

Supplementary Table 1. Genetic polymorphism of *FLG* in Korean atopic dermatitis patients

| Location | Change HGCO | Code | AA HUGO | SNP (NCBI) | SNP* (A/B/C) | Genotype frequency | | | | Allele frequency | | |
|----------|-------------|---------|------------|------------|--------------|--------------------|--------------|--------------|--------------|------------------|--------------|--------------|
| | | | | | | AA | Aa | aa | P | A | a | P |
| Repeat 0 | c.975G>A | GCG>GCA | p.=(325A) | New | None | 0.89 1.00 | 0.11 0.00 | 0.00 0.00 | 0.028 | 0.94 1.00 | 0.06 0.00 | 0.030 |
| Repeat 0 | c.995G>T | GGC>GTC | p.G332V | rs41267154 | G/T/T | 0.06 0.24 | 0.45 0.46 | 0.49 0.40 | 0.025 | 0.28 0.42 | 0.71 0.58 | 0.043 |
| Repeat 0 | c.1236T>C | CGT>CGC | p.=(412R) | rs11582620 | None | 0.82 0.84 | 0.18 0.16 | 0.00 0.00 | 0.801 | 0.91 0.92 | 0.09 0.08 | 0.810 |
| Repeat 0 | c.1330G>A | GGG>AGG | p.G444R | rs11588170 | G/A/G | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 0 | c.1360A>G | ACA>GCA | p.T454A | rs2011331 | A/G/G | 0.06 0.24 | 0.45 0.46 | 0.49 0.40 | 0.025 | 0.28 0.42 | 0.71 0.58 | 0.043 |
| Repeat 1 | c.1432C>T | CCT>TCT | p.P478S | rs11584340 | C/T/T | 0.06 0.24 | 0.45 0.46 | 0.49 0.40 | 0.025 | 0.28 0.42 | 0.71 0.58 | 0.043 |
| Repeat 1 | c.1555C>A | CAC>AAC | p.H519N | rs12036682 | None | 0.81 0.68 | 0.18 0.26 | 0.0 0.06 | 0.096 | 0.91 0.81 | 0.09 0.19 | 0.046 |
| Repeat 1 | c.2181C>A | CAC>CAA | p.H727Q | rs35904544 | C/C/A | 0.84 0.90 | 0.05 0.04 | 0.11 0.06 | 0.614 | 0.86 0.92 | 0.14 0.08 | 0.269 |
| Repeat 1 | c.2263G>A | GAA>AAA | p.E755K | rs74129461 | G/A/A | 0.06 0.22 | 0.45 0.36 | 0.49 0.42 | 0.044 | 0.28 0.40 | 0.72 0.60 | 0.081 |
| Repeat 2 | c.2508T>C | GAT>GAC | p.=(836D) | rs3120653 | T/C/C | 0.46 0.04 | 0.49 0.04 | 0.49 0.42 | 0.673 | 0.48 0.56 | 0.52 0.44 | 0.272 |
| Repeat 2 | c.2938C>G | CAT>GAT | p.H980D | rs12756586 | C/C/G | 0.84 0.88 | 0.05 0.04 | 0.11 0.08 | 0.816 | 0.86 0.90 | 0.14 0.10 | 0.523 |
| Repeat 2 | c.3154A>G | AGA>GGA | p.R1052G | New | None | 0.98 0.96 | 0.02 0.04 | 0.00 0.00 | 0.604 | 0.99 0.98 | 0.01 0.02 | 0.606 |
| Repeat 3 | c.3387T>C | TCT>TCC | p.=(1129S) | rs9436067 | T/C/C | 0.46 0.54 | 0.06 0.04 | 0.49 0.42 | 0.673 | 0.48 0.56 | 0.52 0.44 | 0.272 |
| Repeat 3 | c.3397C>T | CGG>TGG | p.R1133W | New | None | 0.98 0.96 | 0.02 0.04 | 0.00 0.00 | 0.604 | 0.99 0.98 | 0.01 0.02 | 0.606 |
| Repeat 3 | c.3500C>G | GCA>GGA | p.A1167G | rs7530018 | C/G/G | 0.46 0.54 | 0.06 0.04 | 0.49 0.42 | 0.673 | 0.48 0.56 | 0.52 0.44 | 0.272 |
| Repeat 3 | c.3574G>A | GGG>AGG | p.G1192R | New | None | 0.96 0.96 | 0.04 0.04 | 0.00 0.00 | 1.000 | 0.98 0.98 | 0.02 0.02 | 1.000 |
