

Z404 Identification and characterization of lipophorin receptor from wax moth, *Galleria mellonella*

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Identification and characterization of lipophorin receptor from wax moth, *Galleria mellonella* have been conducted. In this work, ligand blotting was generally used to confirm the presence of lipophorin receptor. As a result, lipophorin receptor of the fat body has an apparent molecular mass of 97 kDa under non-reducing condition SDS-PAGE. In the lipophorin concentration-dependent experiment, the receptor was detected at the concentration lower than 200 ug/ml and could be detected after 5 minutes when the reaction was started. The receptor has an absolute requirement for Ca^{2+} and this result was supported by the experiment performed with EDTA. Also, suramin (Polysulfated polycyclic hydrocarbon) inhibited the binding of lipophorin to receptor. In addition, the stage specific reactions of the receptor showed that the receptor was detected only in early last larval, prepupal and adult stages but not in the other stages.

Z405 Hemolymph origin silk gland protein (HOSGP) of wax moth, *Galleria mellonella*

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Hemolymph origin silk gland protein (HOSGP) has been purified from the last larval hemolymph of wax moth, *Galleria mellonella*. HOSGP was identified from the silk gland and characterized using antibodies against larval hemolymph protein and silk gland. Hemolymph and silk gland extracts were electrophoresed and western-blotted with each developmental stage. HOSGPs were present in the silk gland. To confirm the presence of HOSGP in other tissues, western-blotting was performed with extracts of malpighian tubule, midgut and fat body. A high concentration of HOSGP was also detected in the fat body. HOSGP was present in large amounts in the silk gland of the last instar larval and wandering stages when silk is actively produced. HOSGP has been purified by KBr density gradient ultracentrifugation, anion-exchange chromatography (DEAE-cellulose column) and resource Q using fast protein liquid chromatography (FPLC) and characterized. The purified HOSGP was shown to have molecular of approximately 80kDa. Other characteristics such as amino acid composition, N-terminal sequence, isoelectric point and spectroscopic property were investigated.