



Pertussis – High Contagiosity Calls for Rapid and Safe Diagnostics



Molecular Genetic Test System for the Rapid Detection of *Bordetella pertussis* and *Bordetella parapertussis* from Throat, Mouth and Nose Swabs.

Advantages of Using GenoQuick® Bordetella

- **High Sensitivity and Specificity:** the simultaneous detection of two highly conserved target sequences IS481 and IS1001 guarantees the reliable identification of *B. pertussis* and *B. parapertussis*!
- **Safe:** internal controls document the validity of results and secure safe and impeccable test procedures!
- **Fast:** results can be obtained within 2.5 hrs after receipt of specimens!
- **Simple:** the detection of *B. pertussis* and *B. parapertussis* is given by a single band on the dipstick, meaning it can be recognized at a glance!
- **User-friendly:** the GenoQuick® technology is suitable for routine lab set-ups through a minimal pipetting effort!
- **Cost-effective:** only minimal equipment is necessary which allows even smaller laboratories a cost-effective implementation. A ready-to-use lysis buffer system is included in the kit to allow for simple DNA extraction procedures!
- **CE-labeled:** no need for elaborate validation studies!

Facts about Pertussis

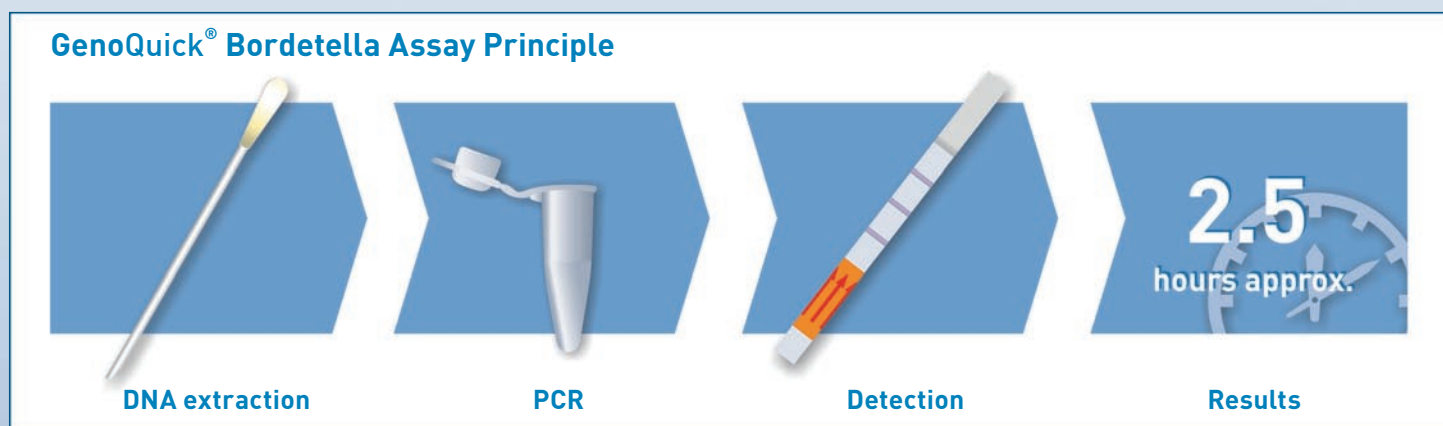
During recent years an increase in whooping cough incidence amongst children and adults has been reported. One reason for this rise could be the fading of immunity with time after vaccination or after a *B. pertussis* infection, respectively. The primary phase of the illness, catarrhal stage, begins 7 to 20 days after infection with influenza-like symptoms: runny nose, sneezing, mild cough, low-grade fever. The following paroxysmal stage is marked by severe coughing spells that end in a „whooping“ sound when the person breathes in and in vomiting. After an additional 4 to 6 weeks the coughing subsides.

Whooping cough is highly contagious. The bacteria spread from person to person through airborne droplet infections. The risk of infection can be given up to 3 weeks into the second stage of the illness. Teenagers and adults are often misdiagnosed due to the absence of specific symptoms like the coughing spells. Thus, these age groups bear a great risk to the infection of toddlers. Since newborns and infants lack immunity against pertussis they are at great risk to suffer from severe complications. Therefore an early and reliable diagnosis of whooping cough is crucial. It allows for a precise and instant antibiotic therapy and breaks up chains of infection since antibiotics shorten the period of contagiousness to 5 days following the start of antibiotic treatment.

Diagnostics

Diagnostic measures should ideally be taken during the early phases of the illness. Culture detection is only possible during this time, while it is laborious and time-consuming due to the slow growth rate and the *Bordetella* bacteria's sensitivity to cold and dryness. Serological detection is not possible upon the raise of antibodies several weeks after infection. While it is not possible to distinguish between an infection and an acquired immunity through vaccination. Thus, the molecular genetic detection of *Bordetella* bacteria via PCR during the early phase of whooping cough is not only superior in terms of sensitivity.

Our rapid assay **GenoQuick® Bordetella** allows the detection of *B. pertussis* and *B. parapertussis* from clinical specimens within a few hours. The quick and simple test protocol enables early diagnosis at the day of the receipt of a sample.



Further information is available directly from Hain Lifescience or from your local distributor!

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