| Repeat 3 | c.4079G>A | CGC>CAC | p.R1360H | rs11586631 | G/A/G | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 3 | c.4126A>G | AGA>GGA | p.R1376G | rs11581433 | A/G/G | 0.06 0.24 | 0.45 0.36 | 0.49 0.40 | 0.025 | 0.28 0.42 | 0.72 0.58 | 0.043 |
| Repeat 4 | c.4410T>C | CAT>CAC | p.=(1470H) | rs12732920 | T/T/C | 0.84 0.88 | 0.16 0.12 | 0.00 0.00 | 0.586 | 0.92 0.94 | 0.08 0.06 | 0.600 |
| Repeat 4 | c.4445C>A | TCC>TAC | p.S1482Y | rs11204978 | C/A/C | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 4 | c.4452C>G | GAC>GAG | p.D1484E | rs71626706 | C/C/G | 0.84 0.88 | 0.16 0.12 | 0.00 0.00 | 0.586 | 0.92 0.94 | 0.08 0.06 | 0.600 |
| Repeat 4 | c.4568C>T | ACA>ATA | p.T1523I | rs12750081 | C/C/T | 0.84 0.88 | 0.16 0.12 | 0.00 0.00 | 0.586 | 0.92 0.94 | 0.08 0.06 | 0.600 |
| Repeat 4 | c.4867C>T | CGG>TGG | p.R1623W | New | None | 1.00 0.94 | 0.00 0.06 | 0.00 0.00 | 0.105 | 1.00 0.97 | 0.00 0.03 | 0.106 |
| Repeat 4 | c.5051G>A | CGC>CAC | p.R1684H | rs12407807 | G/A/G | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 4 | c.5095C>T | CGC>TGC | p.R1699C | rs12405278 | C/T/C | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 5 | c.5414C>T | GCG>GTG | p.A1805V | rs12405241 | C/T/C | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 5 | c.5617C>A | CAA>AAA | p.Q1873K | rs62623409 | C/C/A | 0.84 0.88 | 0.16 0.12 | 0.00 0.00 | 0.586 | 0.92 0.94 | 0.08 0.06 | 0.600 |
| Repeat 5 | c.5671C>T | CGG>TGG | p.R1891W | rs36006086 | C/C/T | 0.84 0.88 | 0.16 0.12 | 0.00 0.00 | 0.586 | 0.92 0.94 | 0.08 0.06 | 0.600 |
| Repeat 5 | c.5672G>A | CGG>CAG | p.R1891Q | rs12407748 | G/A/G | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 5 | c.5883C>A | CAC>CAA | p.H1961Q | rs3126079 | C/A/A | 0.05 0.24 | 0.46 0.36 | 0.49 0.40 | 0.025 | 0.28 0.42 | 0.72 0.58 | 0.043 |

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Supplementary Table 1. Continued

| Location | Change HGCO | Code | AA HUGO | SNP (NCBI) | SNP* (A/B/C) | Genotype frequency | | | | Allele frequency | | |
|------------|-------------|---------|------------|------------|--------------|--------------------|------|------|-------|------------------|------|-------|
| | | | | | | AA | Aa | aa | P | A | a | P |
| Repeat 5 | c.6045C>A | GAC>GAA | p.D2015E | rs71626704 | C/C/A | 0.84 | 0.16 | 0.00 | 0.586 | 0.92 | 0.08 | 0.600 |
| | | | | | | 0.88 | 0.12 | 0.00 | | 0.94 | 0.06 | |
| Repeat 6 | c.6498T>C | TCT>TCC | p.=(2166S) | rs2184954 | T/C/C | 0.05 | 0.46 | 0.49 | 0.025 | 0.28 | 0.72 | 0.043 |
| | | | | | | 0.24 | 0.36 | 0.40 | | 0.42 | 0.58 | |
