**S3.** Primers used to amplify *FAM20A* exons.

|  |  |  |
| --- | --- | --- |
| Primer | Oligonucleotide Sequence | Size (bp) |
| Ex1-1FEx1-1R | 5'-CGACAGCATCCTCAGGAGAG5'-CTCGGTTCGGGAAAAGTTGT | 682 |
| Ex1-2FEx1-2R | 5'-GACTCCAGGCACCTCTTCTG5'-CTGGACTGTGAGGTCTGCAA | 689 |
| Ex2FEx2R | 5'-AAGGACCCCACAGGTGTTTT5'-CCTCCTTATGGGGTCAGGAT | 563 |
| Ex3FEx3R | 5'-ACAGTGCCTGACTCGCAGTA5'-ATGGTGGCATTTCAGAGACA | 412 |
| Ex4-2FEx4-2R | 5'-TACTGTCTTGAGCCCCTGGA5'-AGTTCTGTGCTTGGGCAGAT | 417 |
| Ex5FEx5R | 5'-CTTGCAAGAAGCCTGTCTCC5'-ACTAGAGCAACTGCCCCAAG | 572 |
| Ex6FEx6R | 5'-CAGGAGGCTTGACGGAATAA5'-CACAACCTTTCCCATCCAGT | 548 |
| Ex7FEx7R | 5'-TCCCAGGAGGTTCAGCTTAG5'-TATGAAATGGGGCAAAGGAG | 500 |
| Ex8FEx8R | 5'-ACGGAATATGCAGCCTTACG5'-ATGAGTGACGACCCCTTGAG | 503 |
| Ex9FEx9R | 5'-TGAAGCCAGTCCATTTAGGG5'-TCAAGTGGTTCTTGCAAAGG | 481 |
| Ex10FEx10R | 5'-GTGATCTGACTGGGGAGAGG5'-GCAGTCTGTCATTGGCTGAG | 403 |
| Ex11FEx11R | 5'-GGCAAAGGACTGCAGGATAC5'-CCTGCTTCCTTCCTAGCTGA | 586 |