ImmunoComb ® Antibody Test Kit for Poultry
Chlamydophila psittaci (*Chlamydia psittaci*)

Product Information

General Information

Psittacosis (also known as Chlamydiosis or Ornithosis) is caused by *Chlamydophila psittaci* (C*hlamydia psittaci)* . This bacterium is an obligate intracellular parasite, which infects animals and humans. The sick animal excretes the infectious agent in its bodily fluids, the stool being the major conduit.

Among the manifestations of Psittacosis in poultry are weight loss, reduction of appetite, diarrhea, labored breathing, and drop in egg production. These symptoms are dependent on the strain and severity of infection.

During the typical course of infection, Psittacosis spreads in an epidemic-like fashion, often affecting up to 30% of the flock. While young chicks are especially susceptible, in adult birds the "Psittacosis Syndrome" is characterized by a number of other respiratory viral infections. The *C. psittaci* infection causes financial strain on the poultry raiser by reducing productivity of the flock. Once diagnosed, antibiotics can treat this disease.

As a zoonotic disease, *C. psittaci* can take the form of a severe pneumonia in humans. Those at risk of infection are slaughterhouse staff and poultry raisers who come in contact with infected animals or contaminated meat.

In poultry, the initial infection starts in the respiratory tract and has a latent period of up to 8 weeks. Antibody titers to *C. psittaci* appear after this initial phase, peaking during the acute phase of infection.
With periodical screening of adult sera, Psittacosis outbreaks can be detected early and dealt with before reaching epidemic proportions. Treatment with antibiotics causes a gradual decrease in anti-Chlamydophila antibody levels. Chronic infections are characterized by persistence of low antibody levels.

Technology: The ImmunoComb ®

Biogal's Poultry *Chlamydophila psittaci* (*Chlamydia psittaci*) Antibody Test Kit is a user-friendly assay based on the dot ELISA principle for determining antibody levels to *C. psittaci* in poultry and turkey serum, whole blood or egg yolk. The test can be performed in both the laboratory and the field. No special instruments are required. Results, which are read by eye, are obtained in about 40 minutes. Each kit contains sufficient reagents for 30 tests.

Intended Use:

The Kit is designed to determine IgG antibody titers to *Chlamydophila psittaci* in turkeys and chickens. It provides information about previous exposure to *C. psittaci* .

References:

Bendheim, U., Wodowski, I., Ordonez, M. & Naveh, A. (1994). The development of an ELISA-kit for antibody determination in birds including poultry and psittacines. Proceedings of *Deutsch Veterinarmedizinische Gesellschaft, Munchen, Germany.*

Hafez, H. M. (2002). Diagnosis of Ornithobacterium Rhinotracheale. *International Journal of Poultry Science,* **1(5),** 114-118 .

Lublin, A., Leiderman, E., Mechani, S., Malkinson, M. & Weisman, Y. (1997). Influence of ambient temperature on shedding of Chlamydia psittaci in pigeons. *The 4th Conference of the European Committee of the Association of Avian Veterinarians,* **May** , London, England.

Lublin, A., Leiderman, E., & Weisman, Y. (1999). Seasonal dependence of *Chlamydia psittaci* shedding in pigeons. *Israel Journal of Veterinary Medicine,* **Volume 54 (4)** , Israel .

Phalen, D. N. (2001). The use of serologic assays in Avian Medicine. *Seminars in Avian and Exotic Pet Medicine* , **10 (2)** , 77-89.

Phalen, D. N., Hofls, M., Dahlhausen, B. & Styles, D. (1999). Diagnosis of *Chlamydia psittaci* infections in cocktiels and columbiformes. *Proceedings: Birds and all that Jazz. 20th Annual Conference and Expo,* **September** , New Orleans, Louisiana, USA.

Ryll, M., Kummerfeld, N., Peterson, A., Neumann, U. & Bendheim, U. (1994). Comparative investigations employing two different *Chlamydia psittaci* -antibody-detection systems in psittacides suspicious for psittacosis. *Paper presented in Deutsch Veterinarmedizinische Gesellschaft, Munchen,* Germany.