**Supplementary file 4.** Primers used for qPCR of Ap\_Sema5 and Ap\_Trypsin-like amplicons.

|  |  |  |
| --- | --- | --- |
| **Gene** | **Primer Names** | **Primer sequence** |
| Ap\_Sema5 | SemaF2612 qPCR  SemaR2766 qPCR | 5’- TCG ATG CCC GAA CGA CCG AG-3’  5’- CTC CGG TCA CGA TAG CTG CTC C-3’ |
| Ap\_Trypsin-like | TrypsinF1105 qPCR  TrypsinR1259 qPCR | 5’-GCC ATG GCA AGC CGG CTT AA-3’  5’-CGC GTA GTC GAG GCT CAG GT-3’ |