| Repeat 6 | c.6574A>C | AAA>CAA | p.K2192Q | New | A/A/C | 0.84 | 0.16 | 0.00 | 0.586 | 0.92 | 0.08 | 0.600 |
| | | | | | | 0.88 | 0.12 | 0.00 | | 0.94 | 0.06 | |
| Repeat 6 | c.6580T>C | TAT>CAT | p.Y2194H | rs2184953 | T/C/C | 0.05 | 0.46 | 0.49 | 0.025 | 0.28 | 0.72 | 0.043 |
| | | | | | | 0.24 | 0.36 | 0.40 | | 0.42 | 0.58 | |
| Repeat 6 | c.6990C>T | CAC>CAT | p.=(2330H) | rs71626703 | C/T/T | 0.05 | 0.46 | 0.49 | 0.025 | 0.28 | 0.72 | 0.043 |
| | | | | | | 0.24 | 0.36 | 0.40 | | 0.42 | 0.58 | |
| Repeat 6 | c.7015G>A | GAC>AAC | p.D2339N | New | G/A/A | 0.05 | 0.46 | 0.49 | 0.025 | 0.28 | 0.72 | 0.043 |
| | | | | | | 0.24 | 0.36 | 0.40 | | 0.42 | 0.58 | |
| Repeat 6 | c.7097G>C | AGT>ACT | p.S2366T | rs71625202 | G/C/C | 0.05 | 0.46 | 0.49 | 0.025 | 0.28 | 0.72 | 0.043 |
| | | | | | | 0.24 | 0.36 | 0.40 | | 0.42 | 0.58 | |
| Repeat 6 | c.7171C>T | CCC>TCC | p.P2391S | New | C/C/C (Bs=T) | 0.96 | 0.04 | 0.00 | 0.496 | 0.98 | 0.18 | 0.499 |
| | | | | | | 1.00 | 0.00 | 0.00 | | 1.00 | 0.00 | |
| Repeat 6 | c.7192G>C | GAG>CAG | p.E2398Q | rs71625201 | G/C/C (Bs=G) | 0.07 | 0.46 | 0.47 | 0.058 | 0.30 | 0.70 | 0.084 |
| | | | | | | 0.24 | 0.36 | 0.40 | | 0.42 | 0.58 | |
| Repeat 6 | c.7198A>G | ACA>GCA | p.T2400A | New | A/A/A (Bs=G) | 0.96 | 0.04 | 0.00 | 0.496 | 0.98 | 0.18 | 0.499 |
| | | | | | | 1.00 | 0.00 | 0.00 | | 1.00 | 0.00 | |
| Repeat 6 | c.7214C>G | GCA>GGA | p.A2405G | New | C/C/C (Bs=G) | 0.96 | 0.04 | 0.00 | 0.496 | 0.98 | 0.18 | 0.499 |
| | | | | | | 1.00 | 0.00 | 0.00 | | 1.00 | 0.00 | |
| Repeat 6 | c.7215A>G | GCA>GCG | p.=(2405A) | New | A/A/A (Bs=G) | 0.96 | 0.04 | 0.00 | 0.496 | 0.98 | 0.18 | 0.499 |
| | | | | | | 1.00 | 0.00 | 0.00 | | 1.00 | 0.00 | |
| Repeat 6 | c.7217G>A | GGA>GAA | p.G2406E | New | G/G/G (Bs=A) | 0.96 | 0.04 | 0.00 | 0.496 | 0.98 | 0.18 | 0.499 |
| | | | | | | 1.00 | 0.00 | 0.00 | | 1.00 | 0.00 | |
| Repeat 7 | c.7220G>C | AGG>ACG | p.R2407T | New | G/G/G (Bs=C) | 0.96 | 0.04 | 0.00 | 0.496 | 0.98 | 0.18 | 0.499 |
| | | | | | | 1.00 | 0.00 | 0.00 | | 1.00 | 0.00 | |
| Repeat 7 | c.7229G>A | CGT>CAT | p.R2410H | New | G/G/G (Bs=A) | 0.96 | 0.04 | 0.00 | 0.496 | 0.98 | 0.18 | 0.499 |
| | | | | | | 1.00 | 0.00 | 0.00 | | 1.00 | 0.00 | |
| Repeat 7 | c.7236G>A | GGG>GGA | p.=(2412G) | New | G/G/G (Bs=A) | 0.96 | 0.04 | 0.00 | 0.496 | 0.98 | 0.18 | 0.499 |
| | | | | | | 1.00 | 0.00 | 0.00 | | 1.00 | 0.00 | |
| Repeat 7 | c.7330A>G | AAG>GAG | p.K2444E | rs71625200 | A/G/G | 0.05 | 0.46 | 0.49 | 0.025 | 0.28 | 0.72 | 0.043 |
| | | | | | | 0.24 | 0.36 | 0.40 | | 0.42 | 0.58 | |
