Separate detection of all relevant anti-Bordetella antibodies

- **Anti-Bordetella PT¹ ELISA (IgA, IgG)**
  Order no. EI 2050 A or G
- **Anti-Bordetella FHA² ELISA (IgA, IgG)**
  Order no. EI 2050-3 A or G
- **Anti-Bordetella pertussis³ ELISA (IgM)**
  Order no. EI 2050 M
- **Anti-Bordetella Pertactin ELISA (IgG)**
  Order no. EI 2050-4 G
- **EUROLINE Bordetella pertussis (IgA, IgG)** (antigens: PT¹, FHA², ACT*³)
  Order no. DN 2050 A or G

¹Pertussis toxin; ²Filamentous haemagglutinin; ³Full lysate; ⁴Adenylate cyclase toxin

- Comprehensive product range corresponding to current guidelines of European reference centres
- **ELISA (IgA, IgG): quantification in international units (IU/ml)** – a worldwide first for the detection of FHA antibodies
- Efficient automation solutions (processing, evaluation, archiving)
Clinically suspected *Bordetella pertussis* infection (always consider immunisation history)

Direct detection of pathogen (PCR) (up to 4 weeks after infection)

- **positive**
  - Indication of acute *B. pertussis* infection
- **negative**
  - No *B. pertussis* pathogen found, but infection cannot be ruled out

Serology¹

(Antibody production 1–4 weeks after infection)

- **Anti-*Bordetella pertussis* Toxin (PT)* ELISA (IgG)**
  - <40IU/ml
    - No indication of acute *B. pertussis* infection
  - 40 to <100IU/ml
    - Unclear serological constellation
  - ≥100IU/ml
    - Indication of acute *B. pertussis* infection

Anti-PT ELISA (IgA)

- <12IU/ml
  - No indication of acute *B. pertussis* infection
- ≥12IU/ml
  - Indication of acute *B. pertussis* infection

- Serological follow-up at the earliest after 7–10 days (in suspected cases of infection)
- Additional tests for further antibodies such as anti-FHA IgA or IgG

¹The clinical symptoms and age of the patient should be considered (for age-dependent reference ranges see table).

<table>
<thead>
<tr>
<th>Antigen</th>
<th>Significance</th>
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<tbody>
<tr>
<td>Pertussis toxin (PT)</td>
<td>Anti-PT antibodies can be detected after infection with <em>B. pertussis</em> and after vaccination (PT is a component of many acellular vaccines).</td>
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<tr>
<td>Filamentous haemagglutinin (FHA)</td>
<td>Anti-FHA antibodies can be detected after infection with <em>B. parapertussis</em> or <em>B. pertussis</em>, and after vaccination with <em>B. pertussis</em> (FHA is a component of many acellular vaccines).</td>
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<tr>
<td>Adenylate cyclase toxin (ACT)</td>
<td>Anti-ACT antibodies can be produced after infection with <em>B. parapertussis</em> or <em>B. pertussis</em> (ACT is currently not contained in any of the acellular vaccines).</td>
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<th>Anti-PT (IgG)</th>
<th>Interpretation</th>
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<tbody>
<tr>
<td>&lt;40IU/ml</td>
<td>No indication of an acute infection. Further testing should only be performed if clinical symptoms are present.</td>
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<tr>
<td>40 to &lt;100IU/ml</td>
<td>Unclear serological constellation. A follow-up sample should be analysed 7 to 10 days later.</td>
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<tr>
<td>≥100IU/ml</td>
<td>Indication of an acute infection or recent vaccination.</td>
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