Supplementary Table 1 The minor allele frequency of each SNP in different ethnic groups

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SNP-ID | Alleles A/B | Tibetan | Ewenki | Hainan-Han | Hui | Li | Mongolian | Miao | Uighur | Shaanxi-Han |
| rs11568737 | C/T | 0.038 | 0.015 | 0.000 | 0.040 | 0.040 | 0.040 | 0.028 | 0.024 | 0.053 |
| rs28777 | A/C | 0.129 | 0.110 | 0.133 | 0.165 | 0.116 | 0.130 | 0.163 | 0.297 | 0.096 |
| rs183671 | G/T | 0.095 | 0.125 | 0.092 | 0.140 | 0.111 | 0.165 | 0.096 | 0.305 | 0.096 |
| rs1042602 | A/C | 0.010 | 0.030 | 0.000 | 0.020 | 0.000 | 0.020 | 0.000 | 0.151 | 0.032 |
| rs1393350 | A/G | 0.000 | 0.010 | 0.000 | 0.035 | 0.000 | 0.025 | 0.000 | 0.099 | 0.000 |
| rs1126809 | A/G | 0.000 | 0.005 | 0.000 | 0.035 | 0.005 | 0.025 | 0.000 | 0.085 | 0.000 |

SNP: single nucleotide polymorphism

Supplementary Table 2 The HWE-*P* value of each SNP in different ethnic groups

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SNP-ID | Tibetan | Ewenki | Hainan-Han | Hui | Li | Mongolian | Miao | Uighur | Shaanxi-Han |
| rs11568737 | 1.000 | 1.000 | 1.000 | 1.000 | 0.137 | 1.000 | 1.000 | 1.000 | 1.000 |
| rs28777 | 0.674 | 0.327 | 1.000 | 0.024 | 0.613 | 0.666 | 1.000 | 0.645 | 1.000 |
| rs183671 | 1.000 | 1.000 | 0.332 | 0.095 | 0.332 | 1.000 | 1.000 | 0.255 | 1.000 |
| rs1042602 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.248 | 1.000 |
| rs1393350 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.008 | 1.000 |
| rs1126809 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

SNP: single nucleotide polymorphism, Hardy-Weinberg equilibrium

*P* < 0.05 was considered to be significant.