

Brief Communication

Typing of HLA Class I by Polymerase Chain Reaction-Sequence Specific Oligonucleotide Primer (*PCR-SSOP*) Technique in Iranian Cord Blood Donors

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ABSTRACT

Background: HLA compatibility between transplant donor and recipient is one of the major determinants of transplant outcome. **Objective:** To determine HLA class I by PCR- Sequence-Specific Oligonucleotide Probe (*PCR-SSOP*) in cord blood donors. **Methods:** Genomic DNA of 142 cord blood samples registered at the Cord Blood Bank of Iran at Hematology, Oncology, and Bone Marrow Transplantation Research Center, was prepared and HLA class I was determined by the *PCR-SSOP*. **Results:** A total of 284 HLA-A alleles was identified of which A*02 and A*24 were the most common. Among 284 HLA-B and HLA-C alleles, B*35, B*51, Cw*4 and Cw*12 were the most frequent alleles in the studied population. **Conclusion:** Amplification of HLA loci with *PCR-SSOP* has proved to be a reliable method for HLA-A, -B and -C genotyping.

Keywords: *HLA Typing, PCR-SSOP, Cord Blood, HLA Class I*

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