

# **Truncated DNA Adapter (UDI) Kit for MGI**

**RK21686 MiniSst (8 indices)**

**RK21687 MidiSet (24 indices)**

**RK21688 Set\_A (48 indices)**

**RK21689 Set\_B (48 indices)**

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# 1. Introduction

ABclonal Truncated DNA Adapter (UDI) Kit for MGI contains universal truncated adapters and Unique Dual Index (UDI) primers for sample preparation for Next Generation Sequencing on MGI platform. The MiniSet (CAT.NO. RK21686) provides 8 unique primer pairs (MGI UDI Primers 1-8); the MidiSet (CAT.NO. RK21687) provides 24 unique primer pairs (MGI UDI Primers 1-24); Set\_A (CAT.NO. RK21688) provides 48 unique primer pairs (MGI UDI Primers 1-48); Set\_B (CAT.NO. RK21689) provides 48 unique primer pairs (MGI UDI Primers 49-96).

The kit can not be used to perform PCR-Free DNA lib preparation and 2-3 cycles of amplification are necessary.

# 2. Components

Components	RK21686	RK21687	RK21688	RK21689
MGI Truncated Adapter A7	40µL	120µL	240µL	240µL
MGI UDI Primers 1	5µL	5µL	5µL	-
MGI UDI Primers 2	5µL	5µL	5µL	-
MGI UDI Primers 3	5µL	5µL	5µL	-
MGI UDI Primers 4	5µL	5µL	5µL	-
MGI UDI Primers 5	5µL	5µL	5µL	-
MGI UDI Primers 6	5µL	5µL	5µL	-
MGI UDI Primers 7	5µL	5µL	5µL	-
MGI UDI Primers 8	5µL	5µL	5µL	-
MGI UDI Primers 9	-	5µL	5µL	-
MGI UDI Primers 10	-	5µL	5µL	-
MGI UDI Primers 11	-	5µL	5µL	-
MGI UDI Primers 12	-	5µL	5µL	-
MGI UDI Primers 13	-	5µL	5µL	-
MGI UDI Primers 14	-	5µL	5µL	-

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MGI UDI Primers 15	-	5µL	5µL	-
MGI UDI Primers 16	-	5µL	5µL	-
MGI UDI Primers 17	-	5µL	5µL	-
MGI UDI Primers 18	-	5µL	5µL	-
MGI UDI Primers 19	-	5µL	5µL	-
MGI UDI Primers 20	-	5µL	5µL	-
MGI UDI Primers 21	-	5µL	5µL	-
MGI UDI Primers 22	-	5µL	5µL	-
MGI UDI Primers 23	-	5µL	5µL	-
MGI UDI Primers 24	-	5µL	5µL	-
MGI UDI Primers 25	-	-	5µL	-
MGI UDI Primers 26	-	-	5µL	-
MGI UDI Primers 27	-	-	5µL	-
MGI UDI Primers 28	-	-	5µL	-
MGI UDI Primers 29	-	-	5µL	-
MGI UDI Primers 30	-	-	5µL	-
MGI UDI Primers 31	-	-	5µL	-
MGI UDI Primers 32	-	-	5µL	-
MGI UDI Primers 33	-	-	5µL	-
MGI UDI Primers 34	-	-	5µL	-
MGI UDI Primers 35	-	-	5µL	-
MGI UDI Primers 36	-	-	5µL	-
MGI UDI Primers 37	-	-	5µL	-
MGI UDI Primers 38	-	-	5µL	-
MGI UDI Primers 39	-	-	5µL	-
MGI UDI Primers 40	-	-	5µL	-
MGI UDI Primers 41	-	-	5µL	-
MGI UDI Primers 42	-	-	5µL	-
MGI UDI Primers 43	-	-	5µL	-
MGI UDI Primers 44	-	-	5µL	-
MGI UDI Primers 45	-	-	5µL	-
MGI UDI Primers 46	-	-	5µL	-

