

Appendix 1

Primer name	Primer sequence
ABCA4-1F	CCAGCCACTTGTGTCTTTAGGGTT
ABCA4-1R	ACAGAAAGGCCGTCCAGCTAAACA
ABCA4-2F	AACAAGGTAGAGGGTGTATGGTGG
ABCA4-2R	AAGGCCCAGACCAAAGTCTCTTCA
ABCA4-3F	AAAGGCCAACTCCTAGGTCTGCAT
ABCA4-3R	GCTCAGCAAAGCCACAAGAACACT
ABCA4-4F	AGCCTGGGTGACAGAGCGAGATAAA
ABCA4-4R	TTCACCAAGGTGATGTTCAAGCCG
ABCA4-5F	CCCAAGAACAGAACCTTCCTCTGA
ABCA4-5R	TTTCTTGCCTTCTCAGGCTGGGT
ABCA4-6F	TGTCTTTCCTACCACAGGGCAGTT
ABCA4-6R	AAGGATTGTCCAGAACACCAGGCT
ABCA4-7F	GGAGATCAGACTGTGCCTATGTGT
ABCA4-7R	CAGGTGCTTTGAAATTGCTAGATGG
ABCA4-8F	CAAACCAAACGTTGGAGCATTGGC
ABCA4-8R	ACCTAAGGCCACTCAGCAAGACAA
ABCA4-9F	CCTCCAGCATGGAGTTGAATGAGA
ABCA4-9R	GGAAACGCAAGAGTCCACTTAGCA
ABCA4-10F	CTCTCTGTTTCGTGTCTCTGTCTTG
ABCA4-10R	CCAATAGCGATTA ACTCTTTCCTGG G
ABCA4-11F	GGCTGAAGAACAAGACCAAAGATCC
ABCA4-11R	AGACCACTTGACTTGCTAAGGGAG
ABCA4-12F	ATTCCTGGGACAGCAGCCCTTAT
ABCA4-12R	TGACTTTGGAGAAATGCAGCGAGC
ABCA4-13F	TATCCAAGCCCGTTCCCATCCTTT
ABCA4-13R	AGTCAGAGCTCCATGCTCTCCAAT
ABCA4-14F	TTCCCTCCATCTGGGCTTTGTTCT
ABCA4-14R	AATCCAGGCACATGAACAGGAGGA

ABCA4-15F	AGAGAGCCCTTTAGGGCAGAATGA
ABCA4-15R	GACCCTTCCAAGGAAACGTGTTGT
ABCA4-16F	CATCTGGGTGCTGTTGCATTGGAT
ABCA4-16R	GCCAGTAGGATTTGCTGGTGGATT
ABCA4-17F	AACTGCGGTAAGGTAGGATAGGGA
ABCA4-17R	GCAGCTGACTCATCAGGAATCACA
ABCA4-18F	TCCTTTCCTGCCTTTGCTCGTTCT
ABCA4-18R	TAGGCTTCTTTCCACCCTTGCCAT
ABCA4-19F	ATAGGCAGAATACAAGGGCCTGGA
ABCA4-19R	AGTAGACAGCCGCTGATAGGGAAA
ABCA4-20F	TGCTAAAGGCCATCTCTTCTGCCA
ABCA4-20R	TGAGCTGGGCTCTAGAGAAGTGT
ABCA4-21F	AGATCAGCTGCTGGAAGTGAAGT
ABCA4-21R	TTCACAGAGGTGTTCCCACCCTTA
ABCA4-22F	TCTAAGAGGCAGCACCAAACCACT
ABCA4-22R	GTCATTGTGGTTCCTGTACTCAGC
ABCA4-23F	ACCCTTTACCAACAATGCCCAACC
ABCA4-23R	TGTGTGAGTAGCCATGTCTGGAGT
ABCA4-24F	TAAATAAAGCGGGCGGTGACAGCA
ABCA4-24R	TGACCTGCAGAAGTACCCAGTGTT
ABCA4-25F	TGGGTAACCTCACAGTCTTCCAGT
ABCA4-25R	AGATAGTTGCTATGCTTGGGTGGG
ABCA4-26F	CCCATTATGAAGCAATACCCAACA
ABCA4-26R	TTTCGAGATGGAACCTGGGAGGGA
ABCA4-27F	GGCATTAGAGATCCAGACCTTATAG GCA
ABCA4-27R	TAAAGAGGGTGCTCCTTGCTGAGT
ABCA4-28F	GCTGATTAGGAGGCTGCAGGATAA
ABCA4-28R	TCTCTCATTGGTGAAGGTCCCAGT
ABCA4-29F	TGCCTCCAATACATACCTGGCACA
ABCA4-29R	AAGTGACCAGCAGAGCAGGATTGA
ABCA4-30F	GGAGGAAAGGGTTGGGCACAATTT

