



bioScreen Ileitis Antibody ELISA

Diagnostics for the efficient use of control measures

SUMMARY | bioScreen Ileitis Antibody ELISA is a blocking ELISA for the detection of exposure to *Lawsonia (L.) intracellularis* in pigs. This assay is successfully applied worldwide for determining epidemiological status on farm level and for proper scheduling of preventative and control measures.



YOUR CHALLENGE is an ubiquitous bacteria

Ileitis is a wide spread enteric disease caused by the intracellular bacteria *L. intracellularis*. Epidemiology is strongly influenced by farm characteristics, thus showing big variations in time of onset, severity and prevalence of infection. The two major forms of Ileitis are a subclinical disease of chronic diarrhea leading to poor performance in pigs or an acute disease resulting in severe diarrhea with high mortality. Both forms result in severe financial concerns.

YOUR GOAL is to schedule control measures properly

Preventing or reducing incidence and severity of clinical disease as well performance improvements are major goals in controlling Ileitis. Due to human health concerns the use of antibiotics has become more and more under scrutiny in recent years. Therefore control and prevention of Ileitis through vaccination, management improvements and biosecurity has gained importance. Preventative methods shall be scheduled prior to anticipated onset of relevant infection with *L. intracellularis*. Serology is an effective tool for confirming exposure therefore overcoming the limitations of detecting *L. intracellularis* in fecal samples.

The only commercially available ELISA for detecting exposure to *L. intracellularis*

Enables' serologic profiling of herds for proper scheduling of control measures

Field proven assay – used for determining epidemiological status on farm level

Supports diagnosis of subclinical and clinical infection

Suitable for testing pre-exposure to *L. intracellularis* of replacement gilts to manage placement on sow farms

ASSAY OVERVIEW



bioscreen Ileitis Antibody ELISA

Species	Porcine		
Samples	Serum/plasma		
Type	Blocking ELISA based on whole cell <i>L. intracellularis</i> antigen		
Article number	Plates	Tests	Samples
10.01 11	2	192	184

Tests: Number of tests.

Samples: Number of samples, wells for kit controls excluded.

Conclusion

The bioScreen Ileitis Antibody ELISA is a cost effective technology for determining the epidemiologic status of a pig farm, enabling the proper scheduling of control measures.

Effective handling – ready-to-use reagents and results in less than 2.5 hrs

PERFORMANCE CHARACTERISTICS bioscreen Ileitis Antibody ELISA

The bioScreen Ileitis Antibody ELISA showed good agreement with commonly used direct and indirect methods for detecting *L. intracellularis* infection. The IFAT and bioScreen Ileitis Antibody ELISA results correlated well with the duration of *L. intracellularis* shedding as detected by PCR in experimentally infected pigs (Collins *et al.*, 2012). In a longitudinal study of piglets from age 5 to 26/28 weeks from a farrow-to finishing farm with a history of *L. intracellularis* infection, almost perfect (k (95%) of 0.91 (0.84 to 0.98)) agreement was observed between bioScreen Ileitis Antibody ELISA and IFAT (Lebret *et al.* 2013).

Several studies have proven the successful application of the assay as a farm monitoring tool for determining group prevalence (Hardge *et al.*, 2005) and identifying the time of onset of infection in the production flow (data on file).

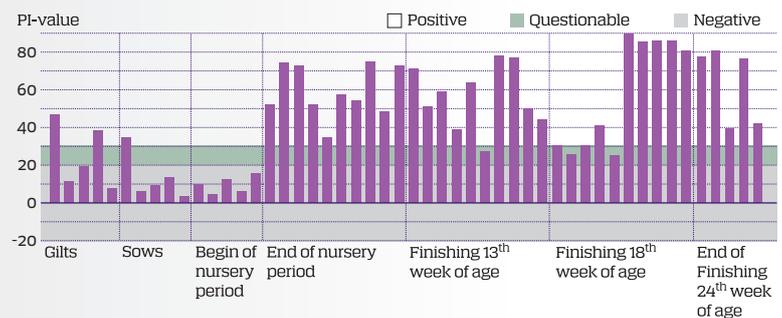


Figure. On a representative sample size from a farm with clinical history of infection with *L. intracellularis*, the bioScreen Ileitis Antibody ELISA demonstrated infection at the end of the nursery period.

Guidance for veterinarians for serologic profiling is provided in a publication by Walter *et al.* (2004). Please contact the local technical or sales representatives of Boehringer Ingelheim Animal Health for additional information on the application of the test in relation to Ileitis vaccination programs.

YOUR SUPPORT

From 9am-4pm CET call:

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References

- Collins *et al.* (2012): Comparison of a commercial ELISA with an indirect fluorescent test to detect antibodies to *Lawsonia intracellularis* in experimentally challenged pigs. *Austr. Vet. J.*, 90, 97:99.
- Hardge *et al.* (2005): The prevalence of *Lawsonia intracellularis* in Europe. *Proc. 2nd Asian Pig Vet. Soc. Congr.*, 104:105, Shangri-La, Philippines.
- Lebret *et al.* (2013): Longitudinal evaluation of three commercial diagnostic assays for *Lawsonia intracellularis* infection in pigs. *Vet. Rec.* 21,172:341.
- Walter *et al.* (2004): Serologic profiling and vaccination timing for *Lawsonia intracellularis*. *J Swine Health Prod.* 12(6):310-313.