

F101 Genetic Variations of *p53* Gene in Korean Population of Cervical Cancer Patients

Hye Suk Hwang*, Jung Hee Hwang, Nam Keun Kim¹ and Ki Wha Chung
Dept. of Biology and Institute of Biotechnology, Kongju National University
¹College of Medicine, Pochon CHA University

The *p53* tumor suppresser gene has become the center of intensive cancer study ever since it became clear that slightly more than 50% of human cancers contain mutations in this gene. Mutational hotspots and carcinogen-specific mutation spectra in *p53* have been reported. In this study, a *MspI* restriction fragment length polymorphism in intron 6 and 16-bp duplication in intron 3 were examined on subjects with Korean populations of normals and cervical cancer patients. Cervical cancer is the most common cancer among woman in Korea. The G→A mutation in intron 6 (*MspI* RFLP) was genotyped by PCR and subsequent digestion of the PCR product using *MspI* restriction enzyme. The mutational rate of Koreans was estimated to 0.032, which is significantly low rate compared with other previously studied ethnic groups.

F102 **Detection of Mitochondrial DNA Mutations Using SSCP Analysis in Cheju Native Horses**

Yong Hwan Jung*, Mi Hee Ko, You Sung Oh, Sang Hyun Han,
and Moon You Oh
Department of Biology, Cheju National University

The hypervariable D-loop region of mitochondrial DNA (mtDNA) was amplified with the polymerase chain reaction using total horse DNA samples. The oligonucleotide primers used to amplify the equine mtDNA D-loop region by PCR were designed by referring to the sequences of tRNA^{Thr} and tRNA^{Phe} in the highly conserved region of mtDNA which are common to many animal species. Analysis of single strand conformation polymorphism (SSCP) of denatured amplified products was carried out by native polyacrylamide (8%) gel electrophoresis followed by silver staining. The results of PCR-SSCP analysis clearly showed two different types. Comparing DNA sequences between these two different types, five sites of base substitutions (four transition and one transversion) were found.