

Study of Selected HLA-A and -B Antigens by PCR-SSP Method in Bengali Population of Siliguri and Adjoining Areas of West Bengal

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ABSTRACT Human leukocyte antigen is a highly polymorphic gene cluster which has made it a valuable tool in the population genetic studies. In this study one hundred individuals belonging to Bengali community of Siliguri sub-division of West Bengal were studied for 20 of the HLA-A and B loci. The HLA alleles were analyzed by using sequence specific primers for polymerase chain reaction (PCR-SSP). The result showed the increase frequency of HLA-A*02, -A*11, -A*24, -A*31, -B*07, -B*08, and -B*37 amongst the tested alleles. The notable observation of this study is the higher incidence of HLA-B*37 and -B*08 which is observed to be the highest amongst the Indian populations. The two-locus haplotype analysis revealed significant positive linkage disequilibrium for A*01-B*37, A*01-B*40, A*29-B*40, A*30-B*51, A*31-B*40. The study provides the HLA data of the Bengali population of this region.