**Supplemental Digital Content 2**

Primers and probe sequences used for individual genotyping

1. Genotyping for pooled DNA

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| SNP\_ID | Primer1 | Primer2 | Probe Sequence | Probe Direction |
| rs918642 | AGCGGATAACTGCCTGGCGGTGGACCATGT | AGCGGATAACGGTAAAGCCCTGAAGATTGC | ATGTGCCAGTCCCAG | F |
| rs3218315 | AGCGGATAACACCAGGCCACGCTCCACACA | AGCGGATAACATGGAGGGTTTCCCCAGAAG | GCCAGGGCTACAGAG | F |
| rs625704 | AGCGGATAACATGAGGGCCCTCAGCTCTAC | AGCGGATAACACTGGGATCTGAGCAGTTCT | cGCTCTACCCTGGACC | R |
| rs5979668 | AGCGGATAACGCCTGAACATAAGCTAGACC | AGCGGATAACCTTTTCAATGGCCCTGAAAC | gTCAGATGGCTGGCAA | F |
| rs9597332 | AGCGGATAACGCTAGCATATGGCAAGAAAG | AGCGGATAACCAAGCCCTAACAAAACAGGA | AGTACAGTTGGAGGAAC | R |
| rs2118109 | AGCGGATAACACTAAGTGGAGCATGTCTTC | AGCGGATAACGTCACGATTTGTGCTCTCTC | gaTTCTTTCTCCCTGCTC | F |
| rs13210693 | AGCGGATAACCCATGGCTCAGGACTTCACA | AGCGGATAACGCATTTGACAGGTTAAAGGG | CAGGACTTCACATCTTCT | R |
| rs7718298 | AGCGGATAACAGCAGAAGACTGCAAGGTCA | AGCGGATAACGCTTCACAAGGTATAGTCTTC | TCAGCAGTGTGAATTTCT | R |
| rs2453568 | AGCGGATAACAAGGTTTGAAGAAGGGTGGG | AGCGGATAACACTCACAGATCTGCTCAGCG | AGGTGACATTTAAGCGAAA | F |
| rs7690646 | AGCGGATAACTTCAGTTGATAGGGCTCTGG | AGCGGATAACAATCAACTCACCCTCACCTC | GCGTCACTCAAACTCCAGTA | R |
| rs4522846 | AGCGGATAACCTAAACTTACGCTTCAAGGC | AGCGGATAACCAGTGATGGCAAACCATTAG | tGGGAAAAACTAAGGTAGGA | R |
| rs12156831 | AGCGGATAACAGCTGCCCATTGATCATCAC | AGCGGATAACCTCTTGCTAACTTCAAACAC | ATTCTCCACCTAAGAGTTACC | R |
| rs703363 | AGCGGATAACACAGTCCCTGTCAGATATGG | AGCGGATAACGTCACTAGGATCTTACAGTC | CCCTGTCAGATATGGATATCA | F |
| rs4920706 | AGCGGATAACTGAAAATATTCTCCTCTTG | AGCGGATAACCAGGCAAATATTACCATGTG | TCTCCTCTTGAAATATGCTATA | R |
| rs10176346 | AGCGGATAACGAACTCCCATTCACAGTTGC | AGCGGATAACCCTTCACATCCTTTGTAAG | aaagTCACAGTTGCTACAAGGA | F |
| rs351739 | AGCGGATAACGACTGGCTGATTATTCTCCC | AGCGGATAACTTCTGAGCTGTGAAGTGTTG | cctGACGGACATTCTGCCTTCAT | R |
| rs3848999 | AGCGGATAACATAACTTTAGAAGTTAGATG | AGCGGATAACGAAGATATGTTTTGTAAAATG | ACTTTAGAAGTTAGATGAGATTG | F |
| rs11802794 | AGCGGATAACGTTATAAGCCAGATTTTGGG | AGCGGATAACTTCCTAGTGCTCCACAAAAG | taatCCAGATTTTGGGTTTTCTTC | F |
| rs7527924 | AGCGGATAACCAGCATTCTCTGGAATTGCC | AGCGGATAACGACAGTCTTCTCCAAAACCC | ttatTTTGATTATGTGACCTTTGA | F |
| rs2188133 | AGCGGATAACACCTCATCAATAGGTACAGG | AGCGGATAACGGGAACATCAGAACTGTGAC | cagtAAACCCTCCTGTTTCCCAAAT | R |
