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Accumulation of Hyphantrin in the brain of Hyphantria cunea

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Hyphantrin belongs to lipocalin family that transport small hydrophobic molecules. The cDNA of Hyphantrin of *Hyphantria cunea* has a length of 1333 bp coding for a 194 residue protein with a predicted molecular mass of 23kDa. This cDNA has a homology with human apolipoprotein D, lazarillo, and other insecticyanin.

Western blot analysis showed the accumulation of Hyphantrin in the pupal brain and subesophageal ganglion, as well as pupal fat body. The size of brain increases up to late pupal stage which is parallel with the accumulation of Hyphantrin. The localization of Hyphantrin in the brain was confirmed by immunohistochemical study.