**Table S1. Description of selected variants in *PIK3CA-KCNMB3* region in GOLDN1**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SNP Name | Gene | Location | Chromosome position (Genome Build 36.3) | HWE *P*-value | Major/minor allele | MAF | Imputed genotype | MACH r2 |
| rs3975506 | Intergenic | Upstream PIK3CA | 180324682 | 0.525 | T/C | 0.17 | No |   |
| rs4855094 | PIK3CA | Intron | 180360671 | 0.923 | G/A | 0.07 | No |  |
| rs6443624 | PIK3CA | Intron | 180380368 | 0.693 | C/A | 0.21 | Yes | 0.954 |
| rs2677760 | PIK3CA | Intron | 180385958 | 0.033 | T/C | 0.49 | Yes | 0.952 |
| rs2677764 | PIK3CA | Intron | 180406501 | 0.524 | C/T | 0.12 | No |  |
| rs7645550 | KCNMB3 | Exon-missense | 180451328 | 0.074 | C/T | 0.37 | Yes | 0.924 |
| rs1170672 | KCNMB3 | Exon-missense | 180451354 | 0.15 | T/C | 0.11 | No |  |
| rs1183319 | KCNMB3 | 5’-UTR | 180451801 | 0.893 | A/G | 0.45 | Yes | 0.918 |
| rs7642066 | KCNMB3 | Intron | 180457365 | 0.657 | T/A | 0.44 | Yes | 0.99 |

1 HWE *P*-value, Hardy-Weinberg equilibrium expectation *P*-values; MAF, minor allele frequency; MACH r2, SNP imputation quality.