

# Ethnic segregation of HTLV-I and HTLV-II carriers among South American native Indians

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To investigate the genetic background of human T-cell leukemia virus type I (HTLV-I) and II (HTLV-II) carriers among South American native Indians, we analyzed HLA DRB1\*3-DQB1\* haplotypes of the virus carriers from Andes highlands and Orinoco lowlands by the PCR-RFLP genotyping method. It was revealed that the HTLV-I-carrying Andes natives had one of the 5 HLA haplotypes: DRB1\*3-DQB1\* 0403\*0302, 0802\*0402, 0901\*0303, 1406\*0302 and 0407\*0302, and that the Orinoco HTLV-II carriers had one of the 3 HLA haplotypes: DRB1\*3-DQB1\* 1402\*0301, 1602\*0301 and 0404\*0302. The HLA haplotypes of Andes HTLV-I carriers and Orinoco HTLV-II carriers were mutually exclusive. The haplotypes associated with HTLV-I carriers were commonly found among the Andes Indians and Japanese, which is the known HTLV-I endemic population,

while the haplotypes associated with HTLV-II carriers were specifically found among the Orinoco Indians and North American Indians, among whom HTLV-II is endemic. These results suggested