10266894, Japanese Patent No. 6336080, and European Patent No. 3036336, and pending U.S. patent application and/or pending claims of foreign counterparts. For license information, please contact a Takara Bio USA, Inc. licensing representative by phone at 650.919.7320 or by e-mail at [licensing@takarabio.com](mailto:licensing@takarabio.com).

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