VAHTS RNA Adapters Set 1/Set 2 for Illumina®

Catalog # N803 / N804

Version 5.1

Vazyme biotech co., ltd.

Introduction

VAHTS RNA Adapters Set 1/2 for Illumina® are two special kits designed for RNA library preparation for Illumina platforms. The set1 (Cat.No. #N803) contains 12 kinds of indexed adapters (RNA Adapter 1 - 12). The set2 (Cat.No. #N804) contains another 12 kinds of indexed adapters (RNA Adapter 13 - 27).

Contents of Kit

Component	N803-01	N803-02
RNA Adapter 1	10 µl	40 µl
RNA Adapter 2	10 µl	40 µl
RNA Adapter 3	10 µl	40 µl
RNA Adapter 4	10 µl	40 µl
RNA Adapter 5	10 µl	40 µl
RNA Adapter 6	10 µl	40 µl
RNA Adapter 7	10 µl	40 µl
RNA Adapter 8	10 µl	40 µl
RNA Adapter 9	10 µl	40 µl
RNA Adapter 10	10 µl	40 µl
RNA Adapter 11	10 µl	40 µl
RNA Adapter 12	10 µl	40 µl

Component	N804-01	N804-02
RNA Adapter 13	10 µl	40 µl
RNA Adapter 14	10 µl	40 µl
RNA Adapter 15	10 µl	40 µl
RNA Adapter 16	10 µl	40 µl
RNA Adapter 18	10 µl	40 µl
RNA Adapter 19	10 µl	40 µl
RNA Adapter 20	10 µl	40 µl
RNA Adapter 21	10 µl	40 µl
RNA Adapter 22	10 µl	40 µl
RNA Adapter 23	10 µl	40 µl
RNA Adapter 25	10 µl	40 µl
RNA Adapter 27	10 µl	40 µl

* N803-01 & N804-01: 4 rxn for each RNA Adapter (2.5 µl / library), 48 rxn for the entire kit.
* N803-02 & N804-02: 16 rxn for each RNA Adapter (2.5 µl / library), 192 rxn for the entire kit.

Storage

All the components can be stored at -20℃ for one year.

Application

Special for RNA library preparation for Illumina platforms with VAHTS mRNA-seq V2 Library Prep Kit (Vazyme, Cat.No. #NR601), VAHTS Stranded mRNA-seq Library Prep Kit (Vazyme, Cat.No. #NR602), and VAHTS Total RNA-seq (H/M/R) Library Prep Kit (Vazyme, Cat.No. #NR603),

Quality Control

16-Hour Incubation: A 50 µl reaction system containing 5 µl of RNA Adapter and 1 µg of Hind III-λDNA incubated at 37℃ for 16 hours resulted in no band degraded detected by agarose gel electrophoresis. A 50 µl reaction system containing 5 µl of RNA Adapter and 1 µg of T3 DNA incubated at 37℃ for 16 hours resulted in no band degraded detected by agarose gel electrophoresis.

Endonuclease Activity: A 50 µl reaction system containing 5 µl of RNA Adapter and 1 µg of ϕX174RF I DNA incubated at 37℃ for 4 hours resulted in < 10% conversion to RF II analyzed by agarose gel electrophoresis.

Sequence

The structure of libraries prepared with VAHTS RNA Adapter set 1/set 2 for Illumina® are as follows:

5' - **Universal Adapter** - Insert DNA Sequence - **RNA Adapter X** - 3'

VAHTS Index Primer for Illumina®

Both the Universal Adapter and the Index are contained in each RNA Adapter. The related sequences are as follows:

