

Two Yolk Protein cDNAs from Fall Webworm, *Hyphantria cunea*, Drury

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YP1 and 2 yolk proteins in the moth, *Hyphantria cunea*, are detected in large amounts from the ovaries of 10-day-old pupae and accumulated in the yolk spheres and eggs for utilization during embryogenesis.

We isolated and sequenced a cDNA clones corresponding to the two yolk proteins. The cDNAs for YP1 (1.2kb) and YP2 (1.1kb) code for 290 and 289 residue proteins, respectively. The predicted amino acid sequence for YP1 and 2 was most closely related to the predicted YP4 from the moths, *P. interpunctella* and *G. mellonella*, and the spherulin 2 protein from the slime mold, *Physarum polycephalum*.

Northern analysis showed a single YP1 and 2 transcripts were present in only female fat body and ovary. YP1 and YP2 cDNA express from 10-day-old pupae and increase to adult stage.