

SPECIFICATION SHEET

Product Name: Primer Kit for Illumina, Set 4
Catalog # PK04-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 289-384	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 4												
	1	2	3	4	5	6	7	8	9	10	11	12
A	289	297	305	313	321	329	337	345	353	361	369	377
B	290	298	306	314	322	330	338	346	354	362	370	378
C	291	299	307	315	323	331	339	347	355	363	371	379
D	292	300	308	316	324	332	340	348	356	364	372	380
E	293	301	309	317	325	333	341	349	357	365	373	381
F	294	302	310	318	326	334	342	350	358	366	374	382
G	295	303	311	319	327	335	343	351	359	367	375	383
H	296	304	312	320	328	336	344	352	360	368	376	384