**Additional file 4**

**Figure S2 (related to Fig. 11)**



**Figure S2. Phylogenetic tree of the insect MMP proteins.** Full-length protein sequences were obtained from the *S. litura* genome. Other MMPs protein sequences were downloaded from NCBI. All of MMPs protein sequences were aligned with ClustalW by the neighbor-joining method and the tree was built by using MEGA6. The *S. litura* MMPs are labeled with diamonds.