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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 silkgland 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 silkgland. In *S. cynthia pryer*i, the immunoreactive proteins with a molecular weight of 80 kDa were also observed in the haemolymph, integument and fat body except mid gut and silkgland. These results reveales that the *A. pernyi* arylphorin has almost 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 the above.