

Supplementary Figures

Figure S1. Phylogenetic relationship to protein encoded by BmCDA7 with other insect chitin deacetylases. Multiple sequences alignment was performed by ClustalW and the phylogenetic relationship of chitin synthases was generated using MEGA software. Bm: *Bombyx mort*; Dm: *Drosophila melanogaster*; Tc: *Tribolium castaneum*; Aae: *Aedes aegyti*; Ag: *Anopheles gambiae*; Am: *Apis mellifera*; Tn: *Trichoplussia ni*; ChtBD2: Chitin-binding domain type2; LDLa: Low-density lipoprotein receptor domain class A; CDA: Chitin deacetylases domain.

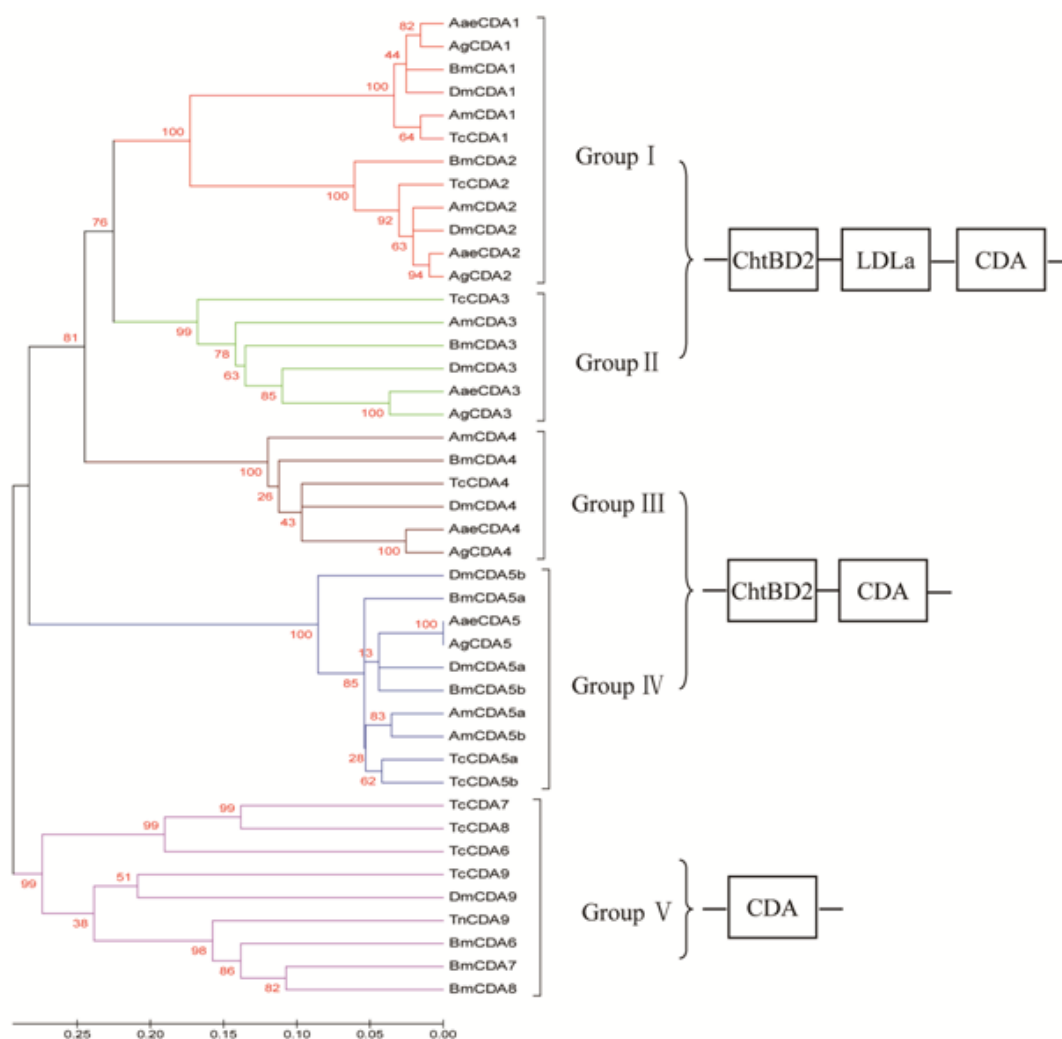
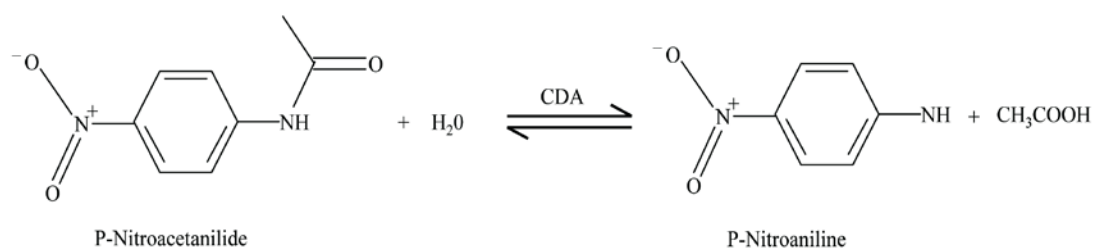


Figure S2. Conversion between *P*-Nitroacetanilide and *P*-Nitroaniline. *P*-Nitroacetanilide is deacetylated by the enzyme chitin deacetylase (CDA) to form *P*-Nitroaniline and acetate. The CDA carry out a similar catalytic action of chitin to chitosan.



© 2014 by the authors; licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).