

研究报告

中国大陆地区发现一例罕见的血小板抗原HPA-10bw等位基因报告

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摘要

采用序列特异性引物-聚合酶链式反应(PCR-SSP)为基础的人类血小板抗原(HPA)基因分型技术做群体调查, 在1,000例受检者中发现1例罕见的HPA-10w(a+b+)杂合子个体, 为了验证分型的可靠性, 使用PCR反应特异性扩增HPA-10基因片段, 然后测序分析。结果表明, nt263位G→A导致GPIIIa糖蛋白第62位精氨酸(CGA)→谷氨酰胺(CAA), 产生HPA-10bw抗原特异性。在中国人群中检测出HPA-10bw低频抗原, 提示在血小板同种免疫引起的新生儿同种免疫血小板减少症(NAIT)、输血后紫癜症(PTP)以及血小板输注无效症(PTR)的诊断中, 该抗原具有临床意义。

关键词 [中国人群](#) [HPA-10bw抗原](#) [PCR-SSP HPA基因分型](#) [DNA测序](#)

分类号

Case report of a rare platelet-specific antigen HPA-10bw allele found in Chinese mainland

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Abstract

<P>A total of 1,000 Chinese blood donors were typed for human platelet antigens (HPA) using a sequence specific primers -polymerase chain reaction (PCR-SSP) based HPA genotyping method. An individual with a rare HPA-10w(a+b+) genotype was found. In order to confirm the typing results, a fragment of HPA-10 gene was amplified by PCR and then sequenced. Sequencing data showed that a single G to A substitution at nucleotide 263 occurred, resulting in amino acid change from Arg (CGA) to Gln(CAA) at position 62 of GPIIIa protein. The substitution generated antigenic specificity HPA-10bw. The detection of an HPA-10bw allele in the Chinese population suggests that this rare allele should be considered in platelet alloimmunization, such as neonatal alloimmune thrombocytopenia (NAIT), post-transfusion thrombocytopenic purpura (PTP) and post-transfusion refractoriness to platelets (PTR).</P>

Key words [Chinese population](#) [HPA-10bw antigen](#) [PCR-SSP HPA genotyping](#) [DNA sequencing](#)

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