| Repeat 7 | c.7398G>A | CCG>CCA | p.=(2466P) | rs71625199 | G/G/A | 0.84 | 0.16 | 0.00 | 0.586 | 0.92 | 0.08 | 0.600 |
| | | | | | | 0.88 | 0.12 | 0.00 | | 0.94 | 0.06 | |
| Repeat 7 | c.7442T>C | TTG>TCG | p.L2481S | rs55650366 | T/C/C | 0.05 | 0.46 | 0.49 | 0.025 | 0.28 | 0.72 | 0.043 |
| | | | | | | 0.24 | 0.36 | 0.40 | | 0.42 | 0.58 | |
| Repeat 7 | c.7521C>G | CAC>CAG | p.H2507Q | rs3126074 | C/G/G | 0.05 | 0.46 | 0.49 | 0.025 | 0.28 | 0.72 | 0.043 |
| | | | | | | 0.24 | 0.36 | 0.40 | | 0.42 | 0.58 | |
| Repeat 7 | c.7633G>A | GGA>AGA | p.G2545R | rs3126072 | G/A/A | 0.05 | 0.46 | 0.49 | 0.025 | 0.28 | 0.72 | 0.043 |
| | | | | | | 0.24 | 0.36 | 0.40 | | 0.42 | 0.58 | |
| Repeat 7 | c.7956A>C | GAA>GAC | p.E2652D | New | C/A/A (A'=A) | 0.73 | 0.27 | 0.00 | 0.030 | 0.87 | 0.14 | 0.024 |
| | | | | | | 0.56 | 0.34 | 0.10 | | 0.73 | 0.27 | |
| Repeat 8 | c.8506A>C | AGT>CGT | p.S2836R | rs11582087 | A/C/A | 0.11 | 0.51 | 0.38 | 0.203 | 0.36 | 0.64 | 0.209 |
| | | | | | | 0.24 | 0.42 | 0.42 | | 0.45 | 0.55 | |
| Repeat 8 | c.8673G>T | GTG>GTT | p.=(2891V) | New | G/T/T | 0.05 | 0.46 | 0.49 | 0.025 | 0.28 | 0.72 | 0.043 |
| | | | | | | 0.24 | 0.36 | 0.40 | | 0.42 | 0.58 | |
| Repeat 8 | c.8807A>G | GAC>GGC | p.D2936G | New | A/G/G | 0.05 | 0.46 | 0.49 | 0.025 | 0.28 | 0.72 | 0.043 |
| | | | | | | 0.24 | 0.36 | 0.40 | | 0.42 | 0.58 | |
| Repeat 8.2 | 8B153T>C | GAT>GAC | p.=(D) | New | x/T/C (A'=C) | 0.11 | 0.51 | 0.38 | 0.778 | 0.36 | 0.64 | 0.473 |
| | | | | | | 0.16 | 0.47 | 0.38 | | 0.42 | 0.58 | |
| Repeat 9 | c.9313T>G | TAC>GAC | p.Y3105D | rs2065958 | T/G/G | 0.05 | 0.42 | 0.53 | 0.024 | 0.26 | 0.74 | 0.020 |
| | | | | | | 0.24 | 0.36 | 0.40 | | 0.42 | 0.58 | |
| Repeat 9 | c.9536T>G | GTG>GGG | p.V3179G | rs2065957 | T/G/G | 0.05 | 0.46 | 0.49 | 0.025 | 0.28 | 0.72 | 0.043 |
| | | | | | | 0.24 | 0.36 | 0.40 | | 0.42 | 0.58 | |
| Repeat 9 | c.9540A>G | TCA>TCG | p.=(3180S) | rs3126069 | A/G/G | 0.05 | 0.46 | 0.49 | 0.025 | 0.28 | 0.72 | 0.043 |
| | | | | | | 0.24 | 0.36 | 0.40 | | 0.42 | 0.58 | |
| Repeat 9 | c.9645G>T | GTG>GTT | p.=(3215V) | rs9436066 | G/T/T | 0.05 | 0.40 | 0.55 | 0.023 | 0.26 | 0.75 | 0.013 |
| | | | | | | 0.24 | 0.36 | 0.40 | | 0.42 | 0.58 | |

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Supplementary Table 1. Continued

| Location | Change HGCO | Code | AA HUGO | SNP (NCBI) | SNP* (A/B/C) | Genotype frequency | | | | Allele frequency | | |
|-----------|-------------|----------|------------|------------|--------------|--------------------|--------------|--------------|--------------|------------------|--------------|--------------|
| | | | | | | AA | Aa | aa | P | A | a | P |
