

BORATEST[®] CBPP CFT Test Kit

For *in vitro* veterinary diagnosis of Contagious Bovine Pleuropneumonia (CBPP)

Cat. No. BBL 2011 001

Kit adequate for 800 samples

INTENDED USE

BORATEST[®] CBPP CFT test kit is for *in vitro* veterinary diagnosis of Contagious Bovine Pleuropneumonia (CBPP). The kit is used to detect specific antibodies in animals infected with CBPP by complement fixation technique as described by the World Organisation for Animal Health (OIE).

Contagious Bovine Pleuropneumonia (CBPP)

Contagious bovine pleuropneumonia (CBPP) is a disease of cattle prevalent in many parts of Africa. It is caused by *Mycoplasma mycoides* subsp. *mycoides* SC (MmmSC; SC = small colonies) and is manifested by fever, respiratory distress, cough, nasal discharge and a mortality of up to 50% in acute outbreaks. Diagnosis depends on the isolation of the aetiological agent and by serological tests. For serological diagnosis, modified complement fixation test as described by the Campbell & Turner remains the prescribed test for international trade.

BORATEST[®] Complement Fixation Test for CBPP

The Complement Fixation Test (CFT) is a classical serological method used for the detection of antibodies against numerous infectious disease agents. In this test, endogenous complement in serum samples is destroyed by heating (at 56⁰C) and control antigen and complement added. If specific antibodies are present in serum samples, there is formation antibody-antigen complexes, which lead to activation and exhaustion of the added complement. This is followed by addition of a haemolytic system consisting of antibody coated erythrocytes (RBCs), which function as an indicator system. Thus, lysis indicates absence while no lysis of erythrocytes indicates presence of immune complexes formed between antibodies in the serum sample and

added antigen. BORATEST® CBPP CFT test kit is a modification of the micromethod of Campbell and Turner (1953) and is carried out as prescribed by the World Organization for Animal Health (OIE).

Reagents provided in BORATEST® CBPP CFT kit

Positive antigen control containing an inactivated suspension of *Mycoplasma mycoides* subsp. *Mycoides*.

Freeze- dried guinea pig complement with diluent.

Haemolysin consisting of a hyperimmune rabbit serum to sheep RBC (rabbit anti-sheep RBC).

A positive control serum consisting of standardized bovine sera from cattle infected naturally with *Mycoplasma mycoides* subsp. *Mycoides*.

A negative control serum from a healthy bovine, not infected with CBPP and free from other diseases.

Materials not provided but required for testing using BORATEST® CBPP CFT kit

Sheep red blood cells

Alserver solution

Veronal Buffer with calcium and magnesium powder (VCM)

Refrigerator

Water bath (56°C)

Centrifuge

Shaker incubator at 37°C

Single channel micropipette

Multichannel micropipette

96 Well U-bottom microplates

General labware

General laboratory consumables.