## **Pathogenes Testing Options**



The various tests we offer help you manage your suspect EPM case. Remember, there are no "EPM tests" because the disease *syndrome* is due to parasites and inflammation. The tests below are useful to define the cause of the signs, parasites or inflammation. If you are unsure what to submit after reviewing the following chart, select SAG 1, 5, 6. The sample is held for 6 months and additional tests can be ordered. You may call us for our suggestions.

TYPE OF TEST	WHAT WE MEASURE	WHEN TO USE THE TEST	HOW TO USE THE RESULT
SAG 1, 5, 6	Antibody to 3 <i>S. neurona</i> serotypes	<ol> <li>Suspect EPM</li> <li>8-10 weeks after treatment</li> </ol>	Antibody against <i>S. neurona</i> can suggest the signs are due to <i>S. neurona</i> infection. After treatment the antibodies should drop. The time to seroconvert (turn negative) depends on the immune background of the animal.
CRP	C-reactive protein concentration	Detect inflammation due to infection	<ol> <li>Monitor inflammation that is sensitive to levamisole HCl treatment. The inciting cause must be remedied for the value to fall.</li> <li>An elevated value with chronic, relapsing horse should trigger running MPP.</li> </ol>
LYME SCREEN	Antibody to Borrelia	To rule in or out Lyme in the cause of disease	A negative value rules out Lyme. A positive value at 20 does not rule Lyme out, but the cause less likely due to <i>Borrelia</i> . A positive value at 40 indicates Lyme should be on the differential. Call for advice on confirmatory testing.
МРР	Antibody to myelin protein	Chronic, relapsing and unresponsive cases that show polyneuritis or encephalomyelitis. Sidewinding older horses.	A positive MPP test indicates there is an autoimmune component to the disease. In a levamisole responsive case it may be prudent to treat the autoimmune reaction and monitor the MPP semiannually. The MPP may indicate longer duration autoimmune disease.
MP2	Antibody to myelin protein	Chronic, relapsing and unresponsive cases that show polyneuritis or encephalomyelitis. Sidewinding older horses.	A positive MPP test indicates there is an autoimmune component to the disease. The MP2 can indicate earlier disease than the MPP test.
S. FAYERI TOXIN	Antibody to Sarcocystis toxin	Rule in or out toxin associated with sarcocyst stages that can cause ataxia and gut inflammation	A positive test indicates the horse has <i>S. fayeri</i> sarcocysts. Use this test when CRP remains high, with or without clinical signs, after treatment. The toxin affects the gut and treatment includes protocidal drugs (for cysts) and ulcer therapy.
IFAT: S. NEURONA	Antibody to Sarcocystis	Antibody to <i>Sarcocystis</i> . IFAT tests are not specific for <i>S. neurona</i> .	This is a study specific test and is used to enroll all horses into our FDA studies. We suggest for clinical use the serotype specific test is more useful.