| rs2165870 | AGCGGATAACCAGTAGTTCTCAACAGTAGG | AGCGGATAACGGATGACAGTGCATCTGTTT | CAGTAGGCTTAAAATATTCAGTATA | R |
| rs12006890 | AGCGGATAACCAGTGTTTAAACAACTAGCTC | AGCGGATAACTAACTGCGGCATGACACAAG | gaacCTAGCTCTCATTTTATTTTAGC | R |
| rs7730111 | AGCGGATAACTCACACAAAGTGTATGTGCC | AGCGGATAACTGGTTGTGTTAGCCAAGTCC | TACAAGGGAAAAACTAATATTCTTTT | R |
| rs2891226 | AGCGGATAACAAGGCATGTCACATATCTTC | AGCGGATAACAGTGAGATAGTGAGGGTGTG | ggggCTTTAAATCAAGTTAAACGGAA | F |
| rs1064346 | AGCGGATAACGTCTCATGCAGAAAATAGTG | AGCGGATAACCAATCGTATCACTTTCATCTG | ATGCAGAAAATAGTGAGATTAAGATC | R |
| rs8127178 | AGCGGATAACTGAGATCTGAGGAGAAGGTG | AGCGGATAACTAACCATGATATAACCGTCC | ggggcGGTGGCAGTCATGTTATCAGTG | R |
| rs1903097 | AGCGGATAACACCTATTTTTACAGTGTCC | AGCGGATAACGTGGTATCTGTAACTATAAAC | CCATGGTAAATTTTATTTTTCAATTATT | R |
| rs4866773 | AGCGGATAACATAAGGGCAAAATCCCCTAC | AGCGGATAACATGATTCACTGGATAAGAG | ggacATGGCTGGAAACATCAGCCTAATC | R |
| rs532967 | AGCGGATAACCTTCTGGCAGGGCTGTTGTA | AGCGGATAACTTCTCCCCTCCTGAGTCATC | GGCTGTTGTACTTGGC | F |
| rs349358 | AGCGGATAACGTAAGCACTTTATCCATGCC | AGCGGATAACCACATTACACATGTGTATGCG | AAAACACCACCTCAAAC | R |
| rs7226214 | AGCGGATAACGAAAGGGCAGTAAAAGGCAG | AGCGGATAACGCCATTTACATGGGACCCAG | atGCAGGTTGGTCAGTT | R |
| rs12470772 | AGCGGATAACTGACTTGTCAACACGAATCC | AGCGGATAACAAAAACCATTTTGAGAGAG | GAATCCTTTCCCTGTAGA | R |
| rs915364 | AGCGGATAACACCCACTATGCTGGGAGCTA | AGCGGATAACGTGAGCCCAGAAACCACCA | CCAGGGGATCCTAGTTTC | R |
| rs2891225 | AGCGGATAACTAACAGCAGACGAAAGAACC | AGCGGATAACCTTTGTCTTTGGTGGATTGG | AGACGAAAGAACCTCAGAG | R |
| rs9374013 | AGCGGATAACTGGCCCAGACATATGGTCTC | AGCGGATAACCACAAAATATCATACTTCTC | TGGTCTCAGGTAAAAGAAG | R |
| rs11654663 | AGCGGATAACAATATACACATAACATTTGC | AGCGGATAACGACAACAATGTAAGTGTACCC | CACATAACATTTGCCATCTT | F |
| rs7679928 | AGCGGATAACGGCCTCATTTCATATTCATTC | AGCGGATAACGCTAGAACAAGTGTTTACTGC | AGAAAAAAATCCCATCTAACT | F |
| rs2256853 | AGCGGATAACATTGGTTTGTTATTGGCTG | AGCGGATAACTTGGTGTAATTGGGTGATCC | TTTGTTATTGGCTGACTGATT | R |
| rs4659592 | AGCGGATAACTCTGCCACTTTTAACAGTGC | AGCGGATAACTAGGCTGAGCGTTATCACAC | ggggTGATGGCCTGGGGCACA | F |
| rs11663884 | AGCGGATAACGCTCTTTAGTTTAATTCCCAC | AGCGGATAACGATTTCATGACCAAGAGCAC | TTCCCACCTATTTATTCTTGTTT | R |
| rs2206024 | AGCGGATAACTGTCATATTCTTTGTCTCC | AGCGGATAACATTAATATCAACTGGTTCC | TTTGTCTCCTAATATGAAGAATT | R |

