

# VAHTS Maxi Unique Dual Barcode Primers Set 3 for MGI

NM34403

Version 24.1



## Product Description

VAHTS Maxi Unique Dual Barcode Primers Set 3 for MGI is a specialized kit for DNA library preparation based on the MGI sequencers. The VAHTS Universal Adapter for MGI in the kit is the stubby adapter that can be compatible with various library preparation kits based on the T-A ligation. VAHTS Unique Dual Barcode Primer for MGI contains specifically paired Unique Dual Barcode (UDB). After library preparation, it can achieve two distinct and unrelated index sequences double verification, minimizing index hopping and index misassignment, ensuring that the reads in downstream analysis are nearest to the truth.

This kit includes Universal Adapters and 96 different VAHTS Unique Dual Barcode Primer for MGI. All the reagents provided in the kit have undergone rigorous quality control and functional testing to ensure the optimal stability and repeatability of library preparation.

## Components

Components	NM34403-01 (384 rxns)
VAHTS Unique Dual Barcode Primer for MGI	20 µl each
VAHTS Universal Adapter for MGI	4 × 480 µl

▲ The amount of DNA Adapter used for a DNA library depends on the amount of input DNA. For details, please refer to the Appendix.

▲ The concentration of VAHTS Universal Adapter for MGI is 15 µM; the concentration of VAHTS Unique Dual Barcode Primer for MGI is 12 µM.

### NM34403 Components

	1	2	3	4	5	6	7	8	9	10
1	193	203	213	393	233	243	253	263	273	283
2	194	204	214	224	234	244	254	264	274	284
3	390	205	215	225	235	245	255	265	275	285
4	196	206	216	226	236	246	256	266	276	286
5	197	207	217	227	237	247	257	267	394	287
6	198	208	391	228	238	248	258	268	278	288
7	199	209	219	229	239	249	259	269	279	Ada
8	200	210	392	230	240	250	260	270	280	Ada
9	201	211	221	231	241	251	261	271	281	Ada
10	202	212	222	232	242	252	262	272	282	Ada

▲ The 8 Barcodes marked with the same color in the table can ensure base balance and are recommended to be used in groups.

## Storage

Store at -30 ~ -15°C and ship at ≤0°C.

## Applications

VAHTS Maxi Unique Dual Barcode Primers Set 3 for MGI (Vazyme #NM34403) is a specialized kit for Vazyme NDM/NRM series library preparation kits, compatible with various sample types: genomic DNA, cfDNA, FFPE DNA, etc. It is suitable for multiple dual-index DNA libraries for MGI sequencers, and can effectively avoid cross-contamination between samples.

## Notes

1. The amount of DNA Adapter used depends on the amount of input DNA. For details, please refer to the Appendix.
2. Don't premix Adapter, Ligation Buffer and Ligase to prevent adapter self-ligation.
3. Don't store the adapters above room temperature (15 ~ 25°C) which may result in decreasing ligation efficiency.

## Appendix

Table 1. Recommended the Dilution Ratio and Volume of Adapters for Vazyme #NDM607 (Mechanical Fragmentation)

Input DNA	Adapter dilution ratio	Volume (μl)
1 ng	1:40	5
10 ng	1:10	5
50 ng	1:2	5
100 ng	Undiluted	5
≥500 ng	Undiluted	5

Table 2. Recommended the Dilution Ratio and Volume of Adapters for Vazyme #NDM627 (Enzymatic Fragmentation)

Input DNA	Adapter dilution ratio	Volume (μl)
1 ng	1:60	5
10 ng	1:10	5
50 ng	1:2	5
100 ng	Undiluted	5
≥500 ng	Undiluted	5

Table 3. Recommended the Dilution Ratio and Volume of Adapters for Vazyme #NRM605 (RNA Library Preparation)

Input RNA	Adapter dilution ratio	Volume (μl)
10 ng	1:10	1
100 ng	1:10	3
1 μg	1:10	5

For Research Use Only. Not for use in diagnostic procedures.