

Z611 **Microsatellite Polymorphism of F13B, HPRTB, LPL and TPOX in Korean Population**

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The markers of microsatellite are polymorphic and are mostly based on loci with tetranucleotide repeats, each locus commonly having between 5 and 15 alleles. Allele and genotype frequencies of HUMBFXIII, HUMHPRTB, HUMPIPOL and HUMTPOX were analyzed using PCR and denaturing polyacrylamide gel electrophoresis followed by silver-staining for visualization. DNA extracts were obtained from about 100 unrelated Korean. Allele frequencies of four loci used in the present study were different from other racial populations. This study confirms that the irregularity in distribution of microsatellite alleles in different populations with the predominance of two or three alleles on these four investigated microsatellite loci.

Z612 **Local Expression and Distribution of Storage Protein in the Ovary of *Hyphantria cunea***

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Storage protein-1 (SP-1) is a major storage protein found in the hemolymph and fat body of *Hyphantria cunea*. SP-1 in *H. cunea* has a high methionine (6%) and low aromatic amino acid content (8.5%) (Cheon *et al.*, 1998). LHP synthesis in lepidopterans occurs primary but not exclusively in larval fat body cells (Kanost *et al.*, 1990). Although several tissues are presented as candidates for alternate expression sites of storage protein, expression of SP-1 in the ovary has not yet been elucidated. The present study aims to determine whether the SP-1 gene is locally expressed in the ovary using RT-PCR, Northern blot, and *in situ* hybridization. SP-1 mRNA accumulated in the nurse cells and follicular epithelial cells, but not on the oocyte of *H. cunea* ovary. The mRNA disappeared from the follicle during post-vitellogenic stage. Most incorporated SP-1 in the yolk body of oocyte might be from surrounding hemolymph. The intensity of hybridization signal in ovary is significantly weak. The SP-1 transcript in the ovary might have accessory roles, compared to the bulk of hemolymphatic SP-1, but it might constitute organ-specific storage system that allowss insect to keep its reproduction activity under nutritional stress.