Supplementary File S1. Analysis of *KCNJ18* and our reference sequence

KCNJ18 has one coding exon (exon 3). This exon was amplified using polymerase chain reaction (PCR) under the following conditions: 94 °C for 5 min, followed by 35 cycles with 94°C for 30 s, 65°C for 1 min and 72°C for 1.5 min as well as a final elongation at 72°C for 10 min. For this procedure the primers of Ryan et al. (2010) were slightly modified for higher specificity (CCAGACATGCTGTCCTCTCTGTTC/ GGGCCTCTCCCCGGCCA) and amplified by means of AmpliTaq Gold with GeneAmp (Applied Biosystems by Life Technologies, Carlsbad, CA, USA). For each preparation of 50 µl we used 50 ng DNA.

For some products, a second amplification was done using a nested PCR with the primers (ATGCTGTCCTCTCTGTTCC/ CGGCCAGGGGTGGATGCTGCATG) under the following conditions: 94 °C for 5 min, followed by 35 cycles at 94 °C for 30 s, 65 °C for 1 min und 72 °C for 1.5 min as well as a final elongation at 72 °C for 10 min. The resulting products were sequenced using BigDye terminator v1.1, v3.1 mix and the forward-primers (CCAGACATGCTGTCCTCTCTGTTC/CTGGCGCTACATGCTGCTCATC/ CGCCGTGGTGGCCCTGCGTGAC/GCCAATGAGATCCTGTGGGGTCAC) on the capillary sequencer ABI 3130xl (Applied Biosystems by Life Technologies, Carlsbad, CA, USA).

Our wild type sequence differed from the published *KCNJ18* sequence[7] in 11 bases and from the known *KCNJ12* sequence in 17 bases. Dr. Ryan´s actual *KCNJ18* sequence (personal communication) differed from our most frequent *KCNJ18* sequence in one base (c.473 T>C) that did not show up in our study. Our reference sequence for *KCNJ18* is:

gattgtgggtcaatcagggtggaagcgtcctccagtcacgtctgggggccctgggatggggtag

aggagcctggagccaccagcccagccagacatgctgtcctctctgttccaggagccgccctgcc

tggagctagcctgggggtgagccagggtcccccaacccccgggg

Exon 3

ATG ACC GCG GCC AGC CGG GCC AAC CCC TAC AGC ATC GTG TCA TTG

GAG GAG GAC GGG CTG CAC CTG GTC ACC ATG TCG GGC GCC AAC GGC

TTC GGC AAC GGC AAG GTG CAC ACG CAG CAC AGG TGC CGC AAC CGC

TTC GTC AAG AAG AAT GGC CAG TGC AAC ATT GCG TTC GCC AAC ATG

GAC GAG AAG TCA CAG CGC TAC CTG GCT GAC ATG TTC ACC ACC TGT

GTG GAC ATC CGC TGG CGC TAC ATG CTG CTC ATC TTC TCG CTG GCC

TTC CTT GCC TCC TGG CTG CTG TTC GGC GTC ATC TTC TGG GTC ATC

GCG GTG GCA CAC GGT GAC CTG GAG CCG GCT GAG GGC CAC GGC CGC

ACA CCC TGT GTG ATG CAG GTG CAC GGC TTC ATG GCG GCC TTC CTC

TTC TCC ATC GAG ACG CAG ACC ACC ATC GGC TAC GGG CTG CGC TGT

GTG ACG GAG GAG TGC CTG GTG GCC GTC TTC ATG GTG GTG GCC CAG

TCC ATC GTG GGC TGC ATC ATC GAC TCC TTC ATG ATT GGT GCC ATC

ATG GCC AAG ATG GCA AGG CCC AAG AAG CGG GCA CAC ACG CTG CTG

TTC AGC CAC AAC GCC GTG GTG GCC CTG CGT GAC GGC AAG CTC TGC

CTC ATG TGG CGT GTG GGC AAC CTG CGC AAG AGC CAC ATT GTG GAG

GCC CAT GTG CGC GCG CAG CTC ATC AAG CCG CGG GTC ACC GAG GAG

GGC GAG TAC ATC CCG CTG GAC CAG GTC GAC ATC GAT GTG GGC TTC

GAC AAG GGC CTG GAC CGC ATC TTT CTG GTG TCG CCC ATC ACC ATC

TTG CAT GAA ATT GAC GAG GCC AGC CCG CTC TTC GGC ATC AGC CGG

CAG GAC CTG GAG ACG GAC GAC TTT GAG ATC GTG GTC ATC CTG GAA

GGC ATG GTG GAG GCC ACA GCC ATG ACC ACC CAG GCC CGC AGC TCC

TAC CTG GCC AAT GAG ATC CTG TGG GGT CAC CGC TTT GAG CCC GTG

CTC TTC GAG GAG AAG AAC CAG TAC AAG ATT GAC TAC TCG CAC TTC

CAC AAG ACC TAT GAG GTG CCC TCT ACG CCC CGC TGC AGT GCG AAG

GAT CTG GTA GAG AAC AAG TTC CTG CTG CCC AGT GCC AAC TCC TTC

TGC TAT GAG AAC GAG CTG GCC TTC CTG AGC CGT GAC GAG GAG GAT

GAG GCG GAC GGA GAC CAG GAC GGC CGA AGC CGG GAT GGC CTC AGC

CCC CAG GCC AGG CAT GAC TTT GAC AGA CTC CAG GCT GGC GGC GGG

GTC CTG GAG CAG CGG CCC TAC AGA CGG GGG TCA GAG ATC TGA

gccaaccttggccgacatgcagcatccacccctggccggggagaggccccgcggtcgctcaggggc

cctgggtttgagcagaacgggcccagtgccctgggttgcagactcagtagcgttttagtcgtttta

tgtttctttgcaaaggcctcagaaggttggccggagaggggg