

# **SMART-Seq® Total RNA Pico Input with UMIs**

Catalog Nos.	Amount
634363 (Not sold separately; sold as a part of 634354)	24 rxns
634364 (Not sold separately; sold as a part of 634355 & 634356)	96 rxns

### Lot Number

Specified on product label. Specified on product label.

# Description

SMART-Seq Total RNA Pico Input with UMIs, sold as part of SMART-Seq Total RNA Pico Input with UMIs (ZapR® Mammalian) (Cat. Nos. 634354–634356), is used in conjunction with the ZapR Mammalian rRNA Depletion Kit to generate strand-specific RNA-seq libraries for Illumina® sequencing from 10–1,000 cells or 250 pg–10 ng inputs of purified total RNA. This product incorporates Takara Bio's proprietary SMART® (Switching Mechanism at the 5' end of RNA Template) technology and include refinements to the SMARTe® method for stranded RNA-seq that simplifies library preparation workflow and improves sequencing performance.

# Package Contents

## Package 1:

634363 <u>(24 rxns)</u>	634364 <u>(96 rxns)</u>	
110 µl	450 μl	SMART® UMI-TSO Mix v3*

## Package 2:

634363 <u>(24 rxns)</u>	634364 ( <u>96 rxns)</u>	
30 µl	110 µl	SMART® Pico Oligos Mix v3*
100 µl	400 µl	5X First-Strand Buffer
50 µl	200 µl	SMARTScribe <sup>™</sup> II Reverse Transcriptase
30 µl	100 µl	RNase Inhibitor (40 U/µl)
100 µl	2 x 200 µl	SeqAmp <sup>™</sup> DNA Polymerase
2 x 1.25 ml	10 ml	SeqAmp <sup>™</sup> CB PCR Buffer (2X)
1.25 ml	5 ml	Tris Buffer (5 mM)
100 µl	400 µl	PCR2 Primers v3
2 x 1.25 ml	10 ml	Nuclease-Free Water
0.5 ml	1 ml	10X Lysis Buffer

\* Takara Bio proprietary sequences

# **Storage Conditions**

- Store Package 1 components at -70°C.
- Store Package 2 components at -20°C.

## **Expiration Date**

• Specified on product label.

Takara Bio USA, Inc. 2560 Orchard Parkway, San Jose, CA 95131, USA

U.S. Technical Support: <u>technical\_support@takarabio.com</u>

# Shipping Conditions

• Dry ice

# **Product Documents**

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

• SMART-Seq Total RNA Pico Input with UMIs (ZapR Mammalian) User Manual

# **Quality Control Data**

To assess the quality of the reagents, 250 pg of Control Total RNA (Human Brain) was converted to an Illumina-ready cDNA sequencing library as described in the user manual, using 5 cycles in the PCR1 step and 18 cycles in PCR2 step. Purified libraries were quantified using the Qubit 2.0 Fluorometer (Life Technologies) and Qubit dsDNA HS Assay Kit (Thermo Fisher Scientific, Cat No. Q32851 or Q32854), resulting in an output of at least 2.5 ng/µl. Libraries were diluted to 1 ng/µl, and 1 µl of the dilution was analyzed with an Agilent Bioanalyzer and High Sensitivity DNA Kit (Agilent Technology, Cat. No. 5067-4626). The Bioanalyzer electropherogram showed a broad distribution from 200–1,000 bp with an average size in the 300–500 bp range. The libraries were sequenced on an Illumina® platform and confirmed to contain  $\leq$ 20% of the reads mapping to rRNA (5S, 5.8S, 18S and 28S) and to human mitochondrial ribosomal RNA (m12S and m16S).

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



# **SMART-Seq® Total RNA Pico Input with UMIs**

### CATALOG NOS.

### 634363 & 634364

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#### STATEMENT 392

This Product is protected by one or more patents from the family consisting of:US10941397, People's Republic of China Patent: ZL201480057094.4, US10781443, US10954510, DE602014069266.4, EP3058104, FR3058104, UK3058104, JP6602294, SE3058104, CA2923812, and any corresponding patents, divisionals, continuations, patent applications and foreign filings sharing common priority with the same family. Information on relevant patents and licenses for this product may be found at: https://www.takarabio.com/patents.

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