

3-4-11. Molecular Cloning and Characterization of a cDNA Encoding a Cuticle Protein from the Mulberry Longicorn Beetle, *Apriona germari*

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We have isolated and characterized a cDNA encoding a larval cuticle protein from the mulberry longicorn beetle, *Apriona germari*. A cDNA encoding a larval cuticle protein was cloned from a cDNA library of *A. germari*. Sequence analysis of the cDNA encoding the larval cuticle protein of *A. germari* revealed that the 309 bp cDNA has an open reading frame of 103 amino acid residues with a molecular mass of approximately 10.7 kDa, which we designated AgLCP10.7. The deduced protein sequence of the larval cuticle protein gene of *A. germari* is the most identical to *Bombyx mori* LCP18 (61.3%). Phylogenetic analysis further confirmed the AgLCP10.7 is more closely related to *B. mori* LCP18, *Hyalophora cecropia* CP12 and *Manduca sexta* CP14.6 than to the other insect cuticle proteins. Northern blot analysis indicated that the AgLCP10.7 showed larval epidermis-specific expression pattern at the transcriptional level.