**Supplementary Table 1. PCR primers used for *BBS1, 2, 4, 5, 7, 8, 10* and *12* exon PCR and direct sequencing**. Reference sequences are shown in parentheses.

|  |  |
| --- | --- |
| Exon | Primersequences (5’ 🡪 3’) |
| Forward | Reverse |
| *BBS1* (NM\_024649) |
| 1 | tgttttctctccatctcctccc | tgttttctctccatctcctccc |
| 2-3 | cagagtgacctgtaccagcttcc | gtatgctgggcctattttcagc |
| 4 | gcaataaggcaagaagagggtc | ctatagctgacctcctgccacc |
| 5-7 | cccctagaagtgtggagctgtc | ggttgggtttgcttatagaatttacc |
| 8 | gcattctgggagtatcttgggg | actaactgtggagcatggggag |
| 9 | gagttactgacagggcagggag | ctgaagccaccagttttctgag |
| 10-11 | agggtcagccatagaagtggag | taagaagccccagaggtgagac |
| 12 | atcccctgtcttgctttcctc | ctcctctttccccagaagcag |
| 13 | gaagaaagaatgggaatgtggg | cccagctttgctgtgtaggag |
| 14 | cacaccaacctgagcaggag | gcttagctgtgtggcagagg |
| 15 | tgggaggcagattgagtaggag | ggtctgtggtgggagagtagg |
| 16-17 | actggaatatgccaaacactgg | cactaaacccgcccagttctc |
| *BBS2* (NM\_031885) |
| 3-4 | ATGTGGGCCTGCATATTATC | TTCTGTCAACACTAATGTCACTGTC |
| 5 | GCAGAAGCAGCATGCAAAG | ACCACCTGGGTTTGGAGATG |
| 6-7 | TGTGAAGTCTTATAAAGCCGTACTTG | CCTACAGCCAATACACCTTGG |
| 8 - 9 | TCTTGAAAACTGCTAGACTAAATGAC | ACCCTGGCAATGACACTCTC |
| 10 | AGGCTCTGTCTTTTGAAGCTG | TGACTCCAAGATGGCACAG |
| 11 | ACCTGTGCCATCTTGGAGTC | TCTTGCCCTCCTCTAAGTGC |
| 12 | CTTTATTTTCTGGGCCTTGC | TACAGGTTACAAGCCACCCC |
| 13 | CCCTCAAGAATGGCTGTACC | CCACATGAGAAATCTATGCCC |
| 14 | TGCTGGAAATAATGCAGTTTG | ATGGTGCTCAGGAGCTAAAC |
| 15 | TCATTTGTCTGGGTTCAAGAAG | TGAGAGTTGCTATTCCATACTGC |
| 16 | TCAAAGCAAACTAGCAGTTACTCG | CAGCTCTGGAGTGTGAAAGG |
| 17 | TCTTTTCCCTCCTGGTTTTATG | GGGTGTGATCCAAAGCAAAC |
| *BBS4* (NM\_033028) |
| 1 | GTCCTCCACAGCCCTACGAC | CTGCATGGGACAAAAGCCAC |
| 2 | GGATTAATTGCATAATTGGTGAGC | tgggtgacagtgagactctgc |
| 3 | AGAAGAGACGAAGGATGATTTTATG | CCTAAACCTGACCCACAGCC |
| 4 | cacgcaccactactgccc | TGAACTTGTTTCTTCAATTGCC |
| 5 | TTTTCTGACCCCAGGCTCC | GCAGGCTGGACCTAGGAATG |
| 6 | TGGATGAAATATGATTAAAATGTGGG | CAGCCAGATGATAAATGGAACC |
| 7 | CCTTGCCGAGCAATAACAATC | CCTCTGCAAGCACTAGGGATAATAC |
| 8 | ACAGCAGAAAGTGTCTTTACATTAGC | TTCACTCTTTTAGGCTTGGGAG |
| 9 | GAGGGCATATTACTGTGCATGTG | CAGAATGCAGGAAAACCACC |
| 10 | TGGCCAGACTCTTTTAACTGC | CCTTTGCTTTCCAGGGTCAG |
| 11-12 | GAAAGCTGCCCCACTGCTAC | TGAGACAGCCACTGATCTTCTATG |
| 13 | CAGGGTGAAGTTTACTTTGGGG | TGTATGGCACCACCTCATGG |
| 14 | CACGTATGTACCTACCTTGCTGC | CCAGAACAGCCATGAACGTG |
| 15 | GACCAAAGAAGTGGGTTGGC | CCTCACTGAAAGCTATAATCTCTGC |
| 16 | GGGTTTCCTCTTGAACTCTAACAGC | CATGTCACCTTTCCTAATCCAGC |
| *BBS5* (NM\_152384) |
| 1 | GCCTTGGAGCCAGAGAGAC | GGGTCCCTAACGCGCAC |
| 2 | GAAGACCTTATTTCTAAATGCATGAAC | ACACTGACAAATGATGCTGTTTC |
| 3 | AAGTTCCATATCCATCTCATTCAG | TGCAAATTCACCTGACAAAG |
| 4-5 | CTGCAGAGGCTTTAGGGATG | GCTTGGAGGAAGACAGTACCAC |
