

| Name              | Sequence   |
|-------------------|--|
| 5-OHU B11         | GCT TAG CTT GGA ATC GTA TCA <u>TGT A(5-OHU)A CTC GTG</u> TGC CGT GTA GAC CGT GCC |
| Control B11       | GCT TAG CTT GGA ATC GTA TCA <u>TGT ACA CTC GTG</u> TGC CGT GTA GAC CGT GCC       |
| B11 complementary | GGC ACG GTC TAC ACG GCA CAA <u>ACA GCC CAC GGA</u> TAC GAT TCC AAG CTA AGC       |

**Table S1 List of oligonucleotides used for NEIL2 activity assay** B11: 11 nt non-complementary sequence. The sequence is underlined and gives rise to an 11 nt single-stranded bubble structure after annealing. 5-OHU: 5-hydroxyuracil