

Figure S2 Alternative transcriptional forms of $G\gamma I$ are expressed in gustatory organ. (A) A schematic diagram shows the gene structure of five transcripts of $G\gamma l$ gene. Arrows show primer sites used for detection of $G\gamma l$ transcripts (S1, S2 and A1-3). (B) Multiple transcript forms of $G\gamma I$ were detected by RT-PCR in taste organ. Primers combinations are: Gyl.RA (a: S1 and A1), Gyl.RB,C and D (b: S1 and A3) and Gyl.RD (c: S1 and A2). Primer sequences are: S1, TATCGCCGCGCGCACATCA; A1, CGCACCGAACCCGGTGCCAC; A2, TGTTGTTACGGGAATGAAAT and A3, ATGTATTTCCGTTTCGACTG. The sizes of PCR products are 2,580 bp (RA), 1,114 bp (RB); 832 bp (RC), 923 bp (RD) and 1,405 bp (RE). Lane numbers (a, b and c) correspond to PCR reactions using different primer combination (a: S1-A1, b: S1-A3 and c: S1-A2). These results show expression of $G\gamma I.RC$ (832 bp) and RE (1,405 bp). However, the PCR product size of 923 bp is possibly derived from $G\gamma I$.RD and there remains a possibility that this PCR product is derived from $G\gamma l.RA.$ To discern this possibility, we carried out 3' RACE and $G\gamma I.RD$ was detected from labellum mRNA. (C) 3' RACE shows expression of $G\gamma l.RD$ in labellum. Primers used for 3' RACE: forward, AAACATATAAGCCGGAGCTG and dT24. PCR product of $G\gamma$.RD is 825 bp. All PCR products were confirmed by sequencing. These results suggest that $G\gamma I.RC$, RD and RE are expressed in labellum.

Supplementary Data