| 6 | ggcttgggcaaggtattgag | GAAAAGTAATACGCTTTCCTATAATGC |
| 7 | TCAATTTTGGTATTATTTGCTGC | GGGAGAAAGAACTCATCTAAAAGTC |
| 8 | GCAGTTTAATGAAGGAAGGAGG | TCTGGGGACAATTTCTGTATGAC |
| 9 | TGCTCTAAAATAAGGACAAATTGAG | TGGTGCACAGTGGTATCTACATC |
| 10 | TCTCTTTCTGGTTCTTTTCGTG | CACCTGGCCTCAAAGTATTTC |
| 11-12 | CCTTAGCCCACTGATCTATTCG | TCCATGACTTATGGCAGGTG |
| *BBS7* (NM\_176824) (NM\_018190) |
| 1 | GCCTCTGTCCCTCCTGTTC | CGAGACTTTCGTCAGTGGAAG |
| 2 | TTTTGGCTTGACAACTTTATAGG | TGTCCCTTGGTATTCCAGTTTC |
| 3 | GGGGTGTCTTTCCTAGATTTTC | TCAGAACCCATTTTCCATTACC  |
| 4 | AAAACCTGAAGACCTGCTGAAG | TGATCATGAATCAAACTGAACC  |
| 5 | AGAAGCCCGAGGCCTTAAC | AAAAGCCCTTAAAACAGTAACCAC  |
| 6 | CATGAATGCCTCTATTATTTTCAG | CCTTTCTACAATTTCCCATTTTC  |
| 7 | TGGGGAAATGTCTTATCTCTTATAGC | AAGGTGTGAATTGCTAAGTCTGC  |
| 8 | TTGCTCACCATTCTGAGTCG | AATAAAATTCAAACCATCTGTCATC  |
| 9 | GTCTGGAGCCAGGGAAAAC | cctgctaccagcctatctactg |
| 10 | AAGGGGCATGTACATTGGAG | AAACTTCCATTTTAAAAGGTGATAAAC  |
| 11 | CCCATTTTGTAAAAGCAAATGTC | tgtggtggcacatacctgtag  |
| 12 | GGGGTGGTGAGAGATGTTATTC | gggaaagagaaccgacacag  |
| 13 | gctgagcaccaatgacagg | TCCAAACAATTCATTTCAGGG  |
| 14 | GGAACAGAGTGGGACAGGAG | CAGCCTCTAAAATAAGACAAAGAATC  |
| 15 | ATTACAAAATTCTGCTTATTAACGTG | ACTCACAAATAACTCCTAACTTAAAGG  |
| 16-18 | AAATTGTCACATCTTTAGGAGGC | CCTTGGGAAATAGCCAGTTG  |
| 19 | AAAACATGGCTTTTAGGTTTGTG | AAAATTAAAACAGCCACTTGCC  |
| *BBS8* (NM\_144596) (NM\_198309) (NM\_198310) |
| 1 | AGACGTCAGTTGGGGGATG | CAGCTACCTGGGAGTGGAAG |
| 2 | CAACAATGAAGGATGGCTATTTC | AGGCAGAACAGAAACCATTTAC |
| 3-5 | CATCTCCCTAAAATACATTTCTTGC | CATGGCCTTTCCTTCACAAG |
| 6 | AACAAAAGATGGATAGGCCC | AACTGAGGGTGGATTTTAAAGTATTAG |
| 7 | tgatgagtttagaagctaggcag | CAGTCGGCTAACCCTTAGAATC |
| 8 | TCTAATGCACATTTTGATTGGTG | CAGTTCTCATTTCTTCATGGG |
| 9 | TTCATCCTCAGGGTATGATGTAG | GAAGAAGCTGTTTACTCTCCCC |
| 10 | TTTTCCCTTGATTCTTTCTTGTC | CCCTGATTTGATCATTACACATTG |
| 11 | gtctggcacatggtagcctc | TTTCATAAAGACATGGCCTATACC |
| 12 | GAAAGAGAGGTGTTTGTATTTGC | agtcccactatgttgcccag |
| 13 | TGAGGAAAGAAGGGAGGAGG | CCACACATGACAGCTTTTCTC |
| 14 | CACAAATATGGTGCTGATATATGTTC | CAGGAAGATGAGGTTAGAATTTCC |
| 15 | AAAGAAAAGAACCCTTTGAATTTCTAC | CCTTAACTAATATCAAGGACAGGTTTG |
| *BBS10* (NM\_024685) |
| 1 | CGTTCCCACCCCTGTTTTC | GGGACAAGAGCTCCACAGAG |
| 2a | TTAAGATGTGGGAAGCCAGC | ATCTGCTGGGCGGTACAC |
| 2b | TGGGATTGGTGTATTTGAGTTAG | TGTTGTTCAATGAGACCATGC |
| 2c | GATCCAAAAGATATGTTCATCTAGG | CTGGTAACATGCTTCCCTTTC |
| 2d | CCACTGCTTATTCAACAAGGG | TGACTGCTTTACTTGGCTTGAG |
| *BBS12* (NM\_152618) |
| 2a | AAAAGCAGGGAGCATATCTTG | TGAAGGGACCTGTAGAAAAGG |
| 2b | CAGAAGGCTTAAACTTTTGTAGTGAAG | TGTACAGTTGCCTTGTTGCAC |
| 2c | TTGGTAGAGTTGGCAGTAGGC | CAAAAGCCTGCATCACACTG |
| 2d | AAGGTGAACCTTGTCCTGG | GCACAGTTGGTCTGTATATTGCC |
| 2e | TTAGCTGTCTTCATATTCTTGCAG | TGGCAATAGCTGGCATTTTAG |