**S5 Table.** PCR master mix concentration with Tetra primers adopted for SNP allele validation.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Reagents | Conc. |  Quantity µl | Conc./25µl  | Numbers  | Answer µl | Final Conc.  |
| dNTP  | 1µl = 2.5 mM | 2 | 5000 µM | 96.2 | 192.4 | 200 µM/µl |
| Taq  | 1µl = 5 Unit | 0.3 | 1.5U | 96.2 | 28.86 | 0.06 U/µl |
| 10X Buffer  | 5µl = 20X | 2.5 | 10X | 96.2 | 240.5 | 0.4X/µl |
| 50mM MgCl2  | 1µl = 50 mM | 1.5 | 75 mM | 96.2 | 144.3 | 3 mM/µl |
| FOP  | 1µl = 10µM | 0.5 | 5 µM | 96.2 | 48.1 | 0.2µM/µl |
| ROP  | 1µl = 10µM | 0.5 | 5 µM | 96.2 | 48.1 | 0.2 µM/µl |
| FIP  | 1µl = 10 µM | 1 | 10 µM | 96.2 | 96.2 | 0.4 µM/µl |
| RIP  | 1µl = 10 µM | 1 | 10 µM | 96.2 | 96.2 | 0.4 µM/µl |
| DNA  | 1µl = 50 ng | 4 | 200 ng | 96.2 |   n/a  | 8 ng/µl |
| Water | 1µl = 55.50µM | 11.7 | 649.44 µM | 96.2 | 1125.54 | 25.97 µM/µl |
|  Total MM=2020.2µl Each MM=21µl DNA =4µl Total =25µl |   |