

Part I: Index-Adapter Genomic Library Preparation

Custom Oligonucleotides

Order oligos HPLC purified. * corresponds to phosphorothioate bond. /5Phos/ corresponds to phosphate group. This notation is consistent with the format for IDT.

P5_PCR 5'- AATGATACGGCGACCACCGAG 3'

P7_PCR 5'- CAAGCAGAAGACGGCATACGAG 3'

P5_adapter

5'- AATGATACGGCGACCACCGAGATCTACACTCTTCCCTACACGACGCTCTTCCGATC* T 3'

P7_adapter_#

5'- /5Phos/GATCGGAAGAGCACACGTCTGAACTCCAGTCAC [Barcode Reverse Complement]
ATCTCGTATGCCGTCTTCTGCTT*G 3'

Index-Adapter Preparation

Reconstitute oligonucleotides to 200 uM in 10 mM NaCl annealing buffer, then mix oligonucleotide pairs (P5_adapter, P7_adapter_#) at a 1:1 ratio (25 ul:25 ul). Heat solution to 95°C for 5 minutes followed by cooling at a rate of 0.1°C/s to 4°C in a thermal cycler. Dilute with Elution Buffer to a working concentration of 15 uM. Store at -20°C.

Barcode #	Reverse Complement
1	ATCACG
2	CGATGT
3	TTAGGC
4	TGACCA
5	ACAGTG
6	GCCAAT
7	CAGATC
8	ACTTGA
9	GATCAG
10	TAGCTT
11	GGCTAC
12	CTTGTA

