

Supplementary Table 1. Primer sequences.

Primer name	Sequence	Step
RT primer	Phos TCTNNNNNN	2.1.
5'nAnT-iCAGE_01 N6*	CGACGCTCTTCCGATCT <u>ACC</u> NNNNNN Phos	9.
5'nAnT-iCAGE_01 GN5*	CGACGCTCTTCCGATCT <u>ACCGN</u> NNNN Phos	9.
5'nAnT-iCAGE_01 Dwn*	Phos <u>GGT</u> AGATCGGAAGAGCGTCG Phos	9.
3'nAnT-iCAGE N3 + AGA Up	NNNAGAUCCGGAAGAGCGGUUCAGCAGGAA UGC CGAGACCGAUCUCGUAUGCCG UCUUCUGCUUG	10.
3'nAnT-iCAGE Dwn	CAAGCAGAAGACGGCATAACGAGATCGGTCTC GGCATTCTGCTGAACCGCTCTCCGA	10.
nAnT-iCAGE 2 nd primer	AATGATACGGCGACCACCGAGATCTACTC TTCCCTACACGACGCTCTCCGATCT	13.1.

*barcoding is within the 5'linker. One barcode example is shown (ACC, underlined sequence). Other barcoding options are: CAC, AGT, GCG, ATG, TAC, ACG, GCT.