

**Immunoblot Analysis of *Antheraea pernyi* Arylphorin in
the Several Tissues of the Wild Silkmoths, *Antheraea
yamamai*, *Samia cynthia pryeri*
and *Actias gnoma***

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The occurrences of proteins related to *A. pernyi* arylphorin in haemolymph, fat body, integument, mid gut and silk gland of the wild silkmoths, *A. yamamai*, *A. pernyi*, *S. cynthia pryeri* and *A. gnoma* in the 5th larval instar were investigated by immunoblot analysis using mouse polyclonal antibody for *A. pernyi* arylphorin as probe. In *A. yamamai*, *A. pernyi* and *A. gnoma*, the major immunoreactive proteins with a molecular weight of 80 kDa were observed in the haemolymph, integument, fat body and mid gut except silk gland. In *S. cynthia pryeri*, the immunoreactive proteins with a molecular weight of 80 kDa were also observed in the haemolymph, integument and fat body except mid gut and silk gland. These results reveal that the *A. pernyi* arylphorin has almost the same identity with those of the wild silkmoths, *A. yamamai*, *S. cynthia pryeri* and *A. gnoma* with respect to immunological reactivity. In addition, it can be considered that the *A. pernyi* arylphorin has been evolved from a common ancestor gene of the wild silkmoths described as above.