DMD MASTR

A simple and robust molecular research assay for the identification of all SNVs and CNVs in the DMD gene associated with Muscular Dystrophies.

Research application
- For the detection of DMD variants associated with: Duchenne Muscular Dystrophy (DMD), Becker Muscular Dystrophy (BMD), X-linked dilated cardiomyopathy (XLCM)

Assay characteristics

Table 1. Assay characteristics.

<table>
<thead>
<tr>
<th>Genes analyzed</th>
<th>DMD transcript NM_004006 (Dp427m isoform)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genomic region analyzed</td>
<td>23 kb all 79 exons +/- 30 kb flanking region CNVs and SNVs</td>
</tr>
<tr>
<td>Number of amplicons</td>
<td>118 including 28 control amplicons</td>
</tr>
<tr>
<td>Amplicon length</td>
<td>280 - 400 bp</td>
</tr>
<tr>
<td>Number of plexes</td>
<td>4</td>
</tr>
<tr>
<td>Designed to be compatible with</td>
<td>Illumina MiSeq</td>
</tr>
</tbody>
</table>

Performance characteristics

Table 2. Performance characteristics.

| DNA amount required | 20 ng per multiplex reaction |
Workflow

Table 3. Advised maximum number of samples per run.

<table>
<thead>
<tr>
<th>Sequencing System</th>
<th>Illumina MiSeq Reagent kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow cell</td>
<td>Nano v 2 2 x 251 cycles</td>
</tr>
<tr>
<td></td>
<td>v 2 2 x 251 cycles</td>
</tr>
<tr>
<td></td>
<td>v 3 2 x 276 cycles</td>
</tr>
</tbody>
</table>

For SNV only

Minimal coverage per allele: 20

For SNV and CNV

Minimal coverage per amplicon: 200

only 192 MID combinations available


t for statistically reliable CNV calling, it is advised to analyze minimum 10 samples together. Identical CNVs can not be present in more than 15% of the samples of a sequencing run.

Ordering information

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Product Name</th>
<th>Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>MR-0120.008</td>
<td>DMD MASTR</td>
<td>24</td>
</tr>
</tbody>
</table>

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

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genomics@agilent.com
For Research Use Only. Not for use in diagnostic procedures.

This information is subject to change without notice.

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