Name	Sequence	Index Sequence*
Universal Adapter	5'-AATGATACGGCGACCACCGAGATCTACACTCTTTCCCTACACGACGCTCTTCCGATCT-3'	
RNA Adapter 1	5'-GATCGGAAGAGCACACGTCTGAACTCCAGTCAC**ATCACG**ATCTCGTATGCCGTCTTCTGCTTG-3'	**ATCACG**
RNA Adapter 2	5'-GATCGGAAGAGCACACGTCTGAACTCCAGTCAC**CGATGT**ATCTCGTATGCCGTCTTCTGCTTG-3'	**CGATGT**
RNA Adapter 3	5'-GATCGGAAGAGCACACGTCTGAACTCCAGTCAC**TTAGGC**ATCTCGTATGCCGTCTTCTGCTTG-3'	**TTAGGC**
RNA Adapter 4	5'-GATCGGAAGAGCACACGTCTGAACTCCAGTCAC**TGACCA**ATCTCGTATGCCGTCTTCTGCTTG-3'	**TGACCA**
RNA Adapter 5	5'-GATCGGAAGAGCACACGTCTGAACTCCAGTCAC**ACAGTG**ATCTCGTATGCCGTCTTCTGCTTG-3'	**ACAGTG**
RNA Adapter 6	5'-GATCGGAAGAGCACACGTCTGAACTCCAGTCAC**GCCAAT**ATCTCGTATGCCGTCTTCTGCTTG-3'	**GCCAAT**
RNA Adapter 7	5'-GATCGGAAGAGCACACGTCTGAACTCCAGTCAC**CAGATC**ATCTCGTATGCCGTCTTCTGCTTG-3'	**CAGATC**
RNA Adapter 8	5'-GATCGGAAGAGCACACGTCTGAACTCCAGTCAC**ACTTGA**ATCTCGTATGCCGTCTTCTGCTTG-3'	**ACTTGA**
RNA Adapter 9	5'-GATCGGAAGAGCACACGTCTGAACTCCAGTCAC**GATCAG**ATCTCGTATGCCGTCTTCTGCTTG-3'	**GATCAG**
RNA Adapter 10	5'-GATCGGAAGAGCACACGTCTGAACTCCAGTCAC**TAGCTT**ATCTCGTATGCCGTCTTCTGCTTG-3'	**TAGCTT**
RNA Adapter 11	5'-GATCGGAAGAGCACACGTCTGAACTCCAGTCAC**GGCTAC**ATCTCGTATGCCGTCTTCTGCTTG-3'	**GGCTAC**
RNA Adapter 12	5'-GATCGGAAGAGCACACGTCTGAACTCCAGTCAC**CTTGTA**ATCTCGTATGCCGTCTTCTGCTTG-3'	**CTTGTA**
RNA Adapter 13	5'-GATCGGAAGAGCACACGTCTGAACTCCAGTCAC**AGTCAA**CAATCTCGTATGCCGTCTTCTGCTTG-3'	**AGTCAA**
RNA Adapter 14	5'-GATCGGAAGAGCACACGTCTGAACTCCAGTCAC**AGTTCC**GTATCTCGTATGCCGTCTTCTGCTTG-3'	**AGTTCC**
RNA Adapter 15	5'-GATCGGAAGAGCACACGTCTGAACTCCAGTCAC**ATGTCA**GAATCTCGTATGCCGTCTTCTGCTTG-3'	**ATGTCA**
RNA Adapter 16	5'-GATCGGAAGAGCACACGTCTGAACTCCAGTCAC**CCGTCC**CGATCTCGTATGCCGTCTTCTGCTTG-3'	**CCGTCC**
RNA Adapter 18	5'-GATCGGAAGAGCACACGTCTGAACTCCAGTCAC**GTCCGC**ACATCTCGTATGCCGTCTTCTGCTTG-3'	**GTCCGC**
RNA Adapter 19	5'-GATCGGAAGAGCACACGTCTGAACTCCAGTCAC**GTGAAA**CGATCTCGTATGCCGTCTTCTGCTTG-3'	**GTGAAA**
RNA Adapter 20	5'-GATCGGAAGAGCACACGTCTGAACTCCAGTCAC**GTGGCC**TTATCTCGTATGCCGTCTTCTGCTTG-3'	**GTGGCC**
RNA Adapter 21	5'-GATCGGAAGAGCACACGTCTGAACTCCAGTCAC**GTTTCG**GAATCTCGTATGCCGTCTTCTGCTTG-3'	**GTTTCG**
RNA Adapter 22	5'-GATCGGAAGAGCACACGTCTGAACTCCAGTCAC**CGTACG**TAATCTCGTATGCCGTCTTCTGCTTG-3'	**CGTACG**
RNA Adapter 23	5'-GATCGGAAGAGCACACGTCTGAACTCCAGTCAC**GAGTGG**ATATCTCGTATGCCGTCTTCTGCTTG-3'	**GAGTGG**
RNA Adapter 25	5'-GATCGGAAGAGCACACGTCTGAACTCCAGTCAC**ACTGAT**ATATCTCGTATGCCGTCTTCTGCTTG-3'	**ACTGAT**
RNA Adapter 27	5'-GATCGGAAGAGCACACGTCTGAACTCCAGTCAC**ATTCCT**TTATCTCGTATGCCGTCTTCTGCTTG-3'	**ATTCCT**

* The index sequences (6 bp) are also the index sequences during sequencing, which can be input directly to the Sample Sheet.