Cite this as: Yun-lei CAO, Zhao-feng ZHANG, Jian WANG, Mao-hua MIAO, Jian-hua XU, Yue-ping SHEN, Ai-min CHEN, Jing DU, Wei YUAN, 2016. Association between polymorphisms of prokineticin receptor (PKR1 rs4627609 and PKR2 rs6053283) and recurrent pregnancy loss. *Journal of Zhejiang University-Science B (Biomedicine & Biotechnology)*. **17**(3):218-224. http://dx.doi.org/10.1631/jzus.B1500180

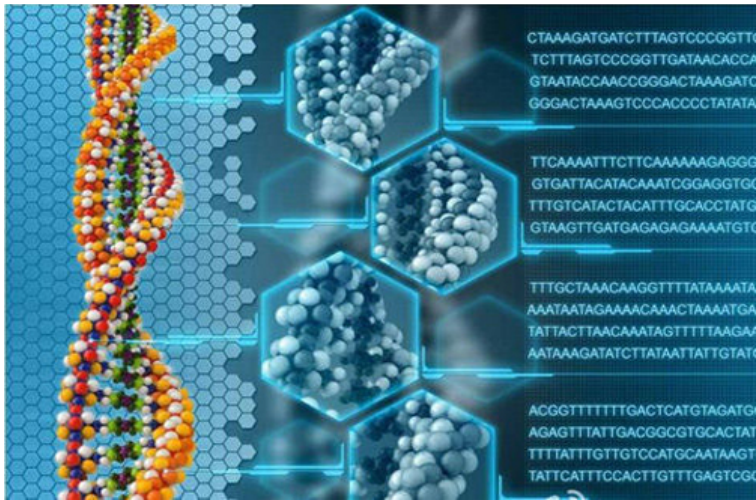
Association between Polymorphisms of Prokineticin Receptor (PKR1 rs4627609 and PKR2 rs6053283) and Recurrent Pregnancy Loss

Key words: PKR1, PKR2, polymorphism, recurrent pregnancy loss

Research Summary

This study aims to investigate the association between polymorphisms of prokineticin receptor (PKR1 rs4627609 and PKR2 rs6053283) and Recurrent pregnancy loss (RPL). Methods are as follows:

- Anticoagulant peripheral blood samples were obtained
- Genomic DNA was extracted
- SNPs of rs4627609 and rs6053283 were detected
- SNP effect on mRNA splicing was predicted



Innovation points

- **Introduction** of the potential role of PKs/PKRs pathway in regulating human early pregnancy.

- **Investigation** of the association between the polymorphisms of PKRs (PKR1 rs4627609 and PKR2 rs6053283) and RPL in the Chinese Han population for the first time.

- **prediction** of the SNP of PKR2 rs6053283 effect on mRNA splicing.

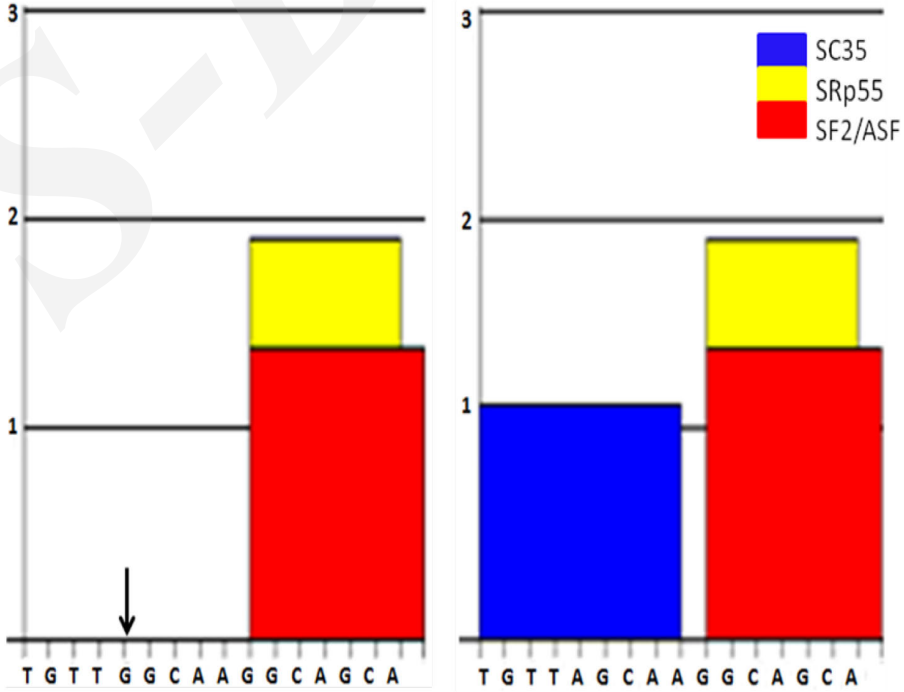


Figure 1

Results and Conclusions

Polymorphism in PKR2 rs6053283 were obviously associated with idiopathic RPL and could be developed as a new biomarker to evaluate the risk of RPL.