

Table S2 Primers of *AhMDHs* family for qRT-PCR detection

| Primer name | Gene ID | Forward Sequence (5' to 3') | Reverse Sequence (5' to 3') |
|----------------|--------------|-----------------------------|-----------------------------|
| <i>AhMDH1</i> | LOC112790043 | TAGCCCTGTCTCCACTGCAT | TACACACAGGCCGCAATAGG |
| <i>AhMDH2</i> | LOC112718423 | CCGTTGGAATCACCCACAGA | TTGGGACTCCAATGTCACGG |
| <i>AhMDH3</i> | LOC112776877 | CATCCAAGGCACAAACGCAA | GCAATTATCAGCCACAGCCG |
| <i>AhMDH4</i> | LOC112791339 | AAGATCGTCGGCTGCATCAA | TTCGATCGGCATGGCATACT |
| <i>AhMDH5</i> | LOC112711210 | CACCGGGATTCAAGGTAGCA | TTTCCTTGGGACACCAGCAG |
| <i>AhMDH6</i> | LOC112728667 | TGAGTCGTCTCTTCGTGTGC | CACTCGTACACGTCCCCATC |
| <i>AhMDH7</i> | LOC112776383 | CCGGAGTGGTGGAATGTTCT | CGCGACCAAGACGTACCTT |
| <i>AhMDH8</i> | LOC112800443 | CAGGGCAAATCGGGTATGCT | TGCATGCCTCAACCACATCA |
| <i>AhMDH9</i> | LOC112711491 | ATTTTGGGGGCAAGCCAAC | AGCAATTGGAACCGTGGAGT |
| <i>AhMDH10</i> | LOC112737907 | ATGGAGCGTGCTGACTTGTT | TGCCCCAGATTGTACGTTT |
| <i>AhMDH11</i> | LOC112735613 | TTGCTGGGGTCAATGTACCG | TCCGGCATAAGCCATTGACA |
| <i>AhMDH12</i> | LOC112726743 | TCAAGGAGTTTGCTCCGTCC | GTTGAGCCATTATCGTCGC |
| <i>AhMDH13</i> | LOC112710233 | ACCGTTGGAAGTGGCCATAG | TTGCGTTTGTGCCTTGGATG |
| <i>AhMDH14</i> | LOC112711212 | TCTTGAAAAGCATGCCGCTG | TCATCAACCACAAGCTCCCG |
| <i>AhMDH15</i> | LOC112722502 | TCGCAGGTCAGGGATTTCAC | TGAAACTCGCAGAGGGCTTT |