2. Genotyping for the verification cohort

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SNP\_ID | Strand | Primer1 | Primer2 | Probe Sequence | Probe  DirectionDir |
| rs17662523 | + | AGCGGATAACAGGGAAAGAGACCCCACAT | AGCGGATAACCTGCGTTGGATACTCAGCAC | ACCCCACATGGCCCC | F |
| rs2118109 | + | AGCGGATAACACTAAGTGGAGCATGTCTTC | AGCGGATAACGTCACGATTTGTGCTCTCTC | TTCTTTCTCCCTGCTC | F |
| rs349358 | - | AGCGGATAACGTAAGCACTTTATCCATGCC | AGCGGATAACCACATTACACATGTGTATGCG | AAAACACCACCTCAAAC | F |
| rs918642 | - | AGCGGATAACTGCCTGGCGGTGGACCATGT | AGCGGATAACGGTAAAGCCCTGAAGATTGC | CCATGTGCCAGTCCCAG | R |
| rs9597332 | + | AGCGGATAACGCTAGCATATGGCAAGAAAG | AGCGGATAACCAAGCCCTAACAAAACAGGA | AGTACAGTTGGAGGAAC | R |
| rs12470772 | + | AGCGGATAACTGACTTGTCAACACGAATCC | AGCGGATAACAAAAACCATTTTGAGAGAG | GAATCCTTTCCCTGTAGA | R |
| rs7718298 | + | AGCGGATAACAGCAGAAGACTGCAAGGTCA | AGCGGATAACGCTTCACAAGGTATAGTCTTC | TCAGCAGTGTGAATTTCT | R |
| rs2188133 | + | AGCGGATAACACCTCATCAATAGGTACAGG | AGCGGATAACGGGAACATCAGAACTGTGAC | cCCCTCCTGTTTCCCAAAT | R |
| rs3218315 | - | AGCGGATAACACCAGGCCACGCTCCACACA | AGCGGATAACATGGAGGGTTTCCCCAGAAG | AGCAGCCAGGGCTACAGAG | R |
| rs13210693 | + | AGCGGATAACCCATGGCTCAGGACTTCACA | AGCGGATAACGCATTTGACAGGTTAAAGGG | CTCAGGACTTCACATCTTCT | R |
| rs2453568 | - | AGCGGATAACAAGGTTTGAAGAAGGGTGGG | AGCGGATAACACTCACAGATCTGCTCAGCG | aAGGTGACATTTAAGCGAAA | R |
| rs4522846 | + | AGCGGATAACCTAAACTTACGCTTCAAGGC | AGCGGATAACCAGTGATGGCAAACCATTAG | GGGGAAAAACTAAGGTAGGA | R |
| rs7690646 | + | AGCGGATAACTTCAGTTGATAGGGCTCTGG | AGCGGATAACAATCAACTCACCCTCACCTC | aaaGTCACTCAAACTCCAGTA | R |
| rs7679928 | + | AGCGGATAACGGCCTCATTTCATATTCATTC | AGCGGATAACGCTAGAACAAGTGTTTACTGC | AGAAAAAAATCCCATCTAACT | F |
| rs2891226 | + | AGCGGATAACAAGGCATGTCACATATCTTC | AGCGGATAACAGTGAGATAGTGAGGGTGTG | CTTTAAATCAAGTTAAACGGAA | F |
| rs5979668 | + | AGCGGATAACCTTTTCAATGGCCCTGAAAC | AGCGGATAACGCCTGAACATAAGCTAGACC | cGAAACTCTTGCATCCACTCCAG | R |
| rs4920706 | + | AGCGGATAACTGAAAATATTCTCCTCTTG | AGCGGATAACCAGGCAAATATTACCATGTG | TTCTCCTCTTGAAATATGCTATA | R |
| rs703363 | - | AGCGGATAACACAGTCCCTGTCAGATATGG | AGCGGATAACGTCACTAGGATCTTACAGTC | GTCCCTGTCAGATATGGATATCA | R |
| rs2165870 | + | AGCGGATAACCAGTAGTTCTCAACAGTAGG | AGCGGATAACGGATGACAGTGCATCTGTTT | AGTAGGCTTAAAATATTCAGTATA | R |
| rs11654663 | + | AGCGGATAACAATATACACATAACATTTGC | AGCGGATAACGACAACAATGTAAGTGTACCC | accTACACATAACATTTGCCATCTT | F |
| rs10176346 | + | AGCGGATAACGAACTCCCATTCACAGTTGC | AGCGGATAACCCTTCACATCCTTTGTAAG | CTCCCATTCACAGTTGCTACAAGGA | F |
| rs11802794 | + | AGCGGATAACGTTATAAGCCAGATTTTGGG | AGCGGATAACTTCCTAGTGCTCCACAAAAG | gggatCCAGATTTTGGGTTTTCTTC | F |
| rs7730111 | + | AGCGGATAACTCACACAAAGTGTATGTGCC | AGCGGATAACTGGTTGTGTTAGCCAAGTCC | tgCAAGGGAAAAACTAATATTCTTTT | R |
| rs11663884 | + | AGCGGATAACGCTCTTTAGTTTAATTCCCAC | AGCGGATAACGATTTCATGACCAAGAGCAC | tcccTTCCCACCTATTTATTCTTGTTT | R |
| rs349363 | + | AGCGGATAACGTTTATCAAAACCCTCATTC | AGCGGATAACGGGAGAGGTTTTCAAATAC | CCTCATTCTATCTAATTAATTGAATCC | F |
| rs2256853 | + | AGCGGATAACTTGGTGTAATTGGGTGATCC | AGCGGATAACATTGGTTTGTTATTGGCTG | agaacTCCAGGTCATTCAAAAACCAGC | F |
| rs8127178 | + | AGCGGATAACTAACCATGATATAACCGTCC | AGCGGATAACTGAGATCTGAGGAGAAGGTG | tgcTATAACCGTCCAAATCAGAAAATTA | F |
| rs351739 | - | AGCGGATAACGACTGGCTGATTATTCTCCC | AGCGGATAACTTCTGAGCTGTGAAGTGTTG | ggaaAAAGGACGGACATTCTGCCTTCAT | F |