Certificate of Analysis

SMARTer® Stranded Total RNA-Seq Kit - Pico Input Mammalian Components

Catalog Nos.	Amount	Lot Number
635008 (not sold separately; sold as a part of 635005)	12 rxns	Specified on product label.
635009 (not sold separately; sold as a part of 635006)	48 rxns	Specified on product label.
635010 (not sold separately; sold as a part of 635007)	96 rxns	Specified on product label.

Description

The SMARTer Stranded Total RNA-Seq Kit - Pico Input Mammalian Components are used with Illumina indexing primers as part of the SMARTer Stranded Total RNA-Seq Kit - Pico Input Mammalian to generate strand-specific RNA-seq libraries for Illumina® sequencing using purified total RNA input ranging from 250 pg–10 ng. This kit takes advantage of SMARTer Stranded RNA-seq technology, based on Clontech's patented SMART® (**S**witching **M**echanism **a**t 5' end of **R**NA **T**emplate) technology, with the added benefits of the same locked nucleic acid (LNA) technology used in the SMART-Seq® v4 kit. The integrated post-cDNA synthesis removal of abundant molecules originating from rRNA makes the workflow extremely sensitive with excellent reproducibility and low mapping to rRNA. This method was developed to work with either high- or low-quality total RNA and does not require additional rRNA removal methods or kits. Final libraries retain strand of origin information.

Package Contents

Package 1:

635008 (12 rxns)	635009 (48 rxns)	635010 (96 rxns)	
54 µl	216 µl	432 µl	TSO Mix*
12 µl	50 µl	100 µl	R-Probes*
15 µl	60 µl	120 µl	ZapR™
5 µl	5 µl	5 µl	Control Total RNA (1 µg/µl)

Package 2:

635008 (12 rxns)	635009 (48 rxns)	635010 (96 rxns)	
12 µl	50 µl	100 µl	SMART Pico Oligos Mix*
50 µl	200 µl	400 µl	5X First-Strand Buffer
25 µl	100 µl	200 µl	SMARTScribe™ RT (100 U/µl)
6 µl	25 µl	50 µl	RNase Inhibitor (40 U/µl)
50 µl	200 µl	400 µl	ZapR Buffer (10X)
50 µl	200 µl	2 x 200 µl	SeqAmp™ DNA Polymerase
1.25 ml	3 x 1.25 ml	6 x 1.25 ml	SeqAmp PCR Buffer (2X)
250 µl	1 ml	2 x 1 ml	Stranded Elution Buffer
25 µl	100 µl	200 µl	PCR2 Primers
1.25 ml	2 x 1.25 ml	4 x 1.25 ml	Nuclease-Free Water

* Takara Bio USA, Inc. proprietary sequences

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(120822)

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Cat. Nos. 635008, 635009 & 635010

SMARTer Stranded Total RNA-Seq Kit - Pico Input Mammalian Components (Not sold separately; Sold as a part of 635005, 635006 & 635007)

Storage Conditions

- Store Package 1 at –70°C.
- Store all other components at –20°C.
- Do not freeze/thaw ZapR and R-Probes more than 3 times. We recommend aliquotting ZapR and R-Probes into multiple vials to avoid repeated freeze/thaw cycles.

Shelf Life

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

Shipping Conditions

- Dry ice

Product Documents

Documents for our products are available for download at **takarabio.com/manuals**
The following documents apply to this product:

- SMARTer Stranded Total RNA-Seq Kit - Pico Input Mammalian User Manual

Quality Control Data

A sample kit from each lot was tested as follows: 250 pg of Control Total RNA (Mouse Brain) was converted to an Illumina-ready cDNA sequencing library with the SMARTer Stranded Total RNA-Seq Kit - Pico Input Mammalian as described in the User Manual, using 5 cycles in PCR1 and 16 cycles in PCR2 steps. Purified libraries were quantified using the Qubit 2.0 Fluorometer (Life Technologies) with a dsDNA HS Assay Kit, resulting in an output of at least 5 ng/µl. Libraries were diluted to 1.5 ng/µl, and 1 µl of the dilution was analyzed with an Agilent Bioanalyzer and High Sensitivity DNA Kit (Agilent, Cat. No. 5067-4626). The Bioanalyzer electropherogram showed a broad distribution from 200 bp to 1,000 bp with a peak in the 370–400 bp range. The libraries were sequenced on an Illumina platform and confirmed to contain less than 25% of the reads mapping to rRNA

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

Notice to Purchaser

SMARTer® Stranded Total RNA-Seq Kit - Pico Input Mammalian Components

CATALOG NOS.

635008, 635009, 635010

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.

Your use of this product is also subject to compliance with the licensing requirements, listed below if applicable, and described on the product´s web page at http://www.takarabio.com. It is your responsibility to review, understand and adhere to any restrictions imposed by these statements.

STATEMENT 275

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STATEMENT 425

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