| Repeat 9 | c.9658G>C | GAC>CAC | p.D3220H | New | None | 0.96 0.94 | 0.04 0.08 | 0.00 0.00 | 0.421 | 0.98 0.96 | 0.02 0.04 | 0.427 |
| Repeat 9 | c.9792C>T | CAC>CAT | p.=(3264H) | New | C/C/T | 0.84 0.88 | 0.16 0.12 | 0.00 0.00 | 0.586 | 0.92 0.94 | 0.08 0.06 | 0.600 |
| Repeat 9 | c.9808C>T | CGC>TGC | p.R3270C | New | C/C/T | 0.84 0.88 | 0.16 0.12 | 0.00 0.00 | 0.586 | 0.92 0.94 | 0.08 0.06 | 0.600 |
| Repeat 9 | c.9838G>C | GAG>CAG | p.E3280Q | New | None | 0.98 0.96 | 0.02 0.04 | 0.00 0.00 | 0.604 | 0.99 0.98 | 0.01 0.02 | 0.606 |
| Repeat 9 | c.9966A>G | CAA>CAG | p.=(3322Q) | rs6681433 | A/G/G | 0.05 0.24 | 0.46 0.36 | 0.49 0.40 | 0.025 | 0.28 0.42 | 0.72 0.58 | 0.043 |
| Repeat 9 | c.10017G>A | CAG>CAA | p.=(3339Q) | rs2065956 | G/A/G | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.10194T>C | TCT>TCC | p.=(3732S) | rs3091276 | T/C/C | 0.05 0.24 | 0.46 0.36 | 0.49 0.40 | 0.025 | 0.28 0.42 | 0.72 0.58 | 0.043 |
| Repeat 10 | c.10203G>A | GGG>GGA | p.=(3401G) | New | G/G/A | 0.84 0.88 | 0.16 0.12 | 0.00 0.00 | 0.586 | 0.92 0.94 | 0.08 0.06 | 0.600 |
| Repeat 10 | c.10206G>C | CGG>CGC | p.=(3402R) | New | G/G/C | 0.84 0.88 | 0.16 0.12 | 0.00 0.00 | 0.586 | 0.92 0.94 | 0.08 0.06 | 0.600 |
| Repeat 10 | c.10209C>A | ACC>ACA | p.=(3403T) | New | C/C/A | 0.84 0.88 | 0.16 0.12 | 0.00 0.00 | 0.586 | 0.92 0.94 | 0.08 0.06 | 0.600 |
| Repeat 10 | c.10210A>G | AGG>GGG | p.R3404G | New | A/A/G | 0.84 0.88 | 0.16 0.12 | 0.00 0.00 | 0.586 | 0.92 0.94 | 0.08 0.06 | 0.600 |
| Repeat 10 | c.10213A>C | ACC>CCC | p.T3405P | New | A/A/C | 0.84 0.88 | 0.16 0.12 | 0.00 0.00 | 0.586 | 0.92 0.94 | 0.08 0.06 | 0.600 |
| Repeat 10 | c.10225C>G | CGA>GGA | p.R3409G | New | C/C/G | 0.84 0.88 | 0.16 0.12 | 0.00 0.00 | 0.586 | 0.92 0.94 | 0.08 0.06 | 0.600 |
| Repeat 10 | c.10234G>A | GGA>AGA | p.G3412R | New | G/G/A | 0.84 0.88 | 0.16 0.12 | 0.00 0.00 | 0.586 | 0.92 0.94 | 0.08 0.06 | 0.600 |
| Repeat 10 | c.10241A>G | CAC>CGC | p.H3414R | New | A/A/G | 0.84 0.88 | 0.16 0.12 | 0.00 0.00 | 0.586 | 0.92 0.94 | 0.08 0.06 | 0.600 |
| Repeat 10 | c.10307G>C | GGA>GCA | p.G3436A | rs2065955 | G/C/G | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.10473T>C | AAT>AAC | p.=(3491N) | rs3126067 | T/C/C | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.10491T>C | GAT>GAC | p.=(3497D) | rs3126066 | T/C/T | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.10590G>T | AGG>AGT | p.R3530S | rs72697000 | G/T/G | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.10600A>T | AAC>TAC | p.N3534Y | rs12732870 | A/A/T | 0.84 0.88 | 0.16 0.12 | 0.00 0.00 | 0.586 | 0.92 0.94 | 0.08 0.06 | 0.600 |
