Table SI. Full list of 96 cardiac-associated genes screened.

| Gene   |
|--------|
| AARS2  |
| ABCC1  |
| ABCC9  |
| ACTC1  |
| ACTN2  |
| AKAP9  |
| ANK2   |
| ANKRD1 |
| BAG3   |
| BRAF   |
| CACNA1C|
| CACNB2 |
| CASQ2  |
| CAV3   |
| CBL    |
| CRYAB  |
| CSRP3  |
| DES    |
| DMD    |
| DSC2   |
| DSG2   |
| DSG3   |
| DSP    |
| DTNA   |
| EMD    |
| EYA4   |
| FHL2   |
| FHOD3  |
| FKTN   |
| GATAD1 |
| GLA    |
| GPD1L  |
| HCN4   |
| ILK    |
| JPH2   |
| JUP    |
| KCNE1  |
| KCNE2  |
| KCNE3  |
| KCNH2  |
| KCNJ2  |
| KCNJ5  |
| KCNQ1  |
| KRAS   |
| LAMP2  |
| LDB3   |
| LMNA   |
| MARCKSL1|
| MYBPC3 |
| MYH6   |
| MYH7   |
| MYL2   |
| MYL3   |
| MYLK2  |
| MYOZ2  |
| MYPN   |
| NEXN   |
| NRAS   |
| OBSCN  |
| PDLIM3 |
| PKP2   |
| PLB1   |
| PLN    |
| PRKAG2 |
| PSEN1  |
| PSEN2  |
| PTPN11 |
| RAF1   |
| RBM20  |
| RYR2   |
| SCN1B  |
| SCN3B  |
| SCN4B  |
| SCN5A  |
| SCO2   |
| SGCD   |
| SHOC2  |
| SLC25A4| SNTA1 |
| SOS1   |
| TAZ    |
| TCAP   |
| TGFβ3  |
| TMEM43 |
| TMEM70 |
| TMPO   |
| TNNC1  |
| TNNC2  |
| TNNI3  |
| TNNT2  |
| TNNT3  |
| TPM1   |
| TRPC6  |
| TTN   |
| TTR    |
| VCL    |