

Supplementary information to:

Original article:

**ASSOCIATION BETWEEN 15 INSERTION/DELETION GENETIC
POLYMORPHISMS AND RISK OF SCHIZOPHRENIA USING
POOLED SAMPLES**

Maedeh Bordbar , Mostafa Saadat* 

Department of Biology, College of Sciences, Shiraz University, Shiraz 71467-13565, Iran

* **Corresponding author:** Mostafa Saadat, Department of Biology, College of Sciences, Shiraz University, Shiraz 71467-13565, Iran. Fax: +98-71-32280926.
E-mail: saadat@shirazu.ac.ir

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Supplementary Table 1: The specific forward and reverse primers and PCR product length of each indel polymorphism

Loci	Primer sequences	PCR product length (bp)	Reference
APOB	F: 5' ACCGGCCCTGGCGCCCGCCAGCA 3' R: 5' CAGCTGGCGATGGACCCGCCGA 3'	93/84	Boerwinkle and Chan, 1989
ADRA2B	F: 5' CAAGCTGAGGCCGGAGACACT 3' R: 5' AGGGTGTGGGGGCATCT 3'	112/103	Eldeeb et al, 2021
PDCD6I	F: 5' CCTTAAGGTCTGTGTCAACC 3' R: 5' TATTCCTCCACTCGAACAAAC 3'	227/212	Liu et al., 2014
LRPAP1	F: 5' AGTGTGCGTGGAGCCTATG 3' R: 5' GGTGTTTCTGGACACAAAGGA 3'	222/185	Benes et al., 2000
TLR2	F: 5' CACGGAGGCAGCGAGAAA 3' R: 5' CTGGGCCGTGCAAAGAAG 3'	286/264	Tahara et al., 2007
DHF	F: 5' CGCAAGTCTGGCCCCATC 3' R: 5' TCAGGTATCTGCCGGGCC 3'	119/100	Hayashi et al., 2010
VEGF	F: 5' GCTGAGGATGGGGCTGACTAGGTA 3' R: 5' GTTTCTGACCTGGCTATTTCCAGG 3'	230/212	Buraczynska et al., 2007
HLA-G	F: 5' GTGATGGGCTGTTTAAAGTGTCACC 3' R: 5' GGAAGGAATGCAGTTCAGCATGA 3'	224/210	Hviid et al., 1999
TPA	F: 5' GTAAGAGTTCCGTAACAGGACAGCT 3' R: 5' CCCCACCTAGGAGAACTTCTCTTT 3'	424/113	Valle-Garay et al., 2013
DBH	F: 5' TGCAAAAATCAGGCACATGC 3' R: 5' TCCAATAATTTGGCCTCAATC 3'	166/147	Barbanti et al., 2019
UCP2	F: 5' CAGTGAGGGAAGTGGGAGG 3' R: 5' GGGGCAGGACGAAGATTC 3'	502/457	Wang et al., 2007
FADS2	F: 5' TTTCTCAAAGGCCGTGGTGT 3' R: 5' AGTGCTAACCCTCCTGGAA 3'	629/607	Kothapalli et al., 2016
MDM2	F: 5' TTTCTTTCTGGTAGGCTGG 3' R: 5' CACCTACTTTCCACAGAGA 3'	262/222	Lalonde et al., 2012
TP53	F: 5' TCAAATCATCCATTGCTTGG 3' R: 5' TGGGACTGACTTTCTGCTCTT 3'	195/179	Wu et al., 2002
SLC6A4	F: 5' GACATAATCTGTCTTCTGGCCTCTCAAG 3' R: 5' CAATGTCTGGCGCTTCCCCTACATAT 3'	310/266	Hauser et al., 2003

