

EurobioPlex BORDETELLA PERTUSSIS AND BORDETELLA PARAPERTUSSIS

Whooping-cough syndrome ?
To protect others, you have to know.



Quick¹

Results in less
than 90min.



Open¹

Compatible with
various system



Complete¹

All controls
included

¹.For more information, please refer to the technical sheet

CLINICAL CONTEXT

Whooping cough is a very contagious disease of the respiratory system caused by Gram negative bacteria, *Bordetella pertussis* and *Bordetella parapertussis*. The clinical symptoms are a chronic cough, which can be very strong and can be followed by wheezing and throwing up. For the most severe cases, most often in newborns, this can lead to hypoxia, irreversible lesions and death. In older children and adults, particularly the ones that have been vaccinated or contracted the disease, it is not as severe and is characterized by a chronic cough. Pertussis is an endemic disease in the EU/EEA and worldwide. ECDC reports more than 25 000 cases of pertussis in 2023, and more than 32 000 between January and March 2024².

DIAGNOSIS

The best specimen for diagnosing whooping cough is a nasopharyngeal aspirate. In some case it's possible to use nasopharyngeal swab³.

Culture is not recommended due to its poor sensitivity (around 60%), but may be mandatory to monitor the effect of antibiotics. Molecular biology is recommended for diagnosis during the first three weeks after the appearance of symptoms (high sensitivity).

CHARACTERISTICS

Test principle ¹	The <i>Bordetella pertussis</i> / <i>parapertussis</i> Eurobioplex test uses real time polymerase chain reaction amplification, that simultaneously in one reaction, detects <i>Bordetella pertussis</i> (target region IS481) and <i>Bordetella parapertussis</i> (target region IS1001) from a nucleic acid extract as well as a human cellular control (β -actin).
Sample Type ¹	Nasopharengeal aspirations
Analytical Sensitivity ¹	<i>Bordetella pertussis</i> and <i>Bordetella parapertussis</i> : 100 copies / μ l
Diagnostic sensitivity ¹	<i>Bordetella pertussis</i> : 96,7 % <i>Bordetella parapertussis</i> : 95,6 %
Diagnostic specificity ¹	> 99%

Reference	Designation	Format
EBX-001	EurobioPlex <i>pertussis</i> and <i>parapertussis</i>	24 / 48/ 96 tests

Other EurobioPlex References		
EBX-041	EurobioPlex SARS-CoV-2 multiplex	100 / 200 / 600 tests
EBX-042	EurobioPlex SARS-CoV-2 ; FluA/B ; RSV	100 / 200 / 600 tests

2. <https://www.ecdc.europa.eu/en/publications-data/increase-pertussis-cases-eueea>

3. https://www.sfm-microbiologie.org/wp-content/uploads/2019/07/BACTERIE_Coqueluche.pdf

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