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MGI UDI Primers 47	-	-	5µL	-
MGI UDI Primers 48	-	-	5µL	-
MGI UDI Primers 49	-	-	-	5µL
MGI UDI Primers 50	-	-	-	5µL
MGI UDI Primers 51	-	-	-	5µL
MGI UDI Primers 52	-	-	-	5µL
MGI UDI Primers 53	-	-	-	5µL
MGI UDI Primers 54	-	-	-	5µL
MGI UDI Primers 55	-	-	-	5µL
MGI UDI Primers 56	-	-	-	5µL
MGI UDI Primers 57	-	-	-	5µL
MGI UDI Primers 58	-	-	-	5µL
MGI UDI Primers 59	-	-	-	5µL
MGI UDI Primers 60	-	-	-	5µL
MGI UDI Primers 61	-	-	-	5µL
MGI UDI Primers 62	-	-	-	5µL
MGI UDI Primers 63	-	-	-	5µL
MGI UDI Primers 64	-	-	-	5µL
MGI UDI Primers 65	-	-	-	5µL
MGI UDI Primers 66	-	-	-	5µL
MGI UDI Primers 67	-	-	-	5µL
MGI UDI Primers 68	-	-	-	5µL
MGI UDI Primers 69	-	-	-	5µL
MGI UDI Primers 70	-	-	-	5µL
MGI UDI Primers 71	-	-	-	5µL
MGI UDI Primers 72	-	-	-	5µL
MGI UDI Primers 73	-	-	-	5µL
MGI UDI Primers 74	-	-	-	5µL
MGI UDI Primers 75	-	-	-	5µL
MGI UDI Primers 76	-	-	-	5µL
MGI UDI Primers 77	-	-	-	5µL
MGI UDI Primers 78	-	-	-	5µL

MGI UDI Primers 79	-	-	-	5µL
MGI UDI Primers 80	-	-	-	5µL
MGI UDI Primers 81	-	-	-	5µL
MGI UDI Primers 82	-	-	-	5µL
MGI UDI Primers 83	-	-	-	5µL
MGI UDI Primers 84	-	-	-	5µL
MGI UDI Primers 85	-	-	-	5µL
MGI UDI Primers 86	-	-	-	5µL
MGI UDI Primers 87	-	-	-	5µL
MGI UDI Primers 88	-	-	-	5µL
MGI UDI Primers 89	-	-	-	5µL
MGI UDI Primers 90	-	-	-	5µL
MGI UDI Primers 91	-	-	-	5µL
MGI UDI Primers 92	-	-	-	5µL
MGI UDI Primers 93	-	-	-	5µL
MGI UDI Primers 94	-	-	-	5µL
MGI UDI Primers 95	-	-	-	5µL
MGI UDI Primers 96	-	-	-	5µL

### 3. Storage

All components should be stored at -20°C. The shelf life of each reagent is one year when stored properly.

### 4. Applications

Rapid DNA Lib Prep kit;

Rapid Plus DNA Lib Prep kit;

Rapid Plus DNA Lib Prep Kit for MGI V2;

ABclonal Whole RNA-seq Lib Prep kit;  
mRNA-seq Lib Prep Kit;  
Fast RNA Lib Prep Kit.

## 5. Sequences

Taking MGI UDI Primers 1 as an example, the library structure constructed is as follows:

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5'GCATGGCGACCTTATCAGCATCACTCACTTGTCTTCCTAAGACCGCTTGGCCTCCGACTT----NNNNNNN —  
AAGTCGGATCGTAGCCATGTCGTTCTGTGAGCCAAGGAGTTGTTGTCCTCTAAACTGCTGACGTACTGAGAG  
3 ' CGTACCGCTGGAATAGTCGTAGTGAGTGAACAGAAGGATTCTGGCGAACCGGAGGCTGAA — NNNNNNN —  
TTCAGCCTAGCATCGGTACAGCAAGACTCGGTTCTCAACAACAGGAGATTTGACGACTGCATGACTCTCp
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### Truncated DNA Adapter (UDI) Kit for MGI MiniSet(RK21686)