REFERENCES

- Barbanti P, Guadagni F, De Marchis ML, Ialongo C, Egeo G, Fofi L, et al. Dopamine-beta-hydroxylase 19-bp insertion/deletion polymorphism affects medication overuse in patients with chronic migraine. *Neurolog Sci.* 2019;40:1717-24.
- Benes P, Muzik J, Benedík J, Elbl L, Znojil V, Vácha J. Relation between the insertion/deletion polymorphism in the gene coding for receptor associated protein (RAP) and plasma apolipoprotein AI (apoAI) and high-density lipoprotein cholesterol (HDL) levels. *Clin Genet.* 2000;57:309-10.
- Boerwinkle E, Chan L. A three codon insertion/deletion polymorphism in the signal peptide region of the human apolipoprotein B (*APOB*) gene directly typed by the polymerase chain reaction. *Nucleic Acids Res.* 1989;17:4003.
- Buraczynska M, Ksiazek P, Baranowicz-Gaszczyk I, Jozwiak L. Association of the *VEGF* gene polymorphism with diabetic retinopathy in type 2 diabetes patients. *Nephrol Dial Transplant.* 2007;22:827-32.
- Eldeeb HM, Elgharabawy RM, Abd Elmoniem AE, Ahmed AA. Alpha-2 beta-adrenergic receptor (301–303 I/D) gene polymorphism in hypertension and type 2 diabetes mellitus diseases among Saudi cases in the Qassim region. *Sci Prog.* 2021;104:368504211012162.
- Hauser J, Leszczyńska A, Samochowiec J, Czerski PM, Ostapowicz A, Chlopocka M, et al. Association analysis of the insertion/deletion polymorphism in serotonin transporter gene in patients with affective disorder. *Eur Psychiatry.* 2003;18:129-32.
- Hayashi H, Horino M, Morishita M, Tazoe Y, Tsuboi S, Matsuyama T, et al. Dihydrofolate reductase gene intronic 19-bp deletion polymorphisms in a Japanese population. *Drug Metab Pharmacokinet.* 2010;25:516-8.
- Hviid TV, Sørensen S, Morling N. Polymorphism in the regulatory region located more than 1.1 kilobases 5' to the start site of transcription, the promoter region, and exon 1 of the *HLA-G* gene. *Hum Immunol.* 1999;60:1237-44.
- Kothapalli KS, Ye K, Gadgil MS, Carlson SE, O'Brien KO, Zhang JY, et al. Positive selection on a regulatory insertion–deletion polymorphism in *FADS2* influences apparent endogenous synthesis of arachidonic acid. *Mol Biol Evol.* 2016;33:1726-39.
- Lalonde M-E, Ouimet M, Larivière M, Kritikou EA, Sinnott D. Identification of functional DNA variants in the constitutive promoter region of *MDM2*. *Hum Genomics.* 2012;6:15.
- Liu SG, Yuan SH, Wu HY, Huang CS, Liu J. The programmed cell death 6 interacting protein insertion/deletion polymorphism is associated with non-small cell lung cancer risk in a Chinese Han population. *Tumor Biol.* 2014;35:8679-83.
- Tahara T, Arisawa T, Wang F, Shibata T, Nakamura M, Sakata M, et al. Toll-like receptor 2 –196 to 174 del polymorphism influences the susceptibility of Japanese people to gastric cancer. *Cancer Sci.* 2007;98:1790-4.
- Valle-Garay E, Montes AH, Corte JR, Meana A, Fierer J, Asensi V. tPA Alu (I/D) polymorphism associates with bacterial osteomyelitis. *J Infect Dis.* 2013;208:218-23.
- Wang X, Axelsson J, Nordfors L, Qureshi AR, Avesani C, Barany P, et al. Changes in fat mass after initiation of maintenance dialysis is influenced by the uncoupling protein 2 exon 8 insertion/deletion polymorphism. *Nephrol Dial Transplant.* 2007;22:196-202.
- Wu X, Zhao H, Amos CI, Shete S, Maman N, Hong WK, et al. p53 genotypes and haplotypes associated with lung cancer susceptibility and ethnicity. *J Natl Cancer Inst.* 2002;94:681-90.