**Supplementary Table 1** Oligonucleotides used for real-time PCR genotyping.

|  |  |  |  |
| --- | --- | --- | --- |
| Genetic variants(normal/mutant) | Amplification primers(forward/reverse) | Ampliconsize (pb) | a Genotyping probes(sensor/anchor) |
| no-S/S | ATGAAGCGTTTAGGCATGTTTCCAGGAACTTGGTGATGATA | 170 | Cy5-GCACCTGG**A**AAATGAACTCAC-PTTCCTGCCTGATGAGGGGAAACT-Flu |
| no-Z/Z | CGCTTCCTGGGAGGTGTCAAAGGGTTTGTTGAACTTG | 201 | Cy5-GACCATCGAC**A**AGAAAGGG-PCCAGGCCGTGCATAAGGCTGT-Flu |
| Phe52/ΔPhe52 | CTCTGTCTTGCAGGACAATGGCCCTCCAGGATTTCATC | 326 | Cy5-CACCAATATC**TTC**TCCCCAG-PCAGCTGGCACACCAGTCCAACA-Flu |
| T5/T617 | CGCTTCCTGGGAGGTGTTGGGAGGGATTTACAGTCACA | 384 | GGCCATG**TTTTTT**AGAGGC-FluCy5-CCCATGTCTATCCCCCCCGAG-P |

a The positions complementary to the non-S, Z, ΔPhe-52 or T6 variants in the sensor probes are highlighted in bold. The probes were labelled with the fluorescent compounds Cy5 or fluorescein (Flu), and blocked at the 3' end with a phosphate group (P) when necessary.