Components	Barcode 1 ID	Barcode 2 ID	Barcode 1	Barcode 2
MGI UDI Primers 1	17	25	GTGAGTGATG	TAGAGGACAA
MGI UDI Primers 2	18	26	GAGTCAGCTG	CCTAGCGAAT
MGI UDI Primers 3	19	27	TGTCTGCGAA	GTAGTCATCG
MGI UDI Primers 4	20	28	ATTGGTACAA	GCTGAGCTGT
MGI UDI Primers 5	21	29	CGATTGTGGT	AACCTAGATA
MGI UDI Primers 6	22	30	ACAGACTTCC	TTGCCATCTC
MGI UDI Primers 7	23	31	TCCACACTCT	AGATCTTGCG
MGI UDI Primers 8	24	32	CACCACAAGC	CGCTATCGGC

### Truncated DNA Adapter (UDI) Kit for MGI MidiSet(RK21687)

Components	Barcode 1 ID	Barcode 2 ID	Barcode 1	Barcode 2
MGI UDI Primers 1	17	25	GTGAGTGATG	TAGAGGACAA
MGI UDI Primers 2	18	26	GAGTCAGCTG	CCTAGCGAAT
MGI UDI Primers 3	19	27	TGTCTGCGAA	GTAGTCATCG
MGI UDI Primers 4	20	28	ATTGGTACAA	GCTGAGCTGT
MGI UDI Primers 5	21	29	CGATTGTGGT	AACCTAGATA
MGI UDI Primers 6	22	30	ACAGACTTCC	TTGCCATCTC
MGI UDI Primers 7	23	31	TCCACACTCT	AGATCTTGCG
MGI UDI Primers 8	24	32	CACCACAAGC	CGCTATCGGC
MGI UDI Primers 9	25	33	TAGAGGACAA	GCAACGATGG
MGI UDI Primers 10	26	34	CCTAGCGAAT	TAATCGTTCA
MGI UDI Primers 11	27	35	GTAGTCATCG	GTTCGCTCTA
MGI UDI Primers 12	28	36	GCTGAGCTGT	TCTCACACAT
MGI UDI Primers 13	29	37	AACCTAGATA	CTGTTAGGAT
MGI UDI Primers 14	30	38	TTGCCATCTC	CGCAGACGCG



MGI UDI Primers 15	31	39	AGATCTTGCG	AAGGATCATC
MGI UDI Primers 16	32	40	CGCTATCGGC	AGCGTTGAGC
MGI UDI Primers 17	33	41	GCAACGATGG	TTAGATGCAT
MGI UDI Primers 18	34	42	TAATCGTTCA	GTCCAGAGCT
MGI UDI Primers 19	35	43	GTTGCTCTA	CACGTGATAG
MGI UDI Primers 20	36	44	TCTCACACAT	CCACTAGTCC
MGI UDI Primers 21	37	45	CTGTTAGGAT	TGGACTTGGC
MGI UDI Primers 22	38	46	CGCAGACGCG	GCTTGACAGG
MGI UDI Primers 23	39	47	AAGGATCATC	AAGACCTCTA
MGI UDI Primers 24	40	48	AGCGTTGAGC	AGTTGCCATA

### Truncated DNA Adapter (UDI) Kit for MGI Set A (48 indices) (RK21688)

Components	Barcode 1 ID	Barcode 2 ID	Barcode 1	Barcode 2
MGI UDI Primers 1	17	25	GTGAGTGATG	TAGAGGACAA
MGI UDI Primers 2	18	26	GAGTCAGCTG	CCTAGCGAAT
MGI UDI Primers 3	19	27	TGTCTGCGAA	GTAGTCATCG
MGI UDI Primers 4	20	28	ATTGGTACAA	GCTGAGCTGT
MGI UDI Primers 5	21	29	CGATTGTGGT	AACCTAGATA
MGI UDI Primers 6	22	30	ACAGACTTCC	TTGCCATCTC
MGI UDI Primers 7	23	31	TCCACACTCT	AGATCTTGCG
MGI UDI Primers 8	24	32	CACCACAAGC	CGCTATCGGC
MGI UDI Primers 9	25	33	TAGAGGACAA	GCAACGATGG
MGI UDI Primers 10	26	34	CCTAGCGAAT	TAATCGTTCA
MGI UDI Primers 11	27	35	GTAGTCATCG	GTTGCTCTA
MGI UDI Primers 12	28	36	GCTGAGCTGT	TCTCACACAT
MGI UDI Primers 13	29	37	AACCTAGATA	CTGTTAGGAT
MGI UDI Primers 14	30	38	TTGCCATCTC	CGCAGACGCG