| Repeat 10 | c.10691G>A | CGT>CAT | p.R3564H | rs7518080 | G/A/G | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.10702C>G | CAG>GAG | p.Q3568E | rs7540123 | C/G/C | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.10703A>G | CAG>CGG | p.Q3568R | rs7532285 | A/G/A | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.10734C>T | CCC>CCT | p.=(3578P) | New | C/T/C | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.10735A>G | ACG >GCG | p.T3579A | New | A/G/A | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.10736C>G | ACG>AGG | p.T3579R | rs3126075 | C/G/C | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.10746C>A | CAC>CAA | p.H3582Q | New | C/A/C | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.10779G>C | GAG>GAC | p.E3593D | rs12083389 | G/C/G | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.10783T>C | TCC>CCC | p.S3595P | New | None | 1.00 1.00 | 0.00 0.00 | 0.00 0.00 | 1.000 | 1.00 1.00 | 0.00 0.00 | 1.000 |
| Repeat 10 | c.10802A>G | CAT>CGT | p.H3601R | New | A/G/A | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |

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Supplementary Table 1. Continued

| Location | Change HGCO | Code | AA HUGO | SNP (NCBI) | SNP* (A/B/C) | Genotype frequency | | | | Allele frequency | | |
|-------------|-------------|---------|------------|------------|--------------|--------------------|--------------|--------------|-------|------------------|--------------|-------|
| | | | | | | AA | Aa | aa | P | A | a | P |
| Repeat 10 | c.10806T>C | CAT>CAC | p.=(3602H) | New | T/C/T | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.10807G>A | GCA>ACA | p.A3604T | New | G/A/G | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.10813A>T | AAT>TAT | p.N3605Y | New | A/T/A | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.10814A>C | AAT>ACT | p.N3605T | New | A/C/A | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.10822G>C | GGT>CGT | p.G3608R | New | G/C/G | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.10836A>G | GCA>GCG | p.=(3612A) | New | A/G/A | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.10872G>A | GAG>GAA | p.=(3624E) | New | G/A/G | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.10918T>G | TCA>GCA | p.S3639A | New | T/G/T | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.10976C>A | TCC>TAC | p.S3659Y | New | C/A/C | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.10994G>C | AGT>ACT | p.S3665T | New | G/C/G | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.11043C>A | GCC>GCA | p.