Association study of tumor necrosis factor-β TNF-β polymorphism and psychoses in mixed pedigrees of Chinese Han population  


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Abstract   

Objective To explore the relationships between TNF-β gene polymorphism G252A and schizophrenia mood disorders in the mixed pedigrees of Chinese Han population. 

Methods Collected 65 core families the G252A polymorphism was genotyped by applying PCR-RFLP technique then transmission disequilibrium test (TDT) was performed. 

Results TNF-β gene polymorphism G252A was associated with schizophrenia in female group $\chi^2 = 5.26 (P < 0.05)$ and early-onset age of onset $\leq 25$ years group $\chi^2 = 6.76 (P < 0.05)$ and early-onset age of onset $\leq 25$ years group $\chi^2 = 5.00 (P < 0.05)$. 

Conclusion TNF-β gene may be one of common susceptible genes for schizophrenia and mood disorders in Chinese Han population also may affect the age of onset. 

Key words Schizophrenia Mood disorders Tumor necrosis factor-β Single nucleotide polymorphism

1. DNA 10 μL 5 μL MgCl$_2$ 1.5 mmol/L dNTP 200 pmol/L [ ] 15 pmol/L DNA 100 ng Taq DNA 1 U PCR 10 × PCR buffer 5 μL PCR- RFLP 10 μL 5'-AGA GCT GGT GGG GAC ATG TCT G-3' 5'-CCG TGC TTT GTC TTT TGG ACT A-3' 10 μL MgCl$_2$ 1.5 mmol/L dNTP 200 pmol/L [ ] 15 pmol/L DNA 100 ng Taq DNA 1 U PCR 10 × PCR buffer 5 μL MgCl$_2$ 1.5 mmol/L dNTP 200 pmol/L [ ] 15 pmol/L DNA 100 ng Taq DNA 1 U PCR 10 × PCR buffer 5 μL MgCl$_2$ 1.5 mmol/L dNTP 200 pmol/L [ ] 15 pmol/L DNA 100 ng Taq DNA 1 U PCR 10 × PCR buffer 5 μL MgCl$_2$ 1.5 mmol/L dNTP

3. 10 μL 5× PCR-RFLP buffer 5 μL Nco I 10 U 37 °C 3 min 555bp 185bp Q 740bp 555bp 185bp AA 740bp 740bp

能上有许多相似之处，其基因位于染色体之一，与免疫系统的发育、炎症反应和免疫调节等。一方面，长约为3B3

基因组扫描研究提示染色体3B3晚发组(345)，3B3

传递不平衡检验(\chi^2 = 13.24, P < 0.01)，传递未传递

性别组间\chi^2 = 7.81, P < 0.01。另一方面，传递未传递

\chi^2 = 5.83, P < 0.05。对\chi^2 = 2.57, P < 0.05

传递未传递

\chi^2 = 1.33, P < 0.05

传递未传递

\chi^2 = 5.00, P < 0.05

传递未传递

\chi^2 = 1.00, P < 0.05

传递未传递

\chi^2 = 2.78, P < 0.05

传递未传递

\chi^2 = 3.20, P < 0.05


TNF-\beta 与G252A排列，-\alpha

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