



Figure S3. Phylogenetic tree showing evolutionary relationships for GPRCAL1. Corticotropin-releasing hormone 1-like receptors (CRHR1), CALCRs and CALCRLs from vertebrates and invertebrates were analyzed by the neighbor-joining method with bootstrap analysis of 10,000 replicates with MEGA5. A secretin type GPCR from *Caenorhabditis elegans* (NP_510496.1; WormBase WP:CE23557) was used as the outgroup to root tree. GenBank and VectorBase accession numbers: 1. *A. aegypti* GPRDIH1 (ABX57919). 2. *A. gambiae* GPRDIH1 (AGAP005464-PA). 3. *C. quinquefasciatus* GPRDIH1 (DAA06284). 4. *D. melanogaster* GPRDIH1 (AAF58250). 5. human CRHR1 (NP_001138618). 6. *Rattus norvegicus* CRHR1 (NP_112261). 7. *Gallus gallus* CRHR1 (AAA96656). 8. *Xenopus laevis* CRHR1 (CAA74363). 9. *A. aegypti* GPRCAL1 (AEU12191, this work). 10. *C. quinquefasciatus* GPRCAL1 (CPIJ014419-RA). 11. *A. gambiae* GPRCAL1 (AGAP009770-RA). 12. *D. melanogaster* GPRCAL1 (AAN16138). 13. *Pediculus humanus corporis* GPRCAL1 (PHUM428070). 14. *Nasonia vitripennis* GPRCAL1 (XP_001601649). 15. hCALCRL (NP_005786). 16. *R. norvegicus* CALCRL (NP_036849). 17. *G. gallus* CALCRL (NP_001157122). 18. *X. laevis* CALCRL (NP_001080206). 19. *Danio rerio* CALCRLA (NP_001004010). 20. *Paralichthys olivaceus* CGRPR (BAA92817). 21. hCALCR (AAC50300). 22. *R. norvegicus* CALCR (AAA03030). 23. *G. gallus* CALCR (XP_425985.3). 24. *D. rerio* (XP_003200679). 25. *Grassostrea gigas* CTR (CAD82836). Predicted proteins: 2-3, 10-11, 13-14 and 23-24. Protein sequences translated from cloned cDNAs: 1, 4-9, 12,15-22 and 25.