

Multiplex *Sarcocystis neurona* Antibody Detection Pack

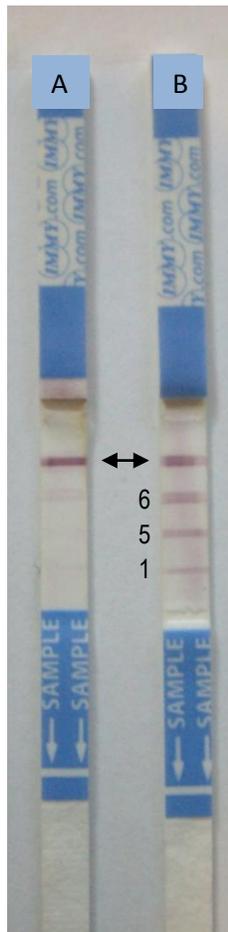


- **Rapid Stall-Side Test**
- **Detects All Phenotypes of *Sn***
- **Detects SAG1, 5, and 6 Separately**
- **No False Positives**
- **For Use in All Mammals**
- **Two Tests Per Pack**

Prota LLC

www.Prota-USA.com

Multiplex *Sarcocystis neurona* Antibody Detection Pack



Phenotypes of *S. neurona* vary in their virulence as well as sensitivity to anti-protozoal drugs. The **Multiplex *S. neurona* Antibody Test Strips** detect the presence of antibodies in serum and discern changes in antibodies prior to and after treatment. Successful treatment results in a negative strip test, shown in A. Only the control line reacted on strip A, arrow. The serum tested with strip B contains antibodies to all three phenotypes of *S. neurona*, SAG 1, 5, and 6.

Multiplex *S. neurona* Antibody Test Strips determine the presence of antibodies in horse serum after infection with *Sarcocystis neurona*, etiologic agent in equine protozoal myelitis (EPM). This immunochromatographic assay exploits lateral-flow technology and specific phenotype antigens that are used in the Peptide ELISA. The detection of antibody can assist the veterinarian when forming a differential diagnosis.

This **antibody** identification strip denotes strain specific peptides distinguishing all known virulent phenotypes of *S. neurona* by their surface antigens **SAG 1, 5, or 6**. The selection of these specific proteins ensures that there are **no cross-reactions** with coincident, non-pathogenic organisms. The **specificity to each protein is 100%**. There are no false positive results because cross reacting antigens are eliminated. Each *S. neurona* phenotype is identified by a unique protein marker. The analytical **sensitivity** of the strip test is equivalent to ELISA values at 1:20 of serum from horses at 16 days after induced infection and in field cases of sarcocystosis. The intensity of the reaction line is qualitative. Immunogold conjugated protein is used as the chromagen and is sensitive to 1 nG/mL. The strip format is rapid, easy to use, requires minimal

training and identifies each phenotype.

Biological and molecular assays demonstrated that 47% of opossums carry mixed populations of *Sarcocystis*, 22% carry the non-pathogen *S. falcatula* and 8% carry virulent *Sarcocystis neurona*. Horses are exposed to these mixed populations via contamination of feed sources with opossum feces. The horse develops antibodies to three strains of *S. neurona* that are differentiated by the reaction to specific proteins. One third of the infections will not result in sarcocystosis but produce antibodies that decline in 4 to 6 weeks. It is important for treatment and prognosis to know which strain infects the horse. Post-treatment decline in antibody indicates the organisms were sensitive to the anti-protozoal therapy while persistent clinical signs and persistent antibody indicates resistance.

Exposure to *Sarcocystis* is regional and sero-surveillance studies **predict** the high false positive results seen on **nonspecific tests**. The quick and easy to use **Multiplex *S. neurona* Antibody Test Strips** determines exposure, eliminates false positive test results and identifies the phenotype of the infection.

Each pack includes two strips, 2 test buffer vials, volumetric pipettes, and instructions. On line support is available at www.pathogenes.com or call 1-352-591-3221.

Order online at www.Prota-USA.com