

**Supplementary Table S1. Sequences of DNA oligonucleotides used for preparation of double stranded fluorescent DNA substrates.**

M: 5-methylcytosine. X: 5-hydroxymethylcytosine.

<b>Name</b>	<b>Sequence</b>
<b>CGup</b>	5' - CTCAACAAC <sup>A</sup> TAAC <sup>T</sup> TACCATCCGGACCAGAAGAGTCATCATGG -3'
<b>MGup</b>	5' - CTCAACAAC <sup>A</sup> TAAC <sup>T</sup> TACCATCMGGACCAGAAGAGTCATCATGG -3'
<b>hmCGup</b>	5' - CTCAACAAC <sup>A</sup> TAAC <sup>T</sup> TACCATCXGGACCAGAAGAGTCATCATGG -3'
<b>noCGup</b>	5' - CTCAACAAC <sup>A</sup> TAAC <sup>T</sup> TACCATCTGGACCAGAAGAGTCATCATGG -3'
<b>um550</b>	5' - ATTO550-CCATGATGACTCTTCTGGTCCGGATGGTAGTTAGTTGTTGAG -3'
<b>um590</b>	5' - ATTO590-CCATGATGACTCTTCTGGTCCGGATGGTAGTTAGTTGTTGAG -3'
<b>um647N</b>	5' - ATTO647N-CCATGATGACTCTTCTGGTCCGGATGGTAGTTAGTTGTTGAG -3'
<b>um700</b>	5' - ATTO700-CCATGATGACTCTTCTGGTCCGGATGGTAGTTAGTTGTTGAG -3'
<b>mC700</b>	5' - ATTO700-CCATGATGACTCTTCTGGTCMGGATGGTAGTTAGTTGTTGAG -3'
<b>hmC550</b>	5' - ATTO550-CCATGATGACTCTTCTGGTCXGGATGGTAGTTAGTTGTTGAG -3'
<b>550-Fill-In</b>	5' - ATTO550-CCATGATGACTCTTCTGGTC -3'