遗传学报 1982 9 (2): 109-116 ISSN: 0379-4172 CN: 11-5450/R

R和S系列白细胞抗原的HLA相应命名

徐静娟，丁惠娟，范丽安，姚芳娟

世界卫生组织免疫遗传学研究合作中心；上海市免疫学研究所免疫遗传研究室、基础免疫研究室；上海第二医学院生物学教研室

收稿日期 修回日期 网络版发布日期 接受日期

摘要 HLA系统是人群一种具有高度多态性的遗传结构，在不同人种间有明显差异。某一人种中常见的HLA抗原，在其它人种中可能少见或甚至完全缺失。在试验与血清供者同一人种时被认为是使用单价的(operationally monospecific) HLA分型血清，在其它人种中可能出现额外反应。因此鉴定HLA抗原最好是采自同一人种的抗血精。上海市白细胞分型协作组曾用上海地区经产妇细胞毒轿清检出11个白细胞抗原。这些抗原分属于两个分离子系列(segregant series),由于当时缺乏参考血清，被临时命名为R系列和S系列。R系列包括7个抗原：R1、F2.2、R3、R4、R7、R8和R11.2。S系列包括4个抗原：S5、S6、S10和S12。本文报道将R和S系列抗原的分型血清与法、英、日等国实验室提供HLA分型血清作平行试验，通过血清聚类分析(clustering analysis)和群体抗原相关分析(correlation analysis)确定R和S系列5个抗原的HLA相应命名。

关键词

分类号

HLA Equivalents of R and S Series Leukocyte Antigens

Xu Jingjuan, Ding Huijuan, Fan Lian, Yao Fangjuan

WHO Collaborating Center for Research on Immunogenetics;Immunogenetics and Basic Immunology Laboratories,Shanghai Institute of Immunology;Department of Biology, Shanghai Second Medical College

Abstract

Shanghai Cooperation Team on Leukocyte Typing (1979a,1979b) identified 11 leukocyte antigens with local cytotoxic sera.Genetic analysis showed that these antigens could be divided into two segregate series controlled by two linked loci.Because no reference sera were available then,the two segregate series and their corresponding genetic loci were temporarily called R and S respectively as the local designation.This paper reported the HLA equivalents of five R and S series leukocyte antigens.A random panel of 115 healthy volunteers was typed with 50 local sera which could detect 11 R and S series antigens R1,R2.2,R3,R4,R7,R8,R11.2;S5,S6,S10,S12),and 83 HLA sera,kindly contributed by French,English and Japanese scientists,which could detect 16HLA antigens (A1,A2,A9,A10,A29,Aw32;B5,B7,B8,B12,B13,B17,B27,Bw35,B40).Cluster analysis of serum reaction patterns showed that anti-S6and anti-A2,anti-S10 and anti-A9,anti-R2.2 and anti-B13,abti-R3 and anti-B5 anti-R4 and anti-B17 were clustered respectively in the same group (Tables 1-5).Correlation analysis of distribution patterns in the tested population sample of the corresponding antigens assigned separately with R and S typing sera and HLA-A and -B typing sera showed that S6 and A2,S10 and A9,R2.2 and B13,R3 and B5,and R4 and B17 were highly correlated (Table 6).Some missings for each other are mainly due to technical errors and cross-reactions,though cannot be excluded the possibility or interference caused by the extra minor antibodies.The results obtained demonstrated that S6 and A2,S10 and A9,R2.2 and B13,R3 and B5,and R4 and B17 were equivalents to each other respectively,and S series was corresponding to HLA-A series and R series to HLA-B series.

In order to check the conclusion reached by us,three sera for each of these 5 R and S specificities,a total of 15,were sent to prof.P.I.Terasaki,Tissue Typing Laboratory,University of California,Los Angeles,and Dr.T.Juji,Bolld Transfusion Service,Tokyo University Hospital,Tokyo,to be tested with their characterized lymphocyte panel.The conclusion was confirmed by the data obtained in these two laboratories (Tables 7—8).The kind help of prof.P.I.Terasaki and Dr.T.Juji is sincerely appreciated.

Key words

DOI:

通讯作者