**Table S4 Primers of 8 validated testis derived circRNAs for general and quantitive RT-PCR.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Gene Symbol | CircRNA ID | Forward primer | Reverse primer | Length (nt) | Tm(℃) |
| *PIWIL1* | novel\_circ\_007180 | F:TGCGTAATGATTTTAATGTGATG | R:AAGGTACTCTTTGGATTCTGGTC | 166 | 60 |
| *DPY19L2* | novel\_circ\_016260 | F:CAGTTTTGCTTTGTTTTGTATTC | R:TCATAATCATCCATAGTCCTTGC | 244 | 60 |
| *SLC26A8* | novel\_circ\_011701 | F:AAAGATTTGTCGGTGTTAC | R:TGCTCATATCTGGCGTTA | 84 | 60 |
|  |  |  |  |  |  |
| *IQCG* | novel\_circ\_000490 | F:AGAAACAGCCAAAGAAGCAGTCA | R:AATCTCACGGAAATGCAATCACC | 191 | 60 |
| *TTLL5* | novel\_circ\_002178 | F:CGCTGTCGATCAGGCAGTTAC | R:TGCTGTTTGGGCTGCTTTATT | 152 | 60 |
| *IFT81* | novel\_circ\_007286 | F:CCGTGAATATGACGGCACT | R:ATAGCAGGCTCTGAAACCA | 170 | 60 |
| *SMC1B* | novel\_circ\_017749 | F:GAACAAGCATATTAAACAGCAAC | R:CTTCCAGAGTCTCACAGACAAGG | 181 | 60 |
| *ACVR2A* | novel\_circ\_009154 | F:CCTGTGCTCGTTCCAACTCAA | R:AATGCCGCCGTTTATCTTTGT | 144 | 60 |
| *TTLL5*-mRNA |  | F:AACTGGAGGAGGTGTTGACTT | R:CTGTTTGGGCTGCTTTATTTT | 167 | 60 |
| *IQCG*-mRNA |  | F:TATTGCTCACCTCAAGGACCA | R:TTCTTCAGTTTTCAGCCGTAG | 172 | 60 |
| *β-actin* |  | F:GCGTTACACCCTTTTTCTTGACA | R:TCACCTTCACCGTTCCAGTTT | 152 | 60 |