

## **HLA-DRB1 gene polymorphism in the Kyrgyz population**

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### **Summary**

Central Asia is a vast region at the crossroads of different habitats, cultures, and trade routes. Little is known about the genetics and the history of the populations of this region. In order to investigate the genetic characteristics of Kyrgyz and their affinities to other populations, HLA-DRB1 polymorphism was investigated in 148 healthy unrelated individuals living in Kyrgyz Republic. Kyrgyz, as representative of the Central Asian cluster, not only contain a considerable admixture of Mongoloid genes, but also Caucasian genes as well. The predominant HLA-DRB1 alleles were HLA-DRB1\*0701 and \*0301. Genetic distances and principal component analysis based on DRB1 allele frequencies suggested that Kyrgyz are genetically situated closer to the European than to the East Asian cluster. The present results agree well with the admixture hypothesis that Kyrgyz have not only been derived from Mongoloid, but also Caucasoid ancestors.

**Key words:** anthropology, HLA-DRB1, Kyrgyz