

**Supplementary Table 1.** Oligonucleotides used in TM3'seq protocol. All oligos were synthesized using standard desalting by Integrated DNA Technologies – IDT.

Oligo name	Oligo sequence
Tn5ME-B-30T	5'-GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTV-3'
B-tag-sw	/5Biosg/ACCCCATGGGGCTACACGACGCTCTTCCGATCTrGrGrG
Adapter-A (Illumina)	5'- TCGTCGGCAGCGTCAGATGTGTATAAGAGACAG-3'
Tn5MErev (Picelli 2014)	5'-[phos]CTGTCTCTTATACACATCT-3'
i5 (Illumina Idx5)	AATGATACGGCGACCACCGAGATCTACACNNNNNNNN*TCGTCGGCAGCGTC
i7 (Illumina Idx7)	CAAGCAGAAGACGGCATACGAGATNNNNNNNN*GTCTCGTGGGCTCGG

\*N, indicates i7 or i5 barcodes. Standard Illumina barcodes were used.