**Supplementary Table S1** List of primers used in this study

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| **Primer name** | **Primer sequence (5'→3')** |
| *RdCHS1-*gene cloning-F | AAATGGCTCCTGGTGGTGTGTC |
| *RdCHS1-*gene cloning- R | GCTGCCATTTCCAGTATCAAC |
| *RdCHS1-qRT-F* | TCAGTGGAGGAATTCCGAAAG |
| *RdCHS1- qRT-R* | TTAACGCAGTTAGCAGGAGTAG |
| *Rd CHS1*F-32 | CGGGATCCATGGCTCCTGGTGGTGTG |
| *Rd CHS1*R-32 | CCCAAGCTTTCAGTGAGCCGGAACGCT |
| *Rd CHS1*F-121 | GCTCTAGAATGGCTCCTGGTGGTGTG |
| *Rd CHS1*R-121 | CGGGATCCTCAGTGAGCCGGAACGCT |
| *NtCHS-qRT-F* | TGACACCCACTTGGATAGTTTAG |
| *NtCHS-qRT-R* | CGACCTCTGGAATTGGATCAG |
| *NtCHI-qRT-F* | CTTTTCTCGCCGCTAAATG |
| *NtCHI-qRT-R* | TTTCTGCCACCTTCTCTG |
| *NtF3'H-qRT-F* | AGGCTCAACACTTCTCGT |
| *NtF3'H-qRT-R* | CATCAACTTTGGGCTTCT |
| *NtF3'5'H-qRT-F* | CGCACTACCATACTTAGGAGCCAT |
| *NtF3'5'H-qRT-R* | CAGCATCAGGAGTAGAAGCAACAG |
| *NtDFR-qRT-F* | AACCAACAGTCAGGGGAATG |
| *NtDFR-qRT-R* | TTGGACATCGACAGTTCCAG |
| *NtANS-qRT-F* | TGGCGTTGAAGCTCATACTG |
| *NtANS-qRT-R* | GGAATTAGGCACACACTTTGC |
| *NtUFGT-qRT-F* | GAGTGCATTGGATGCCTTTT |
| *NtUFGT-qRT-R* | CCAGCTCCATTAGGTCCTTG |
| *NtTubA1-qRT-F* | CTCCTATGCTCCTGTCATTTC |
| *NtTubA1-qRT-R* | GGCGAGGATCACACTTAAC |
| *NtAN2-qRT-F* | GAAGAAAGGTGCATGGACTG |
| *NtAN2-qRT-R* | TCTGCAGCTCTTTCTGCATC |
| *NtAN1a- qRT-F* | ACCATTCTCGAACACCGAAG |
| *NtAN1a- qRT-R* | TGCTAGGGCACAATGTGAAG |
| *NtAN1b- qRT-F* | CTTGAACACTTCTCAAACCGA |
| *NtAN1b- qRT-R* | TGCTAGGGCACAATGTGAAG |
| *β-actin -qRT-F* | GGCCGTGGTAGTGAACATATAA |
| *β-actin -qRT-R* | GTATGCCCTTCCTCATGCTATC |
| *NtTubA1-qRT-F* | CTCCTATGCTCCTGTCATTTC |
| *NtTubA1-qRT-R* | GGCGAGGATCACACTTAAC |
| *Rdactin1-qRT-F* | GTATGCCCTTCCTCATGCTATC |
| *Rdactin1-qRT-R* | GGCCGTGGTAGTGAACATATAA |
| *RdCHS2-*gene cloning-F | AAAATCCCAGTATGTGCGAGTA |
| *RdCHS2-*gene cloning- R | CGTATGAGCGTCCACGAAGT |
| *RdCHS3-*gene cloning-F | ATGGTCAGGATAGAGGATGTTC |
| *RdCHS3-*gene cloning- R | TCCACATGAGCGTCCACGAA |

\* Restriction enzyme site are underlined