MGI UDI Primers 15	31	39	AGATCTTGCG	AAGGATCATC
MGI UDI Primers 16	32	40	CGCTATCGGC	AGCGTTGAGC
MGI UDI Primers 17	33	41	GCAACGATGG	TTAGATGCAT
MGI UDI Primers 18	34	42	TAATCGTTCA	GTCCAGAGCT
MGI UDI Primers 19	35	43	GTTGCTCTA	CACGTGATAG
MGI UDI Primers 20	36	44	TCTCACACAT	CCACTAGTCC
MGI UDI Primers 21	37	45	CTGTTAGGAT	TGGACTTGGC
MGI UDI Primers 22	38	46	CGCAGACGCG	GCTTGACAGG
MGI UDI Primers 23	39	47	AAGGATCATC	AAGACCTCTA
MGI UDI Primers 24	40	48	AGCGTTGAGC	AGTTGCCATA
MGI UDI Primers 25	41	49	TTAGATGCAT	ATGTACGCAG
MGI UDI Primers 26	42	50	GTCCAGAGCT	TTAATGAGAT
MGI UDI Primers 27	43	51	CACGTGATAG	TGCGCCACTT
MGI UDI Primers 28	44	52	CCACTAGTCC	CATTAAGGCC
MGI UDI Primers 29	45	53	TGGACTTGGC	CCGCCTCAGA
MGI UDI Primers 30	46	54	GCTTGACAGG	AATCGGCTCG
MGI UDI Primers 31	47	55	AAGACCTCTA	GCCGGTTATC
MGI UDI Primers 32	48	56	AGTTGCCATA	GGAATATTGA
MGI UDI Primers 33	49	57	ATGTACGCAG	ATCAACGGA
MGI UDI Primers 34	50	58	TTAATGAGAT	AACTGACTG
MGI UDI Primers 35	51	59	TGCGCCACTT	GTACCTCAAT
MGI UDI Primers 36	52	60	CATTAAGGCC	GACTTCTAAT
MGI UDI Primers 37	53	61	CCGCCTCAGA	TGAAGCGTTG
MGI UDI Primers 38	54	62	AATCGGCTCG	CGTGCGATCC
MGI UDI Primers 39	55	63	GCCGGTTATC	TCGGAAGGCA
MGI UDI Primers 40	56	64	GGAATATTGA	CCGATGTCGC
MGI UDI Primers 41	57	65	ATCAACGGA	ACTTAGAATG

MGI UDI Primers 42	58	66	AACTGTA CTG	TCCAAGCCTG
MGI UDI Primers 43	59	67	GTACCTCAAT	AGACGATGAT
MGI UDI Primers 44	60	68	GACTTCTAAT	CTCACAAGAC
MGI UDI Primers 45	61	69	TGAAGCGTTG	CGTTCCTACT
MGI UDI Primers 46	62	70	CGTGCGATCC	GTGGTTGTGA
MGI UDI Primers 47	63	71	TCGGAAGGCA	GAAGGCCTGC
MGI UDI Primers 48	64	72	CCGATGTCGC	TAGCTTGCCA

