**Table S1 Primers used in this study.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Gene | Primer sequences | Tm (℃) | Product size (bp) | Primer use | Amplification efficiency, R2 |
| AplaCSP4 | F: TCCAGTAGAATTCATCCATTATG | 54.2  | 435 | Sequence verification |  |
| R: ACATAATCTATTTAGTTTGAATTGC | 53.0  |  |
| AplaCSP4 | F: GAGGAGCGCAATTGTTAGTTTGT | 60.7  | 307 | RT-PCR | 　 |
| R: CCATTCGTCTGGTTTCTTCTCGA | 63.2  |  |
| Actin | F: TTGGACTTCGAACAAGAAATGGC | 63.3  | 383 |  |
| R: GAAGCCAAGATAGATCCACCGAT | 61.5  | 　 |
| AplaCSP4 | F: AGGAGCGCAATTGTTAGTTTGT | 58.8  | 109 | qRT-PCR | 99.10%, 0.99 |
| R: TCGAATCTAGGTCTAGCGCTTC | 58.6  |
| β-actin | F: GGCATCACACCTTCTACAATGA | 57.6  | 130 | 98.00%, 0.99 |
| R: GTGTTGAAGGTTTCGAACATGA | 57.7  |
| EF1-α | F: CCTGGACACAGAGATTTCATCA | 57.3  | 138 | 97.09%, 0.99 |
| R: TAATGCATGTTCACGTGTTTGA | 57.6  |