

Molecular Cloning of cDNAs Encoding 26kDa Subunit of Secreted Ferritin from *Hyphantria cunea*

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Lepidopteran hemolymph ferritin is composed of several subunits. Hemolymph ferritin of *H. cunea* is found to have M.W of 660kDa, three subunit of 26, 30 and 32kDa. We have isolated and sequenced the cDNA for 26kDa subunit (HcFER₂₆).

The cDNA has a length of 1293 bp coding for a 221 residue protein with a predicted molecular mass of 25kDa. The HcFER₂₆ cDNAs contain a highly conserved putative iron responsive element(IRE) in a cap-distal location of their 5'UTR. Cystein residues in the N-termini to which fatty acids can be linked and the seven active ferroxidase centre are conserved. The HcFER₂₆ cDNAs has high homology with *G. mellonella* 26kDa subunit (68.7%), *M. sexta* S subunit (68.7%) and *C. ethlius* S subunit (59.3%). The phylogenetic analysis shows that the sequences of insect ferritin subunit are divided into two groups, S(small) and G(Giga) types. The HcFER₂₆ subunit belongs to S type homologous to the vertebrate heavy chains.