### Truncated DNA Adapter (UDI) Kit for MGI Set B (48 indices) (RK21689)

Components	Barcode 1 ID	Barcode 2 ID	Barcode 1	Barcode 2
MGI UDI Primers 49	65	73	ACTTAGAATG	GACAATGCTC
MGI UDI Primers 50	66	74	TCCAAGCCTG	GCTAATCACA
MGI UDI Primers 51	67	75	AGACGATGAT	AGTCCATAGG
MGI UDI Primers 52	68	76	CTCACAAGAC	CTATCGCCTA
MGI UDI Primers 53	69	77	CGTTCCTACT	ATCGTGGTCT
MGI UDI Primers 54	70	78	GTGGTTGTGA	TGGCTAATAC
MGI UDI Primers 55	71	79	GAAGGCCTGC	CAGTGCAGAG
MGI UDI Primers 56	72	80	TAGCTTGCCA	TCAGGCTGGT
MGI UDI Primers 57	73	81	GACAATGCTC	ATACTCACGC
MGI UDI Primers 58	74	82	GCTAATCACA	ATGCTCCGCG
MGI UDI Primers 59	75	83	AGTCCATAGG	TGTGAACTTG
MGI UDI Primers 60	76	84	CTATCGCCTA	GAGAGGTGCT
MGI UDI Primers 61	77	85	ATCGTGGTCT	TGCACTGTAA
MGI UDI Primers 62	78	86	TGGCTAATAC	GCCTAGGCAA
MGI UDI Primers 63	79	87	CAGTGCAGAG	CCATCATAGC
MGI UDI Primers 64	80	88	TCAGGCTGGT	CATGGTAATT
MGI UDI Primers 65	81	89	ATACTCACGC	CACCATGTCT

MGI UDI Primers 66	82	90	ATGCTCCGCG	ATATGTCTGG
MGI UDI Primers 67	83	91	TGTGAACCTG	AAGGAAGCGT
MGI UDI Primers 68	84	92	GAGAGGTGCT	TCAAGACGTC
MGI UDI Primers 69	85	93	TGCACTGTAA	CCGCTCAGTA
MGI UDI Primers 70	86	94	GCCTAGGCAA	GGTGTGTACA
MGI UDI Primers 71	87	95	CCATCATAGC	TTCACGTAAG
MGI UDI Primers 72	88	96	CATGGTAATT	GGTTCCACAC
MGI UDI Primers 73	89	97	CACCATGTCT	AGGTATTCTT
MGI UDI Primers 74	90	98	ATATGTCTGG	CGAATGCAAC
MGI UDI Primers 75	91	99	AAGGAAGCGT	TTCAACGGCG
MGI UDI Primers 76	92	100	TCAAGACGTC	CTCGGCGGAA
MGI UDI Primers 77	93	101	CCGCTCAGTA	ACGGTAATGG
MGI UDI Primers 78	94	102	GGTGTGTACA	GATCCGACGT
MGI UDI Primers 79	95	103	TTCACGTAAG	TCACGATACA
MGI UDI Primers 80	96	104	GGTTCCACAC	GATTCTCTTC
MGI UDI Primers 81	147	131	AGCTGCGCAC	ATTCAAGTTC
MGI UDI Primers 82	148	132	GATTAATGAA	ACGGCTTCCG
MGI UDI Primers 83	149	133	CCAATGCTTG	CAATGGCAGA
MGI UDI Primers 84	150	134	TTGCCTATGT	GGCATCAGAT
MGI UDI Primers 85	151	135	AACGCTCACG	TAACCTGAAC
MGI UDI Primers 86	152	136	CCGATCGGCC	CCGTAGATCA
MGI UDI Primers 87	153	137	TTAGGAACTA	TGTATATCGG
MGI UDI Primers 88	154	138	GGTCAGTAGT	GTCGGCCGTT
MGI UDI Primers 89	155	139	TGCCGGATCA	TGCATGACGA
MGI UDI Primers 90	156	140	ACTCATGACC	GCATAGCGTA
MGI UDI Primers 91	157	141	CAAGTCTCAT	AAGCTGTAG
MGI UDI Primers 92	158	142	GTGACATGTG	CTTGGATACT

MGI UDI Primers 93	159	143	AAGTACCTGG	AACTACGTCC
MGI UDI Primers 94	160	144	CCTATAGCAC	CCGGTCTAAC
MGI UDI Primers 95	161	145	TTCGGTCAGT	TTACGACCGG
MGI UDI Primers 96	162	146	GGATCGAGTA	GGTACTAGTT

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