**Table S1 Primers sequence for target genes**

|  |  |  |
| --- | --- | --- |
| **Primer name** | **Primer sequence（5’-3’）** | **application** |
| *MaIDH1*-F | CCCAAGCTTCAATGGGTCCTCGAGCCATGAGC | Obtain the target gene *MaIDH1* |
| *MaIDH1*-R | CAACCGAGCTCTTACAGGTTAGAGATGACGGCAAAC |
| *MaIDH2*-F | CCCAAGCTTCAATGGGTCCCCGTGCCATGA | Obtain the target gene *MaIDH2* |
| *MaIDH2*-R | CCGCTCGAGTTACAGGTTGGAGATGACAGCAA |
| *MaIDH3*-F | CCCAAGCTTCAATGTTTGCCACCCAGCGT | Obtain the target gene *MaIDH3* |
| *MaIDH3*-R | CCGCTCGAGTTACAGCTCGCTGATGATAGCGT |
| *MaIDH4*-F | CCCAAGCTTCAATGCTTGCCAACAAAATCAACGG | Obtain the target gene *MaIDH4* |
| *MaIDH4*-R | TCCCCCGGGTTAAACGGTGCGCTTCTTCTGC |
| *MaIDH5*-F | CCCAAGCTTCAATGAAAGACTCGAAGGATGCG | Obtain the target gene *MaIDH5* |
| *MaIDH5*-R | TCCCCCGGGTTAGACGCCACGGACCTT |
| *MaIDH6*-F | CCCAAGCTTCAATGACTCGCATCATTTGGGAC | Obtain the target gene *MaIDH6* |
| *MaIDH6*-R | TCCCCCGGGTCACAAGGCCGACTTGAGC |

The underlined part is the enzyme cleavage site.

**Table S2 Primer sequence for RT-qPCR**

|  |  |  |
| --- | --- | --- |
| **Primer name** | **Primer sequence（5’-3’）** | **application** |
| RT-*MaIDH1*-F | CAGTTCAGGCATCAAGTT | Obtain the target gene *MaIDH1* |
| RT-*MaIDH1*-R | TAGGCATGACCATGACAT |
| RT-*MaIDH2*-F | AACAAGGTTGGTCTCAAG | Obtain the target gene *MaIDH2* |
| RT-*MaIDH2*-R | AACAAGGGAAGCATACAT |
| RT-*MaIDH3*-F | GTCCTTATCCGTGAGAAC | Obtain the target gene *MaIDH3* |
| RT-*MaIDH3*-R | TCAGAAGCATCCTTAGTG |
| RT-*MaIDH4*-F | CCTATGTCGATCTTGATAT | Obtain the target gene *MaIDH4* |
| RT-*MaIDH4*-R | ACTTCTTAATTGCCTCAG |
| RT-*MaIDH5*-F | CAAGAACACTATCCTGAAGAAG | Obtain the target gene *MaIDH5* |
| RT-*MaIDH5*-R | AATCAATCGGTGCTCGTA |
| RT-*MaIDH6*-F | GTGATTACAAGCAACAGT | Obtain the target gene *MaIDH6* |
| RT-*MaIDH6*-R | CCGAGGACTTTAACATCT |
| RT-18S *rDNA* F | CGTACTACCGATTGAATGGCTTAG | 18S rDNA reference gene |
| RT-18S *rDNA* R | CCTACGGAAACCTTGTTACGACT |