

## Human Bordetella pertussis IgG ELISA Kit | IgG elisa kit

Bordetella pertussis IgG ELISA

CATALOG #  
**AAA72572**

REACTIVITY  
**Human**

### PRODUCT SYNONYMS

Bordetella pertussis IgG; Bordetella pertussis IgG ELISA; IgG elisa kit

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                         |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity              | Human                                                                                                                                                                                                                   |
| Specificity             | The Bordetella pertussis IgA, IgG, and IgM ELISA was verified in an internal study. The specificity exceeded 99% for the IgA, IgG, and IgM. The sensitivity exceeded 99% for the IgA and IgG and was 88.9% for the IgM. |
| Samples                 | Serum or plasma directed against Bordetella pertussis and Bordetella parapertussis                                                                                                                                      |
| Preparation and Storage | Store at 2-8 degree C                                                                                                                                                                                                   |

### ADDITIONAL INFORMATION

#### Related Product Information for IgG elisa kit

Background: Bordetella pertussis belongs to the genus of Bordetella. It is a small coccoid, gram negative bacillus, which occurs world-wide. Bordetella pertussis is the causative agent of whooping cough, a globally occurring infectious disease that is transmitted from person to person by droplet infection. Children up to the age of 4 years are particularly affected and the mortality in infected infants is high (60 % of deaths occur within the first year after birth). Infections with B. parapertussis result in a less severe form of the disease. The attachment of B. pertussis and B. parapertussis to the ciliated cells in the mucosa of the human respiratory tract is mediated by adhesins. An important adhesion protein and an equally important immunogen is the so-called filamentous haemagglutinin (FHA). Colonisation of the respiratory tract and establishment of infection are facilitated by the synergistic action of several virulence factors. An important virulence factor is pertussis toxin (PT) which mediates multiple biological effects such as leukocytosis, lymphocytosis, mitogenicity, and increased sensitivity to histamine. The use of ELISAs for the detection of specific antibodies is the current method of choice for the measurement of antibodies, e.g. antibodies against the filamentous haemagglutinin (FHA) which are produced in response to contact with Bordetella pertussis and Bordetella parapertussis. As a consequence of this cross reactivity, an immune response to the group-specific antigen provides evidence of contact with Bordetella pathogen.

Principle of the Assay: The ELISA (Enzyme Linked Immunosorbent Assay) is an immunoassay, which is particularly suited to the determination of antibodies in the field of infectious serology. The reaction is based on the specific interaction of antibodies with their corresponding antigen. The test strips of the microtiter plate are coated with specific antigens of the pathogen of interest. If such antibodies in the sample are present, they bind to the fixed antigen. A secondary antibody, which has been conjugated with the enzyme alkaline phosphatase, detects and binds to the immune complex. The colourless substrate p-nitrophenylphosphate is then converted into the coloured product p-nitrophenol. The signal intensity of this reaction product is proportional to the concentration of the analyte in the sample and is measured photometrically.

Intended Uses: The Bordetella pertussis IgA, IgG and IgM ELISA tests are qualitative immunoassays for the detection of human antibodies in serum or plasma directed against Bordetella pertussis and Bordetella parapertussis. These assays are recommended for the sensitive detection of such antibodies in various kinds of samples.

#### Product Categories/Family for IgG elisa kit

Infectious Disease; Research Assays; Assay Categories

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

