

# Certificate of Analysis

**Product Name:** RapidSeq High Yield Small RNA Sample Prep Kit

**Catalog Number:** KS074012, KS074012-I, KS074012-II, KS074012-III, and KS074012-IV

**Shipping and Storage Condition:** Shipped the reagents in dry ice and the plastic ware at room temperature. Upon receipt, store all reagents appropriately. Avoid repeated freeze/thaw cycles. This kit is stable for half a year after shipping date. Please note the different storage temperatures: Box1 = -20°C, Box 2= room temperature, Box 3 = -20°C.

## Description

Components in this kit are prepared with pure chemicals to construct NGS libraries compatible with Illumina's sequencing platform for subsequent cluster generation, using purified small RNA or total RNA contains small RNA fragments as input. 4 sets of the kit with different 4 sets of 12 aligners, respectively are available.

## Quality Control

At least one kit of each lot has been tested for small RNA NGS library construction using Biochain's Adult Normal Lung Tissue Total RNA (Cat# R1234152-50) and Illumina's NGS instrument. Good coverage and low adapter dimer are observed. All known miRNAs are captured.

## Kit Components

One kit with aligner has 3 boxes listed in below; only one aligner box is included in one kit. (see table 1-3 below). Reagents are sufficient for 12 assays. The kit without aligner only includes 2 boxes.

**Table 1.** Contents List of RapidSeq High Yield Small RNA Sample Prep Kit (Box 1 of 3)

**Note: store Box 1 at -20°C**

Cap Color	Item	Amount in kit	Part No.
Green	Tail Oligo	30 µl	KS074012-3
	Tail Buffer	30 µl	KS074012-4
	Tail Enzyme	30 µl	KS074012-5
	Ligation Enhancer	27 µl	KS074012-6
Red	Cap Oligo	30 µl	KS074012-7
	Cap Enzyme	30 µl	KS074012-8
Yellow	RT Oligo	60 µl	KS074012-9
	RT Enzyme	60 µl	KS074012-10
Blue	Universal Primer	60 µl	KS074012-11
	PCR MasterMix	700 µl	KS074012-12
Amber	Gel Cutting Indicator	26 µl	L5022100-DS

**Table 2.** Contents List of RapidSeq High Yield Small RNA Sample Prep Kit (Box 2 of 3)

**Note: store Box 2 at room temperature**

Item	Amount in kit	Part No.
Gel Cutter	12	KS071012-11
Gel Breaker	12	KS071012-12
Gel Filter	12	KS071012-13
DNA Storage Solution	1500 µl x 2	LB3401010

**Table 3.** Contents List of RapidSeq High Yield Small RNA Sample Prep Kit (Box 3 of 3)

**Note: store Box 3 at -20°C**
**KS072012-I**

Item	Amount in kit (µl)	Part No.	Sequence
Aligner 1	10	KS072012-1	ATCACG
Aligner 2	10	KS072012-2	CGATGT
Aligner 3	10	KS072012-3	TTAGGC
Aligner 4	10	KS072012-4	TGACCA
Aligner 5	10	KS072012-5	ACAGTG
Aligner 6	10	KS072012-6	GCCAAT
Aligner 7	10	KS072012-7	CAGATC
Aligner 8	10	KS072012-8	ACTTGA
Aligner 9	10	KS072012-9	GATCAG
Aligner 10	10	KS072012-10	TAGCTT
Aligner 11	10	KS072012-11	GGCTAC
Aligner 12	10	KS072012-12	CTTGTA

**KS072012-II**

Item	Amount in kit (µl)	Part No.	Sequence
Aligner 13	10	KS072012-13	AGTCAA
Aligner 14	10	KS072012-14	AGTTCC
Aligner 15	10	KS072012-15	ATGTCA
Aligner 16	10	KS072012-16	CCGTCC
Aligner 17	10	KS072012-17	GTAGAG
Aligner 18	10	KS072012-18	GTCCGC
Aligner 19	10	KS072012-19	GTGAAA
Aligner 20	10	KS072012-20	GTGGCC
Aligner 21	10	KS072012-21	GTTTCG
Aligner 22	10	KS072012-22	CGTACG
Aligner 23	10	KS072012-23	GAGTGG
Aligner 24	10	KS072012-24	GGTAGC

**KS072012-III**

Item	Amount in kit (μl)	Part No.	Sequence
Aligner 25	10	KS072012-25	ACTGAT
Aligner 26	10	KS072012-26	ATGAGC
Aligner 27	10	KS072012-27	ATTCCT
Aligner 28	10	KS072012-28	CAAAAG
Aligner 29	10	KS072012-29	CAACTA
Aligner 30	10	KS072012-30	CACCGG
Aligner 31	10	KS072012-31	CACGAT
Aligner 32	10	KS072012-32	CACTCA
Aligner 33	10	KS072012-33	CAGGCG
Aligner 34	10	KS072012-34	CATGGC
Aligner 35	10	KS072012-35	CATTTT
Aligner 36	10	KS072012-36	CCAACA

**KS072012-IV**

Item	Amount in kit (μl)	Part No.	Sequence
Aligner 37	10	KS072012-37	CGGAAT
Aligner 38	10	KS072012-38	CTAGCT
Aligner 39	10	KS072012-39	CTATAC
Aligner 40	10	KS072012-40	CTCAGA
Aligner 41	10	KS072012-41	GACGAC
Aligner 42	10	KS072012-42	TAATCG
Aligner 43	10	KS072012-43	TACAGC
Aligner 44	10	KS072012-44	TATAAT
Aligner 45	10	KS072012-45	TCATTC
Aligner 46	10	KS072012-46	TCCCGA
Aligner 47	10	KS072012-47	TCGAAG
Aligner 48	10	KS072012-48	TCGGCA

2. One Certificate of Analysis
3. One user's manual

**FOR IN VITRO RESEARCH USE ONLY**
**APPROVED BY:**
