Avian DNA Sexing Test
Molecular method for gender identification of monomorphic birds based on PCR technology
In many bird species males and females have very similar phenotypic traits (sexual monomorphism) and cannot be discriminated on the basis of external characteristics. In nestlings it is even more difficult than in the adults to distinguish between the two sexes.

Traditional methods for gender identification as the observation of sex-specific behaviour, laparoscopy, laparotomy are time consuming, expensive, and, in some cases invasive and dangerous.

The Avian DNA Sexing Test is a molecular method based on the examination of sexual chromosomes starting from samples of feathers and is the best method and safest choice for avian breeders and veterinarians.

In birds, unlike mammals, females are the heterogametic sex i.e. have 2 different sex chromosomes (ZW), while males are the homogametic sex (ZZ). The most universal tag for sex typing is the CHD gene encoding the Chromo-Helicase DNA binding protein.

The Diatheva Avian DNA Sexing Test allows to isolate birds DNA starting from samples of feathers and analyze DNA by Polymerase Chain reaction (PCR) using a ready to use PCR mix containing specific primers pair for amplification of CHD-W and CHD-Z genes.

Field of application
- Gender identification of monomorphic birds of any age, any time of the year
- The test is applicable to a large number of taxa

Benefits
- Confidence Clear and reproducible results, independent of operator technique or interpretation
- Ease of use Minimal hands-on time
- Speed Rapid method for sex identification
- Convenience All reagents and solutions are included and ready to use

Workflow

<table>
<thead>
<tr>
<th>How it works</th>
<th>DNA extraction</th>
<th>PCR Amplification of DNA using Avian DNA Sexing kit</th>
<th>Amplicon analysis Gel electrophoresis</th>
<th>Results interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using Genomic DNA Isolation kit</td>
<td>120 min</td>
<td>60 min</td>
<td>90 min</td>
<td>10 min</td>
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</tbody>
</table>

Ordering information

<table>
<thead>
<tr>
<th>Code</th>
<th>Product</th>
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<tbody>
<tr>
<td>MBK0069</td>
<td>Genomic DNA Isolation Kit</td>
<td>50 extractions</td>
</tr>
<tr>
<td>MBK0059</td>
<td>Avian DNA Sexing kit</td>
<td>50 tests</td>
</tr>
<tr>
<td>MBK0089</td>
<td>Avian DNA Sexing Kit - Automatic</td>
<td>50 tests</td>
</tr>
</tbody>
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