LONG QT SYNDROME PANEL[1] DG-5.2.0 (12 GENES)

Gene symbols used follow HGNC guidelines: Gray KA, Yates B, Seal RL, Wright MW, Bruford EA. Nucleic Acids Res. 2015 Jan 43(Database issue):D1079-85.
OMIM disease identifiers and descriptions : October 25th, 2026.
This list is accurate for panel version DG 5.2.0
non-protein coding genes are covered, but as coverage statistics are based on protein coding regions, statistics could not be generated.
Ad 1. Blank field signifies a gene without a current OMIM association
Ad 2. OMIM phenotype descriptions between {} signify risk factors
*Ad * This value indicates the percentage of a gene's coding sequence covered at or above the specified Genotype Quality (GQ) threshold, based on alignment against the GRCh38 reference genome. The GQ score is a measure of the confidence of the genotype call and is calculated based on both the quantity and quality of the DNA reads.*
- GQ 20: 99% confidence in the genotype call
- GQ 30: 99.9% confidence in the genotype call

Gene	WES GQ>20 | GQ>30*	srWGS GQ>20 | GQ>30*	lrWGS GQ>20 | GQ>30*	Associated Phenotype description and OMIM disease ID
CACNA1C	100% | 100%	96% | 96%	99% | 99%	Timothy syndrome, 601005;Long QT syndrome 8, 618447;Neurodevelopmental disorder with hypotonia, language delay, and skeletal defects with or without seizures, 620029;Brugada syndrome 3, 611875
CALM1	100% | 100%	98% | 98%	99% | 99%	Ventricular tachycardia, catecholaminergic polymorphic, 4, 614916;Long QT syndrome 14, 616247
CALM2	72% | 72%	92% | 92%	100% | 100%	Long QT syndrome 15, 616249
CALM3	100% | 100%	97% | 97%	99% | 99%	Long QT syndrome 16, 618782;?Ventricular tachycardia, catecholaminergic polymorphic 6, 618782
KCNE1	100% | 100%	97% | 97%	99% | 99%	Jervell and Lange-Nielsen syndrome 2, 612347;Long QT syndrome 5, 613695
KCNE2	100% | 100%	97% | 97%	99% | 99%	Long QT syndrome 6, 613693;Atrial fibrillation, familial, 4, 611493
KCNH2	99% | 99%	95% | 95%	98% | 98%	Short QT syndrome 1, 609620;Long QT syndrome 2, 613688
KCNJ2	100% | 100%	98% | 98%	100% | 100%	Atrial fibrillation, familial, 9, 613980;Andersen syndrome, 170390;Short QT syndrome 3, 609622
KCNQ1	99% | 99%	95% | 95%	98% | 98%	Short QT syndrome 2, 609621;Atrial fibrillation, familial, 3, 607554;Long QT syndrome 1, 192500;{Long QT syndrome 1, acquired, susceptibility to}, 192500;Jervell and Lange-Nielsen syndrome, 220400
SCN5A	100% | 100%	96% | 96%	99% | 99%	Ventricular fibrillation, familial, 1, 603829;Heart block, progressive, type IA, 113900;Cardiomyopathy, dilated, 1E, 601154;Heart block, nonprogressive, 113900;Long QT syndrome 3, 603830;Sick sinus syndrome 1, 608567;Brugada syndrome 1, 601144;Atrial fibrillation, familial, 10, 614022;{Sudden infant death syndrome, susceptibility to}, 272120
TECRL	77% | 77%	96% | 96%	99% | 99%	Ventricular tachycardia, catecholaminergic polymorphic, 3, 614021
TRDN	93% | 93%	97% | 97%	99% | 99%	Cardiac arrhythmia syndrome, with or without skeletal muscle weakness, 615441