Nine polymorphic STR loci in the HLA region in the Shaanxi Han population of China

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ABSTRACT. A large number of microsatellite genetic markers have been identified in the human leukocyte antigen (HLA) region. We investigated genetic polymorphism of the nine short tandem repeat (STR) loci (D6S276, MOGCA, D6S265, MIB, D6S273, G51152, TAP1CA, RING3CA, and D6S291) in the HLA region in the Shaanxi Han population. Using a fluorescence-labeled multiplex-PCR STR typing method, 6-13 alleles were detected in these nine STR loci in 150 unrelated Han Chinese from the region of Shaanxi, China. The distributions of the genotypes at these nine loci were in Hardy-Weinberg equilibrium. We conclude that these nine STR loci have a high level of genetic polymorphism; they would be useful for population genetic studies, pre-transplantation HLA typing, forensic and paternity testing, etc.

Key words: HLA; STR; Polymorphisms; Han population genetics