ABCA4-30R	AGAGGGTGCAGGGAGTTTGGTTTA
ABCA4-31F	TGGAAGACAACAAGCAGTTTCACA
ABCA4-31R	ATCTTCTACAGGGAGCCAGGAT
ABCA4-32F	ACGGCACTGCTGTACTTGTGGTAT
ABCA4-32R	ACGTGTCTTGTGACTTCCTGAGCA
ABCA4-33/34F	CCCTGGTCTGAGGATTTCTGTTT
ABCA4-33/34R	ATTTTCAGCAGGAGGAGGGATGGAA
ABCA4-35F	AGCTACCAAACCCTTCTGCTTCT
ABCA4-35R	GTCGGATGTTTCATATGTGCCTGAC
ABCA4-36F	CAAGGTAGAGAAGAGGAACCTGGA
ABCA4-36R	TCTGGTCCTTCAGAGCACACACAA
ABCA4-37F	AGTCGAATCAGAATCCCAGACCCT
ABCA4-37R	CGGAAGCTAAACTTGTGGGTGCTA
ABCA4-38F	CCAGACGTATTGTAGGTGGAATGG
ABCA4-38R	ACTCATCCGCATACAGCTGCTACA
ABCA4-39F	TGTGCTGTCTGTGAGAGCATCTG
ABCA4-39R	TGCCACAGTCTGATGCAGGA
ABCA4-40F	TGGCTCTTGCTCAGTTCCCACATA
ABCA4-40R	ATAAGGTCCAGTTCTGGATGCCCT
ABCA4-41F	AGGAAGCAGAAGCAAGGAAGTGGA
ABCA4-41R	GGCAACATCATGCCAACTGTGGAT
ABCA4-42F	CTGTGCCTGCCCATGTCAATATGT
ABCA4-42R	ACAAGAGCTGATGTTCCGGAAGCCT
ABCA4-43F	TTCTTGATCTCTAGGGCCAGGCTA
ABCA4-43R	TGTACAGATCTTTCAGGGCCTCAG
ABCA4-44F	AAGCTTCTCCAGCCCTAGCTCTAT
ABCA4-44R	GCACGCTTCAGTTTCTCATCTCCA
ABCA4-45F	GGATTTCAATTCTGGAGGCGTGAGA
ABCA4-45R	TGCAGTTTCTAAATCTGCCGACCC
ABCA4-46/47F	CCTTCTGTCAGCTCATCCTCCACA
ABCA4-46/47R	CCAAGTGTCAATGGAGAACACAGG

ABCA4-48F	TTGGGATTACCTTAGGCCCAACCA
ABCA4-48R	TCGGGAATGTTATGCCTCCCTCTT
ABCA4-49F	TACCAGCAGGGCTGTATGTGAACT
ABCA4-49R	AGGCATATCTGAGCCTTGGAGCAA
ABCA4-50F	CAAGATGACGCGAGTCCATGTGAT
ABCA4-50R	GCACACCAGGGAGACTGTGAATTA