**Supplementary Table 1** Primer sequences for bisulfite modified PCR and RT-qPCR.

| Primer      | Sequence (5’ - 3’)               |
|------------|----------------------------------|
| BSP forward| GAGGGGAAGAAATAATAGAGAG           |
| BSP reverse| CTCTCCTCTACATATATTTCAAAAAAC      |
| TAP63 forward| GTCCAGAGCACACAGACAA             |
| TAP63 reverse| TAGCATGGACTGTATCCGCA           |
| ΔNP63 forward| AGCCAGAAGAAAGGACAGCA          |
| ΔNP63 reverse| TCACTAAATTGAGTCTGGGCAT       |
| KRT1 forward| ATGGACAACAACCCGAGTCT            |
| KRT1 reverse| TGCAGCTCTTCATACCTTGCTCT         |
| KRT5 forward| CTCATGAACACCAAGCTGCG           |
| KRT5 reverse| CTGCCACTGCCATATCCAGA           |
| KRT10 forward| TCCCAACTGGCCTTGAAACA          |
| KRT10 reverse| TGAGAGCTGCACACAGTACG         |
| KRT14 forward| ACCCTCTCCCTCCTCCAGTTC         |
| KRT14 reverse| TCGZGCACATCCATGACCTT         |
| ACTB forward| GCCGACAGGATGCAGAAGGAG           |
| ACTB reverse| CTAGAAGCATTGGCGGGTGAC         |

BSP, bisulfite sequencing PCR primer; red bases represent bisulfite converted residues (C->T; G->A).
All other sequences were used for RT-qPCR.