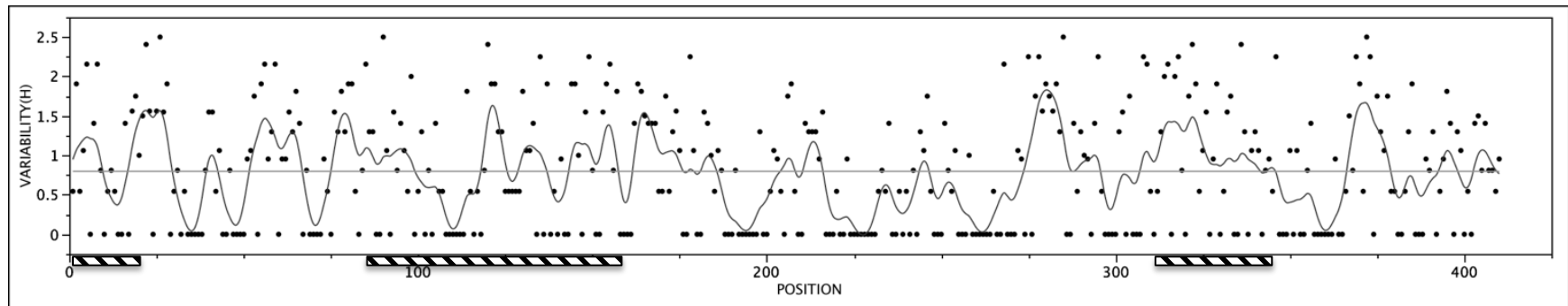


## Supplemental Figure 2



**Supplemental Figure 2.** Plot of conservation of GOT1 proteins from arthropods with divergent regions of *T. californicus* *GOT1p1/2* highlighted. The dots show the Shannon entropy  $H$  values for each amino acid position over the alignment of arthropod GOT1 proteins (with two vertebrates as well). Lower values indicate lower diversity (i.e. higher conservation). A cubic spline curve was fitted to the data with a lambda of 11 to highlight regions of higher conservation. Hatched bars under the x-axis show the regions of higher divergence between paralogs. In addition to the two *T. californicus* *GOT1p1/2* proteins, the following proteins were included: ACO15246 cytAAT *Caligus clemensi*, ACO11819 cytAAT *Lepeophtheirus salmonis*, ACN51888 cytAAT *Daphnia magna*, NP725534 GOT1B *D. melanogaster isoA*, GNO 342583 *Dpulex* cytAAT *Daphnia pulex*, XP 313023 *Anopheles gambiae*, NP002070 cytAAT *Homo sapiens*, XP969549 cytAAT *Tribolium castaneum*, and AAH45269 *Xenopus laevis*.