

E111 Identification and Characterization of Lipophorin receptor from the Fat Body of Wax moth, *Galleria mellonella*

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A lipophorin receptor was identified and partially purified from the fat body of wax moth, *Galleria mellonella*. An in vitro binding assay was used to investigate the specific binding activity for lipophorin in fat body of wax moth, *G. mellonella*. Lipophorin(LP) purified from the 6th larval haemolymph with the KBr density gradient ultracentrifugation and gel filtration chromatography was used for the Ligand Blotting and radio labeled lipophorin by reductive methylation using [14-C] formaldehyde was used for the binding assay. Through the binding assay, the optimal pH of receptor was pH 5 and the concentration of Ca²⁺ in the incubation buffer had negative effect on LP binding. Suramin inhibited the binding activity of LP-receptor in the presence of increasing concentration of it. In addition, LP receptor identified using Ligand Blotting had apparent molecular weight of 116kD under non-reducing condition.

E112 cDNA sequence of the Male Specific Protein of the Greater Wax moth, *Galleria mellonella* L.

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Male Specific Protein(MSP) is the hemolymph protein which has sex and stage specificity in the Greater Wax moth, *Galleria mellonella* L. MSP was synthesized only in the fat body and existed in the various organs of male adult insect including hemolymph and testes.

To identify the cDNA sequence for MSP, we constructed cDNA library using Uni-ZAP XR Vector. Total RNA was isolated from the fat body of 1-day-old male adult. Poly (A)+ mRNA was purified by oligo(dT) cellulose column and purified mRNA was used to construct a cDNA library.

To find out genes encoding MSP, antibody screening method was performed. Through three times of serial screening procedures, a possible MSP encoding clone was isolated. In order to confirm the cDNA sequence of MSP, the N-terminal sequencing and internal peptide sequencing of MSP are now being performed.