**Table S1. Sequencing results of amplicons generated after 55 amplification thermal cycles[#]**

| Sample ID | Without WTB | With WTB | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 30A | 31G | 32C | 33T | 34G | 35G | 36T | 37G | 38G | 39C | 40G | 41T | 42A |
| T10 | c.35G/A | | | | | | A | | | | | | | |
| T11 | WT | | | | | G/A | G/A | | G/A | | | | | |
| T12 | c.34G/C | | | | | C | | | | | | | | |
| T13 | WT | | | | | G/A | G/A | | G/A | | | | | |
| T24 | WT | | | | | G/A | A/G | | | | | | | |
| T40 | C.38G/A | | | | | | | | | A | | | | |
| T44 | WT | | | | | G/A | A/G | | G/A | G/A | | | | |
| T49 | WT | | | | | G/A | C/G/A | | G/A | | | | | |
| T53 | c.35G/A | | | | | | A | | | | | | | |
| T58 | WT | | | | | G/A | A/G | | | | | | | |
| T59 | WT | | | | | | G/A | | G/A | | | | | |
| T60 | WT | | | | | G/A | G/A | | C/G/A/ | | | G/A | | |
| T64 | WT | | | | | A/G | G/A | | | | | | | |
| T66 | c.35G/T | | | | | | T | | | | | | | |
| T67 | c.35G/A | | | | | | A | | | | | | | |
| T69 | WT | | | | | G/A | C/G/A | | | | | | | |
| T71 | WT | | | | | G/A | T/G | | | | | | | |
| T72 | WT | | | | | G/A | G/A | | G/A | | | | | |
| T73 | WT | | | | | G/A | A/G | | G/A | | | | | |
| T101 | WT | | | | | G/A | G/A | | G/A | | | | | |
| T102 | c.38G/A | | | | | | | | | A | | | | |
| T103 | WT | | | | | G/A | G/A | | G/A | | | | | |
| T104 | WT | | | | | G/A | G/A | | G/A | | | | | |
| T105 | WT | | | | | G/A | G/A | | A/G | | | | | |
| T106 | c.34G/T | | | | | T | | | | | | | | |
| T107 | WT | | | | | G/A | C/G/A | | G/A | | | | | |
| T108 | WT | | | | | A/G | | | G/A | | | | | |
| T109 | WT | | | | | G/A | G/A | | G/A | | | | | |
| T110 | WT | | | | | G/A | G/A | | G/A | | | | | |
| T111 | WT | | | | | G/A | | | G/A | | | | | |
| T112 | c.35G/A | | | | | | A | | | | | | | |
| T113 | WT | | | | | A/G | G/A | | G/A | | | | | |
| T114 | c.38G/A | | | | | | | | | A | | | | |
| T115 | c.38G/A | | | | | | | | | A | | | | |
| T116 | c.38G/A | | | | | | | | | A | | | | |
| T117 | WT | | | | | G/A | G/A | | G/A | | | | | |
| T118 | WT | | | | | G/A | | | | G/A | | | | |
| T119 | WT | | | | | | G/A | | G/A | | | | | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T120 | WT | | | | | | | | ==T/G/A/== | G/A | | | |
| T121 | c.35G/C | | | | | | C | | | | | | |
| T122 | c.38G/A | | | | | | | | | A | | | |
| T123 | c.38G/A | | | | | | | | | A | | | |
| T124 | c.35G/C | | | | | | C | | | | | | |
| T125 | c.35G/A | | | | | | A | | | | | | |
| T126 | c.35G/A | | | | | | A | | | | | | |
| T127 | WT | | | | | G/A | ==T/G/A/== | | | | | | |
| T128 | c.37G/T | | | | | | | | T | | | | |
| T129 | WT | | | | | G/A | G/A | | | G/A | | | |
| T130 | WT | | | | | G/A | G/A | | G/A/C | G/A | A | | |

#In the preliminary experiments, all samples were amplified using real-time PCR in reaction mixtures with or without 0.5 μM WTB, and 55 thermal amplification cycles. In the "with WTB" column, all targeted sequences overlapping with WTB are listed. Underlined letters indicate the bases complementary to residual LNA in WTB oligonucleotides. Only mutated bases that were observed following sequencing results are shown. The order of bases indicates the order of associated with peak heights. For example, A/G indicates that the peak of A base was higher than that of the G base. All confirmed mutated bases in reactions that were subjected to only 40 cycles are highlighted in yellow.