=(3681A) | New | C/A/C | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.11046C>G | CAC>CAG | p.H3682Q | New | C/G/C | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.11050C>A | CAG>AAG | p.Q3684 K | New | C/A/C | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.11052G>A | CAG>CAA | p.=(3684Q) | New | G/A/G | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.11077C>A | CAA>AAA | p.Q3693K | New | C/A/C | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.11086A>G | ACA>GCA | p.T3696 A | New | A/G/A | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.11096G>A | CGG>CAG | p.R3699Q | New | G/A/G | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.11102C>G | GCA>GGA | p.A3701G | New | C/G/C | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.11103A>G | GCA>GCG | p.=(3701A) | New | A/G/A | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10 | c.11105G>A | GGA>GAA | p.G3702E | New | G/A/G | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 10.2 | 10B007A>G | AGA>GGA | p.R→G | New | None | 0.00 0.00 | 0.00 0.00 | 1.00 1.00 | 1.000 | 0.00 0.00 | 1.00 1.00 | 1.000 |
| Repeat 10.2 | 10B310C>T | CCC>TCC | p.P→S | New | None | 0.00 0.00 | 0.00 0.00 | 1.00 1.00 | 1.000 | 0.00 0.00 | 1.00 1.00 | 1.000 |
| Repeat 10.2 | 10B697C>G | CCT>GCT | p.P→A | New | None | 0.00 0.00 | 0.00 0.00 | 1.00 1.00 | 1.000 | 0.00 0.00 | 1.00 1.00 | 1.000 |
| Repeat 10 | c.11213G>A | CGC>CAC | p.R3738H | New | G/A/G | 0.11 0.24 | 0.51 0.42 | 0.38 0.34 | 0.203 | 0.36 0.45 | 0.64 0.55 | 0.209 |
| Repeat 11 | c.11909C>T | TCA>TTA | p.S3970L | New | None | 0.80 0.88 | 0.20 0.12 | 0.00 0.00 | 0.300 | 0.90 0.94 | 0.10 0.06 | 0.322 |
| Repeat 11 | c.12018T>C | GTT>GTC | p.=(4006V) | New | None | 0.96 0.98 | 0.04 0.02 | 0.00 0.00 | 1.000 | 0.98 0.99 | 0.02 0.01 | 1.000 |
| Repeat 11 | c.12090G>T | ACG>ACT | p.=(4030T) | New | None | 0.89 0.98 | 0.11 0.02 | 0.00 0.00 | 0.115 | 0.95 0.99 | 0.05 0.01 | 0.122 |

*SNP (A/B/C) represents SNP according to the repeat number polymorphism, for example, for the c.995 locus SNP (A/B/C) is G/T/T. That means repeat number polymorphic variant A, B, C has G, T, T for its base at the 995th position, respectively. Usually A' follows the SNP pattern of A, B's follows the SNP pattern of B. However, if there is discrepancy between A and A' (or B and B's), it is explicitly commented (See for example c.7956A>C. At that locus, A has cytosine, meanwhile A' has adenine for the corresponding base. All numerics denote genotype (or allele) frequency: upper row for control group, lower row for atopic group. The exception is the column under heading 'p', which denotes P value of χ^2 test.