



Figure S3. The most likely phylogeny of the TIMP gene family found searching coding sequences under rapid bootstrapping in RAxML. Terminals of interest (molluscan outgroups, the cephalochordate *B. floridae*, vertebrate terminals identified as TIMPs 1–4, and the previously identified echinoderm TIMP tensilin) are noted, and the diversity of TIMPs used by the holothurid *Stichopus* is highlighted. Red arrows denote terminals with a read depth of less than 20. Magnified area shows one recent diversification of holothurid sequences, this in *Psolus*.