

SPECIFICATION SHEET

Product Name: Primer Kit for Illumina, Set 2
Catalog # PK02-K29A

Product Description: SignalChem Diagnostics Illumina Primer Kit is an indexing kit designed for NGS library preparation for the Illumina sequencing platform. This kit contains paired-end (PE) adapters and unique dual-index (UDI) primers. Each UDI primer consists of a combined i5 and i7 primer mix. Sets 1-4 are available, each with 96 indexes, enabling the preparation of up to 384 uniquely dual-indexed sequencing libraries.

Components:

Pack size	96 x 1 T
PE Adapter	336 µL
UDI Primers 097-192	5 µL each

Shipping & Storage: Store at -15 °C ~ -25 °C for 2 years.

Additional Information:

- The PE adapters are at a concentration of 20 µM and are short adapter sequences that require subsequent PCR amplification to produce complete sequencing libraries.
- The UDI primers are at a concentration of 12.5 µM.
- Thaw adapters slowly at room temperature, and store in aliquots to avoid repeated freeze-thaw.
- The resulting DNA library will have the following structure:



P5 i5 index Rd1 SP Insert DNA Rd2 SP i7 index P7

- For research use only.
- Use appropriate personal protective equipment (PPE), such as a laboratory coat and gloves, and follow proper disposal protocols.

Table 1. Sequence Information

Product	Sequence
PE Adapter for Illumina	5'-/5Phos/GATCGGAAGAGCACACGTCTGAACTCCAGT*C-3' 5'-ACACTCTTTCCCTACACGACGCTCTTCCGATC*T-3'
i5 Index Primer for Illumina	5'-AATGATACGGCGACCACCGAGATCTACAC[i5 index]ACACTCTTTCCCTACACGACGCTCTTCCGATCT-3'
i7 Index Primer for Illumina	5'-CAAGCAGAAGACGGCATACGAGAT[i7 Index]GTGACTGGAGTTCAGACGTGTGCTCTTCCGATC-3'

Note: [i5 Index] and [i7 index] represent a unique 8 base pair index sequence.

Primer locations on the 96-well plate are as follows:

Set 2												
	1	2	3	4	5	6	7	8	9	10	11	12
A	97	105	113	121	129	137	145	153	161	169	177	185
B	98	106	114	122	130	138	146	154	162	170	178	186
C	99	107	115	123	131	139	147	155	163	171	179	187
D	100	108	116	124	132	140	148	156	164	172	180	188
E	101	109	117	125	133	141	149	157	165	173	181	189
F	102	110	118	126	134	142	150	158	166	174	182	190
G	103	111	119	127	135	143	151	159	167	175	183	191
H	104	112	120	128	136	144	152	160	168	176	184	192