

3-4-12. Cloning, Expression and Characterization of a cDNA Encoding an Arylphorin-like Storage Hexamerin from the Mulberry Longicorn Beetle, *Apriona germari*

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We have isolated a cDNA encoding an arylphorin-like storage hexamerin from the mulberry longicorn beetle, *Apriona germari*, and expressed it in baculovirus-infected insect cells. A cDNA encoding an arylphorin-like storage hexamerin was cloned from a cDNA library of the mulberry longicorn beetle, *Apriona germari*. Sequence analysis of the cDNA encoding the arylphorin-like storage hexamerin of *A. germari* revealed that the 2,160 bp cDNA has an open reading frame of 720 amino acid residues with a molecular mass of approximately 84.5 kDa, which we designated AgHex. The deduced protein sequence of the arylphorin-like storage hexamerin gene of *A. germari* is the most identical to *Tenebrio molitor* Hex-2 (62.0%). Phylogenetic analysis further confirmed the AgHex is more closely related to *T. molitor* Hex-2 and *T. molitor* Erp than to the other insect storage proteins. Northern blot analysis indicated that the AgHex showed fat body-specific expression pattern at the transcriptional level. The AgHex was expressed as approximately 85 kDa band in baculovirus-infected insect cells.