

This ready-to-use research assay allows the identification of all mutations in 51 genes associated with Primary Electrical Disorders (PED), using the MASTR Plus simplified protocol.

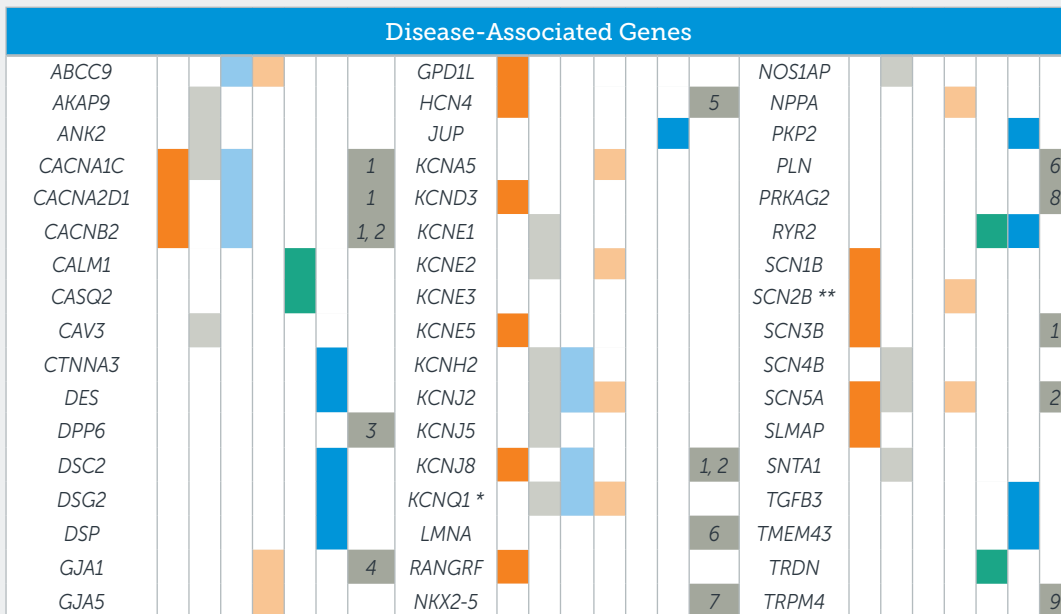


## Research application

- Identification of all mutations in 51 genes associated with Primary Electrical Disorders (PED)

Genomic region analyzed	276.8 kb
Number of amplicons	952
Amplicon length	300-440 bp
Number of plexes	11
DNA amount required	20 ng per multiplex reaction

Assay Characteristics



- AF: Atrial Fibrillation
- ARVD: Arrhythmogenic Right Ventricular Dysplasia
- ASD & AV: Atrial Septal Defect And Atrioventricular Block
- BrS: Brugada Syndrome
- CM: Cardiomyopathy
- CPVT: Catecholaminergic Polymorphic Right Ventricular Dysplasia
- ERS: Early Repolarization Syndrome
- HB: Heart Block
- IVF: Idiopathic Ventricular Fibrillation
- LQTS: Long QT Syndrome
- SIDS: Sudden Infant Death Syndrome
- SQTS: Short QT Syndrome
- SSS: Sick Sinus Syndrome
- WPW: Wolff–Parkinson–White syndrome

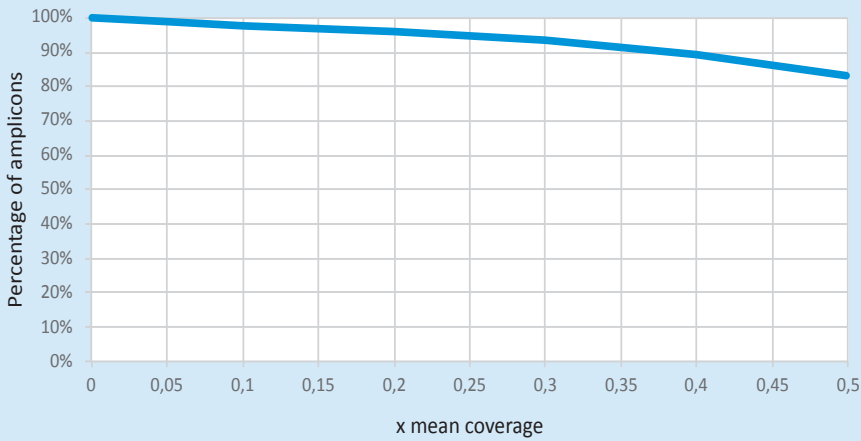
Pathologies

BrS	LQTS	SQTS	AF	ARVD	1: IVF associated	2: ERS	3: IVF	4: SIDS	5: SSS
6: Arrhythmogenic CM		7: ASD & AV conductive defects, Ebstein ASD +/- AV block			8: WPW		9: HB Type 1B		

\* excl. exon 9

\*\* excl. exon 4

Uniform coverage	95 % amplicons detected $\geq 0.2x$ mean coverage
High target specificity	96 % on target read counts



Graph presenting the high uniform coverage for all PED MASTR Plus amplicons. To allow comparison between samples, the read pair counts were normalized.

SNV and CNV\* variant calling: advised maximum number of samples per run

Illumina MiSeq®	
Reagent Kit	Nr samples
Kit v2	5
Kit v3	10



Cat. No.	Product Name	Samples
MR-0260.024	PED MASTR Plus	24

MID (Molecular Identifiers) kits are necessary to complete the workflow.

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