

Purification and Characterization of *Antheraea pernyi* Arylphorin from the 5th Instar Larval Haemolymph of the Chinese Oak Silkworm, *Antheraea pernyi*

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Antheraea pernyi (*A. pernyi*) Arylphorin has been purified by simple gel cutting and diffusive extraction from the 5th instar larval haemolymph of the Chinese oak silkworm, *Antheraea pernyi*. The preparation was shown to be homogeneous by native-PAGE and immunological analysis. The native molecular weight of the protein was estimated to be 461kD by gel filtration. Also the subunit molecular weight of the protein was determined as 80kD, suggesting that it is hexameric protein. The total amount of the aromatic tyrosine and phenylalanine was approximately 17.8%(tyrosine, 8.01%; phenylalanine, 9.74%) and so the protein is confirmed as *Antheraea pernyi* Arylphorin. In addition, the protein was defined as glycoprotein by Schiff's reagent staining. The amount of sugar was $5.1 \pm 0.1\%$, and it is consisted of mannose and N-acetylglucosamine. Rabbit antibody prepared against the *A. pernyi*. Arylphorin crossreacted with the 5th instar larval haemolymph proteins of *Antheraea pernyi* and *Antheraea yamamai*, but not with those of *Bombyx mori* and *Bombyx mandarina*.