

SPECIFICATION SHEET

Product Name: Primer Kit for Illumina, Set 1
Catalog # PK01-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 001-096	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 1												
	1	2	3	4	5	6	7	8	9	10	11	12
A	1	9	17	25	33	41	49	57	65	73	81	89
B	2	10	18	26	34	42	50	58	66	74	82	90
C	3	11	19	27	35	43	51	59	67	75	83	91
D	4	12	20	28	36	44	52	60	68	76	84	92
E	5	13	21	29	37	45	53	61	69	77	85	93
F	6	14	22	30	38	46	54	62	70	78	86	94
G	7	15	23	31	39	47	55	63	71	79	87	95
H	8	16	24	32	40	48	56	64	72	80	88	96