MASTR Solutions for Cardiology

NGS based
Targeted MASTR assays for genes associated with **Sudden Cardiac Death**

Three ready-to-use MASTR assays for genes associated with inherited coronary, electrophysiological and structural heart diseases, potential indicators for Sudden Cardiac Death.

Delivers **Rapid** and **Reliable** answers
Focused on high mutation detection rates
**Simple** and **Affordable**
ADH MASTR v2
for identification of mutations associated with monogenic and polygenic familiar hypercholesterolemia (FH)
4 genes (SNV+CNV) & 12 predisposing SNPs

“ The ADH MASTR v2 assay is an efficient, easy to implement and cost effective NGS tool.”

Dr. Alain Carrié
Hôpital Pitié Salpêtrière and University Pierre and Marie Curie in Paris, France.

UNIFORM COVERAGE
99 % amplicons detected ≥ 0.2x mean coverage

HIGH TARGET SPECIFICITY
> 96 % on target reads counts
**PED MASTR Plus**

for identification of mutations associated with primary electrical disorders (PED) predisposing to arrhythmias

51 genes (SNV)

“**PED MASTR Plus assay is a proficient, highly reliable and reproducible technique to use in routine to screen for genes associated with primary hereditary arrhythmias.**”

**Uniform Coverage**

95 % amplicons detected ≥ 0.2x mean coverage

**High Target Specificity**

> 96 % on target reads counts

PED disorders are heterogenic and have a significant phenotypic and genetic overlap. The image illustrates the number of genes, included in the PED MASTR Plus.

Prof. Dr. Bart Loeys
Antwerp University Hospital, Belgium

**Multiplex PCR**

**Dilution**

**Universal PCR**

Plan run

Multiplex PCR

Quality Control

Universal PCR

Quality Control

Mixing

Sequencing

Data Analysis
HCM MASTR
for early detection of mutations associated with hypertrophic cardiomyopathy (HCM)
5 genes (SNV+CNV)

“HCM MASTR facilitates robust and rapid sequencing of the 5 major HCM genes with high sensitivity.”

Dr. Pascale Richard
Hôpital Pitié Salpêtrière in Paris, France.

UNIFORM COVERAGE
99 % amplicons detected ≥ 0.2x mean coverage

HIGH TARGET SPECIFICITY
> 96 % on target reads counts
Target Genes

ADH MASTR v2

LDLR, PCSK9, APOB (exon 26) and APOE (SNV+CNV)
12 predisposing SNPs
Catalog No.: MR-0141.024

PED MASTR Plus

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(SNV)
Catalog No.: MR-0260.024

HCM MASTR

MYBPC3, MYH7, TNNI3, TNNT2, MYL2 (SNV+CNV)
Catalog No.: MR-0090.024

Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>ADH</td>
<td>Autosomal Dominant Hypercholesterolemia</td>
</tr>
<tr>
<td>AF</td>
<td>Atrial Fibrillation</td>
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<tr>
<td>ARVD</td>
<td>Arrhythmogenic Right Ventricular Dysplasia</td>
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<td>BrS</td>
<td>Brugada Syndrome</td>
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<tr>
<td>CNV</td>
<td>Copy Number Variation</td>
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<tr>
<td>CPVT</td>
<td>Catecholaminergic Polymorphic Right Ventricular Dysplasia</td>
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<td>LQTS</td>
<td>Long QT Syndrome</td>
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<tr>
<td>MPS</td>
<td>Massively Parallel Sequencing</td>
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<tr>
<td>SNP</td>
<td>Single Nucleotide Polymorphism</td>
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<td>SNV</td>
<td>Single Nucleotide Variation</td>
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<td>Short QT Syndrome</td>
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