cDNAs Cloning and mRNA Expression of the Cuticle Protein Homolog from the Chinese Oak Silkworm, *Antheraea pernyi*

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We have cloned two cDNAs encoding the cuticle protein homolog from the Chinese oak silkworm, *A. pernyi*. In this paper, the cloning, sequencing and characterization of two cDNAs of *A. pernyi* cuticle protein homolog are described. Two cDNA sequences were 447 bp and 384 bp in length, encoding 149 and 128 amino acid residues, respectively. The predicted molecular masses for *A. pernyi* cuticle proteins were approximately 16.4 kDa (ApCP16.4) and 14 kDa (ApCP14), respectively. The deduced amino acid sequences of the *A. pernyi* cuticle protein cDNAs showed protein sequence identity to insect cuticle proteins known. Northern blot analysis revealed that these *A. pernyi* cuticle proteins showed epidermis-specific expression. The expression profile of *A. pernyi* cuticle proteins revealed by Northern blot analysis that the high-level mRNA expression of *A. pernyi* cuticle proteins was detected on the first day of larval ecdysis and on the first day after larval-pupal metamorphosis.