

## Isolation of a Gene for Apolipoprotein-III and Its New Function in *Hyphantria cunea* Drury

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We isolated and sequenced a cDNA clone corresponding to apolipoprotein-III (apoLp-III) from the fall webworm, *Hyphantria cunea* Drury. The cDNA for apoLp-III (561-bp) codes for a 187-residue protein with a predicted molecular mass of 20 kDa. Northern blot analysis showed the presence of apoLp-III transcript in the fat body, gonad, and hemocyte.

To investigate the immune-stimulating capacity of apoLp-III, apoLp-III was introduced into baculovirus expression system and expressed in insect cells. Injection of 20  $\mu$ g of recombinant apoLp-III into last instar larvae stimulated the induction of lysozyme and hyphancin D gene. The apoLp-III was localized in hemocyte as well as hemolymph, and apoLp-III in hemocyte was released into hemolymph in response to bacterial injection. The expression and localization of apoLp-III in hemocyte might be related to immune activation.