



**Figure S4. Amino acid sequence alignment of calcitonins (CTs) and calcitonin gene related peptides (CGRPs).** (A) The *A. aegypti* diuretic hormone 31 (*Aaeg*-DH<sub>31</sub>) sequence was aligned with those of other arthropod DH<sub>31</sub> and CTs and in (B) with CGRPs. In (A) and (B), GenBank accession numbers: 1. *A. aegypti* DH<sub>31</sub> (EAT40182). 2. *A. gambiae* DH<sub>31</sub> (XP\_321755). 3. *D. melanogaster* (AAF52685). 4. *R. prolixus* DH<sub>31</sub> (ACX47068). 5. *Bombyx mori* DH<sub>31</sub> (NP\_001124379). 6. *Apis mellifera* DH<sub>31</sub> (P85830). 7. *N. vitripennis* DH<sub>31</sub> (XP\_001599948). 8. *T. castaneum* DH<sub>31</sub> (EEZ99367). 9. *D. punctata* DH<sub>31</sub> (P82372). 10. *Acyrtosiphon pisum* DH<sub>31</sub> (XP\_001945901). 11. hCT (AAA58403). 12. hCGRP (1005250A). 13. *R. norvegicus* CT (AAA40849). 14. *R. norvegicus* CGRP (NP\_612522). 15. *G. gallus* CT (ABY65359) 16. *G. gallus* CGRP (P10286). 17. *Samo salar* CT (NP\_001135058). 18. *S. salar* CGRP (NP\_001140052). Predicted hormone sequences: 2-3, 6-8 and 10; translated from cloned cDNAs: 1, 4-5, 9, 11-18. (C) Predicted protein structure of the *Aaeg*-DH<sub>31</sub>. Amino acid residues in pink are conserved in human CT.