

BORATEST[®] CCPP CFT Test Kit

For *in vitro* veterinary diagnosis of Contagious Caprine Pleuropneumonia (CCPP)

Cat. No. BBL 2011 002

Kit adequate for 800 samples

INTENDED USE

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

Contagious Caprine Pleuropneumonia (CCPP)

Contagious Caprine Pleuropneumonia (CCPP) is a severe disease of goats occurring in many countries in Africa and Asia. It is caused by *Mycoplasma capricolum* subspecies *capripneumoniae* (Mccp), which appears to be transmitted by an infective aerosol and whose infection is confined to the thoracic cavity. Typical disease affects all ages and sexes and is characterized by extreme fever (41–43°C), high morbidity and mortality rates in susceptible herds, with abortions in pregnant goats. Diagnosis depends on the isolation of the etiological agent from lung and pleural lesions as well as by serological tests. Complement fixation test (CFT) is the prescribed test for international trade.

BORATEST[®] Complement Fixation Test for CCPP

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 56°C) and a control antigen and complement added. Addition of a hemolytic system consisting of antibody coated erythrocytes (RBCs), functions as an indicator system. If specific antibodies are present in serum samples, there is formation of antibody-antigen complexes, which lead to activation and exhaustion of the added complement. If the

added complement is exhausted, there is no lysis of added erythrocytes, indicating presence of immune complexes formed between antibodies in the test serum sample and added antigen. The coated RBCs then settle on the floor of the microtiter plate, leaving a clear supernatant. This is interpreted as positive CFT titres that indicates a current or recent infection with *Mycoplasma capricolum* subspecies *capripneumoniae*.

Reagents provided in the kit

A positive antigen control containing a heat inactivated whole cell suspension of *Mycoplasma capricolum* subspecies *capripneumoniae* (Mccp).

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 caprine sera from goats naturally infected with Mccp and tested to give a known titre.

Negative control serum is from a healthy goat, known, tested and found free from infection with CCPP.

Materials not provided but required for testing using BORATEST[®] CCPP 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.